

Gender, Family and Fertility in Asia: An Introduction

By Angelique Chan and Brenda S.A. Yeoh*

Fertility decline has characterized the Asian population transition over the latter part of the last century. Beginning with the initiation of Japan's transition in the 1930s, fertility declines in other Asian countries soon followed, with levels in Hong Kong, China; Singapore and Taiwan Province of China, beginning to fall by the 1960s. The latter part of the 1960s and the 1970s heralded the beginning of transitions in the major Chinese and the Republic of China cities, as well as the Chinese populations in South-East Asia (Hirschman and Guest, 1990; Westley, 2002). The total fertility rate for Asia as a whole, dropped from approximately 6 children per woman in the period 1950-1955 to approximately 2.7 children per woman by 1995-2000. Although there are regional variations in the total fertility rate, the current average level of fertility in Asia is slightly below the world average of 2.8 (Gubhaju and Durand, 2002). Currently, 14 countries and areas in Asia including Hong Kong, China; the

* Angelique Chan, Department of Sociology, National University of Singapore; Brenda S.A. Yeoh, Department of Geography and Asian MetaCentre for Population and Sustainable Development Analysis, National University of Singapore.

Table 1. Population trends in Asia: 1950-2050

Region (Asia)	Population	Total fertility rate	Life expectancy at birth	0-14 years (percentage)	65+ years (percentage)	Dependency ratio
1950	1,348,923	5.89	41.3	36	4	0.68
1975	2,297,685	4.18	44.8	40	4	0.78
2000	3,484,065	2.49	67.7	30	6	0.56
2025	4,472,895	2.11	73.8	22	10	0.48
2050	5,004,281	2.05	76.9	19	17	0.57

Source: Westley, S.B. (2002). "A 'Snapshot' of populations in Asia", *Asia-Pacific Population & Policy Report Number 59*, (Honolulu, East West Center).

Republic of Korea; Singapore; Taiwan Province of China, have fertility that is below replacement level (Gubhaju and Durand, 2002; McDonald, 2002; Tsay, 2002). At the same time, life expectancy has increased dramatically in Asia.

Today, life expectancy is almost 66 years compared to a little over 40 years in the period 1950-1955 (Gubhaju and Durand, 2002). In East Asia, infant mortality has fallen from 181 deaths per thousand population to 38 deaths per thousand population. In South-East Asia, the infant mortality rate was reduced from 168 to 47 (Huguet, 2002). The speed at which fertility and mortality declined in these countries is historically unique because countries in Asia completed the demographic transition in a much shorter time span, when compared to Western countries (Jones and others, 1998). Table 1, adapted from Westley (2002), provides a summary of the demographic transition Asia has experienced since 1950, and projections for 2025 and 2050.

A number of reasons have been suggested for Asia's rapid movement through the demographic transition (Freedman, 1995; Jones and others, 1998; Leete and Alam, 1993). Fertility declines in most countries have generally been concomitant with the rise in the pace of industrialization and relative economic prosperity. Socio-economic factors such as the spread of education, particularly among women, and the increased cost of children, have been cited as vital to bringing down fertility to below-replacement levels in several Asian countries (Caldwell, 1982). The diffusion of contraceptive use arguably plays an important role as well. Many studies have also considered antinatalist policies in many Asian nations as playing a significant role in bringing about the rapid pace of decline. For example, the one-child policy in China resulted in a decrease in the total fertility rate (TFR) from 3.6 in 1975 to 2.3 in 1980

(Gubhaju and Durand, 2002). Similarly, the “Stop at Two” family planning policy instituted in Singapore resulted in the total fertility rate dropping from an average of 6 children per woman in the 1950s to below replacement fertility by 1975 (Fawcett and Khoo, 1980).

The demographic consequences of low fertility and mortality rates include population ageing and zero or negative population growth for countries, regions and cities with below replacement fertility levels. The social and economic repercussions of these demographic realities are wide-ranging. These include issues surrounding the effects of population ageing, e.g., labour shortages, an increase in the old-age dependency ratio, and concerns over the viability of social security systems in Asian countries (World Bank, 1994). In 1960, 39 per cent of the population was between 0 and 14 years of age and 4 per cent was over 65. By the year 2000, the proportion 0 to 14 had declined to 30 per cent and the proportion over 65 had increased to 6 per cent. The proportion aged 65 years and over is projected to increase to 10 per cent by the year 2025 (Huguet, 2002).

There is also concern over the social and economic repercussions of negative or zero population growth. In countries where the total fertility rate is below replacement level, several Governments, e.g., Japan and Singapore, have tried to institute pronatalist policies to stimulate fertility (Ogawa, 2002). These policies have so far done little to increase the total fertility rate. A number of reasons have been suggested for this. For example, McDonald (2002) notes that pronatalist policies in Singapore stress the monetary aspects of child-rearing but fail to address the opportunity costs to women of leaving the labour force to have children. Policies that aim to either limit or increase fertility levels also have to take cultural norms and preferences into account.

In countries such as China and India, where Government policy limits fertility, traditional son preference has resulted in several generations of ‘hissing girls’, as the paper by Croll in this volume shows. Female-selective induced abortion has also increased in countries where son preference persists and fertility decline is state- or self-imposed, as in the case of China and the Republic of Korea (Gubhaju and Durand, 2002).

It should be remembered that fertility declines are not uniformly experienced and differentials continue to exist based on wide-ranging factors including ethnicity, cultural preferences, educational qualifications and urban-rural variations. In coming to grips with fertility decline and its variations, it is important to situate an understanding of fertility issues within the context of family and the gender and generational relations on which the family is based.

This is because fertility decisions are often made in the micro-context of the family, an important institution where social and cultural values governing the relationships among members are often maintained and transmitted, but also sometimes inflected and challenged.

The family thus forms the context in which we examine fertility decline in this special issue. We focus on the relationship between fertility decline and the strategies that women and families use to maintain, and also challenge, cultural preferences regarding family composition in the Asian context. More specifically, we give attention to the relationship between low fertility and son preference in Asian families. The majority of Asian countries have long traditions of son preference. Sons are expected to carry on the family lineage and to provide old-age support, particularly in East and South Asia (Knodel and Debavalya, 1992; Mason, 1992). However, in the face of rapid modernization and accompanying increases in female education and employment, son preference — at least in theory — may be reduced over time if daughters are viewed as being able to provide equivalent economic support to parents. A question which has intrigued scholars focusing attention on the effects of modernization on fertility decline in Asia is whether son preference has continued to persist as a cultural norm. In the past, higher fertility levels meant that families could satisfy their preference for sons more easily. If son preference continues to be important in Asia, smaller family sizes mean that families, now, have to strategize more than ever to achieve their desired family composition.

How do families strategize to achieve their desired family composition in the face of state- or self-imposed fertility limitation? Rapid economic development has increased the cost of children and the opportunity cost to women bearing these children. If women forego full employment in modern labour markets in order to have children, they are foregoing extra family income and returns on their human capital if they have been educated (McDonald, 2002). The papers in this volume speak to the ways in which Asian families manage their reproductive strategies in the face of rapid economic development and trends towards smaller family size. The papers provide insights from East and South Asia in general and include more specific studies on China, Singapore, Bangladesh and Viet Nam.

The papers point to the fact that gender preference appears to persist in modernizing Asia. Families, in a range of different circumstances, continue to attempt to ensure that they have at least one son. The ways in which they do this range from under-reporting of births and sex-selective abortion, to having

additional children in order to satisfy their gender preference. Women's status within the family continues to depend, in part, on the production of sons in order to continue the family lineage or for old-age support. In the future, as social security systems are strengthened in the region, the dependence on sons for financial support in old age may lessen. However, this remains to be seen. This points to a continuing need to focus further research on the effects of low fertility on family dynamics and gender preference. At this point, it is clear from the papers in this volume, that cultural preferences are strong predictors of family composition and family size in Asia. This underscores the importance of understanding the role of culture, and more specifically gender preference, as a lived reality influencing the agencies of, and relationships between, women and other members who constitute the family in our ongoing efforts to understand fertility patterns in Asia.

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Fertility Decline, Family Size and Female Discrimination: A Study of Reproductive Management in East and South Asia

*Without a change in gender reasoning,
the rapid decline in fertility and the now preferred or
imposed smaller family size in East and South Asia,
will mean that daughters will continue to
be subject to new trade-offs*

By Elisabeth J. Croll*

Contrary to demographic expectations and in defiance of historical experience elsewhere, widespread and continuing son preference in much of Asia has not proved to be an impediment to progressive or rapid fertility

* Elisabeth Croll is Professor of Chinese Anthropology at the School of Oriental and African Studies, University of London.

decline. Indeed, one of the most significant features of the twentieth century has been the dramatic decline in fertility and explicit preference for smaller families in much of East and South Asia which, far from reducing, has exacerbated son preference leading to increased discrimination against daughters. An examination of the masculinity rates, sex ratios at birth and gender-disaggregated infant and child mortality rates, all point to excess female mortality in most East and South Asian societies. A study of demographic narratives for each country suggests that, region-wide, there is an increasing tension or conflict between preferred family size and preferred family-sex composition which is only resolved by intensified reproductive management, technological intervention and excess female mortality. Simultaneously, ethnographic studies in villages and cities across the region suggest that beliefs and behaviours associated with the management of reproduction are rooted in notions of gender difference, complementarity and unsubstitutability. Within the new and now preferred smaller families, daughters, rarely able to substitute for sons, are subject to new trade-offs with daughters more than ever before “taking the place of” or “limiting opportunities for” sons. This paper summarizes demographic trends in and patterns of female discrimination associated with fertility decline and smaller family size in East and South Asia, before turning to ethnographic voices in China and India to investigate and identify the premises or rationales underlying family management of reproduction. Combined demographic and anthropological approaches suggest that there is a demographic, development and gendered coherence in East and South Asia combining rapid or progressive fertility decline, rising and sometimes rapid economic development and common cultures of gender which have all contributed to an intensification of daughter discrimination.

Demographic narratives

For much of Asia, demographic narratives over the past century have drawn attention to the adverse female to male sex ratios and the numbers of women “missing” from the population totals of many societies. Towards the end of that century, Amartya Sen (1990) compared the ratios of women to men in Europe (1.06) and North America (1.05) to those in South Asia (0.93), West Asia (0.94) and China (0.94). He argued that the lower rates in Asia were due to excess female mortality, which he calculated, amounted to a total of some 100 million women “missing” from the populations of South and West Asia, North Africa and China. Subsequently, demographer Ansley Coale (1991) also identified excess female mortality as the major factor contributing to the high masculinity rates in populations in which discriminatory treatment offsets the natural lower mortality of females. He both confirmed and refined Sen’s calculations to take into account high losses of males in war and

intercontinental differences in age structures, which gave him a total of 60 million missing females from the populations of China with a masculinity rate 1.074, India (1.066), Pakistan (1.105), Bangladesh (1.064) and Sri Lanka (1.040). In an attempt to reconcile these differences in numbers of “missing” women, Stephan Klassen (1994) introduced modified non-discriminatory standards for evaluating excess female mortality and on this basis, calculated that the number of females missing was nearer 90 million.

While all argue that unfavourable masculinity rates are due to excess female mortality during pregnancy, birth, infancy and childhood, high maternal mortality rates or male migration, the consensus is that it is juvenile sex ratios which are primarily responsible for the high masculinity rates. In all these populations, demographic studies have shown that high female death rates mainly take place in the first five years of life and that gendered discrimination is sufficiently adverse to daughters to cancel out their natural advantage in survival rates. That the “missing women” or “missing females” of these demographic calculations could more appropriately be termed “missing girls” is confirmed by a number of country studies in South and East Asia which have revealed that there are quite distinctive trends and patterns in excess young female mortality.

In South Asia, which has one of the highest masculinity rates in the world, there is an estimated 941 females for every 1,000 males. With the exception of Sri Lanka, this unfavourable rate is reflected in country female ratios: Bangladesh, 954; Bhutan, 981; India, 938; Maldives, 945; Nepal, 973; and Pakistan, 937. As a result of these figures, it is estimated that a total of 79 million women are missing from the region (Haq, 2000). For India, it was the low ratio of females to males, the lowest in the world throughout the twentieth century, which drew attention to the numbers of “missing” females in the population. In 1901, the ratio of females to males was 972 to thousand, but in 1971 it had decreased to 930; in the 1981 census, the figure rose to 934 but the increase was short-lived for, by the 1991 census, the ratio had reached its lowest recorded level of 927 females to 1,000 males. On the basis of these ratios, Agnihotri (1995) estimated that the females missing from India’s population between 1961 and 1991 show a rise from 12 to 32 million, with the steepest increase between 1981 and 1991. Demographers studying these worsening sex ratios have mainly attributed them to excessive female mortality in infancy and early childhood (Sargent and others, 1996). In 1991, for example, it was estimated that for all India the 0 to 6 year ratio was 945 girls to 1,000 boys (Census Report, 2001), and that 56 districts had 0 to 6 year sex ratios below 900 (Chinkath and Athreya, 1997). Indeed, the most recent Indian census in 2001 confirms this hypothesis. Although there are now 933 females for every 1,000 males, the female-male disparity up to the age of six years has

widened since 1991 from 945 to 927 girls per 1,000 boys in 2001 (Census Report, 2001). Like its predecessor, the 2001 census attributed this imbalance to female infanticide, neglect and sex-selective abortions.

Infanticide, long practised in India, was responsible for the disparities in juvenile sex ratios of more than 120 males to 100 females in many areas of nineteenth-century Northwest India where it was not unknown for roughly one quarter of the population to practise infanticide in one out of two female births. In some areas, no or very few girls survived (Miller, 1981). Although it was assumed for much of the twentieth century that female infanticide was a localized practice of declining importance, contemporary scholars such as Patel (1989), George and others (1992) and Sargent and others (1996), suggest that, if this is the case, then more recent studies show that female infanticide has increased more generally in northern and western provinces and more specifically in clustered populations in southern provinces where infanticide now seems to account for a disproportionate number of female stillbirths.

A recent report in the mid-1990s suggests that the practice is spreading to new geographic regions, resulting in the spread of female infanticide across India's rural population and across the social spectrum from Rajputs and Brahmins to other caste groups, among whom it had not been practised before (Sudha and Rajan, 1999).

In addition to the rise in female infanticide, demographic studies also suggest that excess female mortality in infants and children from the age of one year is still significant and widespread in India due to female neglect and shortfalls in the supply of food, nutrition and medical care. In her 1981 path-breaking study of female mortality, Barbara Miller argued that in northern states, among some groups and for some categories of daughters, excessive female mortality was so great that they must be deemed "endangered". Her study of neglect in rural north India drew attention to the ways in which intense desire for sons was directly tied to the fatal neglect of daughters. Differentials between the northern and southern states were confirmed by a number of later studies which showed that female infant and child mortality rates were not only much higher than those for males in the northern states, but also in identifiable regions of south India where district studies continue to show higher female child mortality despite more balanced infant and child sex ratios overall (Dyson and Moore, 1983; Basu, 1992; Kishor, 1993; Murthi and others, 1995).

Indeed, an overview of the data shows that female to male ratios in child mortality, not only continue to show a bias in over 60 per cent of India's districts (Malhotra and others, 1995), but that excess female mortality in infancy and childhood continues to rise in some regions. For example, one very

recent study of sex-specific child-mortality probabilities found that girls who had experienced heightened mortality risk in 1981 experienced continuing and increasing risk in 1991 and that in 1991 excess female mortality had extended to include regions not so disadvantaged in 1981. It concluded that the phenomenon of excess female mortality had persisted over the decade and spread across India during 1981 to 1991, indicating that mortality fell more for males than for females who were increasingly disadvantaged (Sudha and Rajan, 1999). In the late 1990s, it was reported that 18 per cent more girls than boys die before their fifth birthday (Haq, 2000).

If the risk to female infants and children has increased, females before birth are also at greater risk as a result of the widespread and increasing use of sex-selective abortion. In the 1990s, demographers had begun to argue that it was now important to take into account sex ratios at birth as a factor contributing to the high masculinity ratios in India as a whole. Indeed, their studies suggested that the wider distribution, privatization and commercialization of sex identification and abortion facilities, a greater awareness and use of these facilities in clinics and hospitals and the absence or partial absence of regulation had allowed sex-identification facilities to mushroom (Jeffery and others, 1984; Basu, 1992; Arora, 1996).

In the absence of official figures for sex ratios at birth and of reliable statistics of sex ratios in abortions, alternative means have been deployed to estimate sex ratios at birth. For example, using reported sex ratios among infants aged 0 to 1 years as well as sex ratios of child-mortality probabilities to calculate sex ratios at birth, Sudha and Rajan (1999) show a stark shift to excessively masculine sex ratios at birth between 1981 and 1991 from near normal to a range of 107 to 118 or 124 boys per 100 girls in urban areas. They argue that the increasing masculinity of sex ratios at birth in North, Northwest and in urban locations of some central states suggests the growing use of prenatal sex identification and sex-selective abortion.

By the late 1990s, female foeticide had been reported in 27 of India's 32 states, and in some communities in Bihar and Rajasthan, the birth ratio is reported to be as low as 60 females per 100 males, compared to the natural ratios of 97 to 100 males (Haq, 2000). Parallel studies for Bangladesh (Chowdhury and Bairangi, 1990; Chowdhury and others, 1990; Muhuri and Preston, 1991; Rahman and others, 1992; Abeykoon, 1995) and Pakistan (Shah and Cleland, 1993; Abeykoon, 1995) suggest similar trends in which existing discriminatory patterns of female infanticide and neglect continue. For example, a very recent study of sex specific mortality data in Bangladesh showed that girls aged 0 to 4 years had a mortality rate that was 40 per cent higher for girls than for boys (Klassen, 1994). Again, as in India, the

introduction of new technologies may well continue or exacerbate these trends and contribute to rising sex ratios at birth and increasing numbers of girls “missing”.

In East Asia, it was the dramatic increase in the masculinity of sex ratios at birth which first aroused disquiet among demographers, followed by increasing concern at the rising female infant and child mortality rates. Since the mid-1980s, demographic studies in China, the Republic of Korea, Taiwan Province of China and Viet Nam have uniformly showed an increasing rise in the proportion of male births and confirmed that access to sex identification and abortion facilities is widespread and permit new forms of intervention before birth.

For China, reported sex ratios at birth rose from close to the norm of 106 male to 100 female births in the 1960s and 1970s to 108.5 in 1981, 110.9 in 1986, 110.0 in 1987, 111.3 in 1989 to 112 in 1990 and to 117/8 in 2000. Similarly sex ratios at birth have risen from 107 to 110 in Taiwan Province of China and from 107 to 114 in the Republic of Korea (Gu and Roy, 1995; das Gupta and Li, 1999; Census Report, 2001). For China, the figures for sex ratios at birth are complicated by the fact that not all female births are registered, but calculations which take probable rates of under-registration and the sex ratios of older children into account suggest that girls are not just “missing” from the statistics (Zeng and others, 1990; Tu, 1992). Indeed, hypotheses based on under-reporting, abandonment and adoption appear to be much weaker than they were several years ago and attention has shifted to the more serious forms of discrimination such as infanticide, sex-selective abortion or infant and child neglect.

Field investigations suggest that the incidence of female infanticide probably rose during the 1980s when it became the subject of much media concern and, although the practice is likely to persist in poorer remote regions where it is still an accepted means for reducing fertility and achieving desired sex configurations, there is little evidence to suggest widespread female infanticide. Rather, there is a congruence of opinion among China’s demographers that the practice of female infanticide at birth is less responsible for the current rise in sex ratios than sex-selective abortion. In support of their argument, they cite the legal strictures against infanticide, the difficulty in keeping such births and deaths hidden, the considerable psychological costs and above all, they suggest that there are now considerable prenatal options including sex-selective abortion (Zeng and others, 1990; Tu, 1992). Ironically, it is the improvements in the standards of prenatal care and in particular the development and spread of new ultrasound technologies that have been responsible for permitting an increase in sex-identification before birth. While

government policy has forbidden the use of new technologies for sex identification, their widespread use for this purpose is difficult to police and the lack of local funding for health encourages their misuse because the fees levied finance an otherwise under-funded health service and supplement low medical incomes. What lends weight to the importance of sex-selective abortion as the cause of rising sex ratios at birth in both rural and urban regions, is that even in urban hospitals where surveillance is greater, the sex ratios of aborted fetuses and of births also show high sex ratios, which suggest that numbers of women have availed themselves of prenatal sex identification tests (Gu and Li, 1994). Similar trends revealing increases in the use of sex selective abortion characterize the demographic literature for the Republic of Korea, Taiwan Province of China and Viet Nam (Freedman and others, 1994; Goodkind, 1995; Park and Cho, 1995).

In China, there is also evidence of increasing female infanticide and infant and child mortality. In 1981, there was little difference between male and female infant mortality rates but during the next decade, the male infant mortality rate declined from 39 to 35.5 per thousand while the female rate increased from 36 per thousand (which was lower than that for males in 1981) to more than 40 per thousand in 1989 (Sun and others, 1993).

Data from the 1990 census in China allowed demographers Ansley Coale and Judith Banister (1994) to estimate the numbers of missing females over five decades in China. They argued that the numbers of missing females increased with each cohort in that 2 per cent are missing from children born in the mid-1970s, 3 per cent from those born between 1979 and 1982, 4 per cent from those born between 1982 and 1987, 5 per cent from those born in 1988 and 1989 and 6 per cent from those born in 1990. They concluded that large and increasing numbers of female infants and children were missing from the birth registers in China at an increasingly younger age as the result of intervention at birth and neglect in the first years of life. For China, demographers have consistently argued that the total numbers "missing" amount to close on 40 million females with one Chinese newspaper forecasting in 1992 that by the end of the year 2000, this figure would rise to 70 million (*Nongmin Ribao*, 1992).

Overall, what recent demographic studies in East and South Asian countries show is that quite distinctive patterns of female discrimination are converging and are resulting in increasing excess female mortality before birth, at birth and in infancy and childhood. What research also shows is that the phenomenon of "missing girls" occurs alongside economic development and the improved status of women and is more likely to be correlated with declining fertility than any other factor common across the region.

Demographic correlations

A near universal insight derived from demographic and other studies is that increasing discrimination against girls occurs across a wide range of economic and socio-political contexts in East and South Asia. First, the long-held assumption that son preference will diminish or disappear with economic development and correlative redefinitions in the roles of and improvements in the status of women are challenged by recent research which shows that, across the diverse societies of East and South Asia, discrimination against young girls is not confined to poor rural regions or agricultural populations as is sometimes argued (Johannson, 1984). Sex ratios at birth in China, the Republic of Korea and Taiwan Province of China, are not so very different across cities, towns and countryside.

In China, sex ratios at birth are only very slightly lower in the cities, and the main provinces that have sex ratios at birth higher than 111 boys to 100 girls include some of the richest and poorest provinces in the country. In Taiwan Province of China, sex ratios at birth are slightly higher in the capital city of Taipei than in the countryside (Gu and Roy, 1995). Again, although infant mortality rates in China are higher in rural than urban areas, rising female mortality is common to both city, town and countryside (Sun and others, 1993). In India too, excess female mortality before and at birth and in infancy and childhood is not limited to poor, rural and remote locations but also occurs in the richest provinces, cities and their suburbs (Bulmiller, 1990). A recent study suggests that it is urban populations that have been at the forefront in the use of ultrasound technologies (Sudha and Rajan, 1999), while according to the 2001 census, sex ratios fell to 874 and 861 females per thousand boys in two of the country's relatively well-off farming states (Census Report, 2001).

Another anticipated correlation was that between rising women's status measured in terms of entry into education and employment and reduced son preference or dependence. However, a significant trend revealed by demographic research is that daughter discrimination continues to occur in populations where women enjoy an education and employment *and* in communities where women remain illiterate or are secluded within the household. New opportunities for female education and employment have taken place to either greater or lesser degrees in much of East and South Asia, but excess female mortality continues and has increased even where there have been substantial improvements in women's education and economic status as in urban East Asia.

Research investigating the links between the status of women and discrimination against girls in East and South Asia shows that there are few

such direct correlations (Muhuri and Preston, 1991; Basu, 1992; Murthi and others, 1995). For instance, in China, the 1990 census suggested that the sex ratios at birth were 112.5 boys per 100 girls for mothers with some primary schooling, 114.2 for those who had completed primary school, 116.2 for middle school graduates and that it was not until women had received college education that it declined — although to a still high 110.7 (Gu and Xu, 1994). In rural north India, Monica das Gupta (1987) found that excess female mortality for second and subsequent parity daughters was 32 per cent higher than their siblings for uneducated mothers and 136 per cent higher if the mothers were educated. She showed that some educated mothers in their late 20s wanted virtually no daughters even if they already had several sons.

Later, she and her colleagues (1997) argued that recent increases in female education and labour participation alongside increasing excess female mortality in infancy and childhood suggest no clear relationship between women's status and discrimination against girls. A number of other studies published in the 1990s confirmed that the evidence for assuming such a correlation is still far from conclusive (Muhuri and Preston, 1991; Basu, 1992; Murthi and others, 1995). However, both economic development and rising women's status are associated with fertility decline.

The one clear relationship that does emerge is the correlation between excess female mortality and fertility decline and the preference for smaller family size. According to demographers, one of the most remarkable of global changes in the twentieth century was the shift from high to low fertility in Asia and particularly in China and India, the two societies responsible for three quarters of the reduction (Caldwell, 1993; Rele and Alam, 1993). Fertility decline first took place in East Asia with a rapid decline in rates from 5.3 to 2.3 between 1960 and 1990 (Leete and Alam, 1993), while from the mid-1980s the total fertility rate dropped to 1.8 in China, 1.7 in the Republic of Korea and Taiwan Province of China and to 2.3 in Viet Nam.

In South Asia, the total fertility rate almost halved in India and Bangladesh dropping from 6 or 7 to around 3.0 in India and Bangladesh. The exception is perhaps Pakistan where there has been a decline in fertility but it has been slower with the total fertility rate averaging around 4.8 in 1999 (UNICEF, 1999). What is also interesting is that this correlation is so whether fertility decline was rapid or more modest in pace and whether it was voluntary or involuntary. Hence discrimination occurs before, during and after birth in Bangladesh, China, India and Viet Nam where birth control programmes are strict or compulsory and in the Republic of Korea, Pakistan and Taiwan Province of China, where birth control is voluntary and parents may have as many children as they desire. In both sets of circumstances, it is less the speed

or impetus for fertility decline that is important than the new relationship between low fertility and excess female mortality which challenges previous demographic assumptions linking fertility and mortality trends.

Instead of the anticipated demographic transitions associating high mortality with high fertility and low mortality with low fertility, the example of East and South Asia suggests that low fertility can also be associated with high mortality in the case of girls. Female infanticide and neglect have long been perceived as mortality strategies utilised by parents to control fertility, limit family size and achieve desired sex configurations (Scrimshaw, 1981; 1984). Now, sex-selective abortion has been added to the repertoire of mortality strategies and, although in some cases it may well be a substitute for earlier strategies, the increase in excess female mortality suggests that it supplements as well as substitutes for earlier methods — not just at high parity births as previously but also, and increasingly, at lower parity birth orders.

Most demographic studies suggest that it is second and higher parity daughters who are most at risk. However, in recent decades the risk has expanded to include females conceived at second or third parity births. In East Asia, the sharp increase in sex ratios at birth from the mid-1980s can be correlated most directly with birth order. In 1990 in China, the sex ratios at birth were near normal at first birth but there was a substantial increase to 122 boys to 100 girls at second birth and thereafter sex ratios hovered around 130 boys to 100 girls for subsequent births. Here, and perhaps uniquely, the most observable rise was in second-order births because of the one and two-child policies. In the 1990s in the Republic of Korea, the sex ratios at birth were around the norm for first births. These ratios show a slight increase at second births to 112 boys per 100 girls and a dramatic increase at third and fourth births to 185 and 229 boys. In Taiwan Province of China, the sex ratios at birth also remained normal at first birth, for second births they rose to 109 and for third and fourth parity births they jumped to 119 and 128 respectively (Gu and Roy, 1995). Further scrutiny of data on sex ratios shows that parity-specific ratios are directly affected by the existing gender composition of surviving children and that, as in South Asia, second daughters are particularly at risk if there is no son and smaller families are the norm (Gu and Li, 1994; Yuan and Skinner, 2000).

For South Asia, Monica das Gupta's 1987 study of sex differentials in child mortality by birth order in one north Indian state showed that the burden of excessive mortality fell most heavily on girls born with elder sisters. They experienced 53 per cent higher mortality than other children. The fact that this rose to around 70 per cent among such daughters of younger women aged 15 to 29 years suggested to her that discrimination against this category of girls had

increased in recent years. She argued then and in a later study that such selective intent required a degree of consciousness and voluntarism far greater than if discrimination was random and affected all girls equally (das Gupta and Bhat, 1997). Indeed, it might be argued that such reproductive interventions have been deployed purposively by parents to resolve increasing tension between preferred smaller family size and preferred family-sex composition. To further investigate and understand how this conflict and its resolution is managed, it seemed appropriate to turn from demographic outcomes to demographic processes or from statistics to ethnographic narratives to examine the ways in which populations and in particular parents talk about the beliefs and behaviours associated with reproductive management.

Ethnographic voices

An extensive perusal of ethnographic studies in villages and cities across China and India suggests that there is a pervasive theme which punctuates everyday conversation, interview and life-cycle event or ritual and that is that children are rarely referred to as a collective ungendered category (Jeffery and others, 1989; Jeffery and Jeffery, 1996; Croll, 2000). Rather, they are divided by gender into boys and girls with quite different parental or familial expectations and entitlements and this is so in societies that are rural and urban, secluded and employed, literate and illiterate and in rich and poor communities.

Differentiated characteristics and values are attached to boys and girl who are categorized, counted and represented quite separately. Differences between sons and daughters are assumed and unquestioned with the importance attached to and desire for sons quite central to everyday conversation about family, livelihood and religion and at life cycle events. Ethnographic observation and record confirm that conception is as much a cognitive as physical act and that gendered divisions and preferences are quite explicit in men's and women's statements about pregnancy, birth and support in old age and at both marriage and funeral ceremonies.

"May you have many sons" or variations thereof have long been common felicitations reflecting age-old dreams of sons and grandsons and, without exception, blessings, status and good fortune are defined not in terms of daughters or children but of sons. The most important question during pregnancy and birth, and the cause of much anxiety and pressure, prayer and medicine-taking is the gender of the child and, for the majority of girls born, their welcome within the family and community will be quite different from that accorded to their brothers. In interviews and conversations, sons are presented before daughters regardless of age-order with many sons the cause for congratulations and a sequence of only daughters occasion for

commiseration. The pity reserved for those who have no sons or who lose sons is without equal and a major factor in exacerbating the universal quest for a son or sons. In sum, what impresses ethnographers alike is the open enjoyment and privileging of sons in speech, gesture and ritual so that daughters by open or overt implication are devalued and deemed a disappointment and it is this difference which is still highlighted in current family design and building strategies.

Family design and building

The parental preferences, decisions and rationales for having sons reported in the ethnographies can only be understood within a familial context in which the generations are intimately tied into family needs, collective interests and schedules. Although there is no undifferentiated practice of the family within East and South Asia, there is an underlying or central model of the family which, with a public face of unity and cooperation, has a clear emphasis on continuity of the family line and support, ideal family composition, the accumulation of familial resources and intra-familial entitlements (Krishnaraj and Chanana, 1989).

In this context, the process of designing and building a family becomes especially important and ethnographic voices reveal that, almost without exception, it is based on a common set of inter-generational obligations. It has been hypothesized for several decades that the transition from high to low fertility and an associated decline in demand for children and change in their relative value has been caused by a reversal of inter-generational wealth flows between parents and children which include money, goods, services and guarantees for old-age security. For example, the Australian demographer John Caldwell (1976) early argued that the direction of resource flows is from the younger to older generations in traditional societies with higher fertility, and from older to younger generations in developed societies with low fertility and that it is this reversal which is responsible for fertility decline.

In East and South Asia, however, there has been fertility decline alongside both the maintenance or even increase in flows of resources from child to parent due to longer life expectancy, the continuing absence of alternative forms of old-age support and new risks to existing pension schemes as a result of economic crises or economic reforms and an increasing flow of resources to children as a result of the rising costs of education and marriage. Whatever the household, family or kinship form in East and South Asia, the central inter-generational contract continues to incorporate parent-support and care which, still sanctioned and endorsed by filial piety, continues to constitute an essential prerequisite for old-age security. Field studies suggest that there is

a continuing and everyday assumption that it is parent-care rather than child-care which is still the most important aim of family building. In these circumstances, ethnographers have concluded that child-care remains a “means to an end” or a “form of long-range self-interest” primarily represented and practised as a strategy for securing parent care in old age (Jeffery and others, 1989; Potter and Potter, 1990; Ikels, 1993). Very contemporary ethnographic records reveal how parental or familial investments in child care, education and marriage are rationalized openly as a form of enhanced future capacity for care with investments in children manipulated to instill a sense of child indebtedness (Milwertz, 1997; Xie, 1997).

If perceptions of inter-generational obligations are still biased in favour of parent-care, -support and -security, these are still primarily perceived as parent-son contracts with the flow of resources almost exclusively between son and parent. Sons, as permanent members of households or families, are openly spoken of as the only important source of practical support and security in old age and thus invested in structurally, materially and emotionally by both parents to secure future care. Such parental dependency is not considered demeaning, rather it is a parental entitlement that enables sons to repay parents for securing and settling them in marriage. The loneliness, impoverishment and hazards of old age in the absence of sons is a subject returned to time and again in ethnographic records.

In this respect, the differences between sons and daughters constitute a major contrast in familial expectations in that, while sons require early care just as daughters, sons stay, reimburse and provide for their parents in old age, while daughters mostly marry out or move elsewhere. It is this virtual exclusion of daughters from the parent-child contract which lies at the basis of family design and building strategies, influences familial perceptions of daughters and results in the different expectations and entitlements of sons and daughters. Although bias in parental investment and in value accorded to sons and daughters has a long history, in the newer smaller families, parental bias and manipulation has been intensified and more than ever before, devalues and threatens the survival of daughters.

Daughter devaluation

Throughout the ethnographies of China and India, daughters are often spoken of with ambivalence and designated “a burden”, “a liability” or “a loss”. In familial calculations of costs and benefits, the continuity and security of sons as assets are set alongside the liability and drain on family resources associated with daughters who time and again are deemed transient, outsiders, guests or someone else’s property like “water spilled out” or a “bird in a

courtyard”. The expressions “no-return cost”, “double-loss”, “a commodity on which money is lost” or “a no-profit commodity” are common paraphrases for daughters especially where her anticipated dowry is a widely-feared economic drain on her family’s resources. However, ethnographic- studies show that, with or without the expenses of a dowry, daughters are still not assumed or expected to contribute to the support of parents and that this is the important factor in shaping parental gendered expectations of sons and daughters. Indeed there is a certain amount of shame attached to depending on daughters which is very much viewed as a last resort and they are only turned to in the absence of sons (Wolf, 1985; Jeffery and others, 1989; Jeffery and Jeffery, 1996). When daughters do contribute to the support of their parents, and it can be cogently argued that they do so more than is assumed or perceived even by the dependent parents themselves, this support is not fully recognized or acknowledged. More often, it is seen as short-term and part-time and therefore inferior to that of sons. Although much attention has been given to the break between daughters and their natal families and the transfer of their persons, property and labour to the families of their husbands, field studies over the years in South and East Asia suggests that, in some regions and socio-economic categories, this break may be less radical than assumed and that continuing contact after marriage may involve her in making some contribution to the support of her parents.

The difference between objective and perceived contributions as elaborated by Amartya Sen (1987) is apposite here for it can be argued, especially in East Asia, that age-old assumptions about the contrast between a daughter’s marginality and liminality and a son’s security and support continue to mask the existing and increasing contribution of daughters to their parents’ households and that this flow of resources is greater than perceived or reported by parents. If their contribution is acknowledged, it is seen as insubstantial or as short-term rightful returns for the expenses incurred in raising a daughter and thus cancelled out. This perception of daughters might have been expected to change once young unmarried women have entered the labour force in large numbers and remitted contributions to the family budget and contributed towards their own marriage costs.

However, even in East Asian cities and special economic zones, there is little correlation between their entry into the labour force prior to marriage and parental assumptions about losses associated with daughters or indeed the perceptions of daughters themselves of their own value and contributions (Pun, 1997; Wolf, 1997).

There is one exception to this pattern; it is in China’s single-daughter households. Recent field research in Beijing and other cities shows that where

parents have had no choice but to depend on the single daughters, they are grooming them to substitute for sons in the inter-generational contract (Milwertz, 1997). Elsewhere, if daughters are still deemed to be in no position to compete with sons in terms of inter-generational support and in parental expectations, then daughters can also continue to expect fewer entitlements to familial resources than their brothers.

Taking current entitlement analyses and bargaining metaphors as a frame (Sen, 1987), it is hardly surprising that if parents expect very little from their daughters who marry out and are reserved for another family, then, they are less likely to be assigned, or in a position to bargain for, a share of familial resources equal to that of their brothers. For example, it has been well-documented that although girls' access to school has increased in East Asia and to a lesser degree in parts of South Asia, they still have less access to primary schools in poor and rural regions or to higher levels of education in richer and urban locations. Fewer girls attend school than the enrollment figures suggest, more girls than boys are taken out of school and there is a much higher proportion of females among the illiterate.

There is less data available to measure the nutritional status of girls, but that which is available, suggests that girls may have a lower food intake, experience some form of stunting and lesser growth in some regions and during periods of scarcity. They may also suffer from micro-nutrient deficiencies. Again, although there have been few statistics to show that girls have lesser access to medical facilities, there has been interesting research both in China and India in the past few years which shows that girls' illnesses are less likely to be thought "serious" so that they are less likely to be taken to hospital or out-patient clinics and that there is less family money spent on girls' illnesses so that girls are more likely to die at home or on the way to hospital (Jeffery and others, 1989; Bulmiller, 1990; Good, 1990; Wang and Li, 1994; Li and Zhu, 1999; Haq, 2000).

That there is a direct link between expectation and entitlements is confirmed by two very recent field studies in urban China and in southern India. Both areas are locations where customarily, there has been less devaluation of daughters. The field study in urban China shows that now single-child daughters are included in the inter-generational contract for the first time, the entitlements of daughters to family resources have increased with investments manipulated by parents to match new parental expectations and ensure delivery (Milwertz, 1997). The field study in South Asia shows that where daughters had hitherto contributed to the long-term care of parents but for various reasons now no longer do so, then not only are expectations of daughters reduced, but so also are their entitlements to familial resources

(Kapadia, 1995). One very significant theme to emerge from a study of female autobiography and other personal narratives in twentieth-century China, is the way in which young girls felt themselves to be less welcome, valued and entitled than their brothers and estranged as outsiders “in but not of the family” (Croll, 1995). For daughters, less integral to or excluded from long term-familial and kinship genealogies, rituals and decision-making, it may well be that it is familial rather than social exclusion that contributes to their omission from mainstream economic and social activities and that this exclusion is heightened now that parents prefer smaller families. What field studies in the late decades of the twentieth century suggest is that both the preference for smaller families and the continuing dependence on parent-son contracts mean that daughters have become less welcome than ever before and that, in the resolution of this tension, familial management of reproduction has been intensified.

Reproductive management

Reductions in the preferred number of children alongside preferred sex configurations have intensified interest in family-building strategies, and ethnographic voices concur that conception is as much a cognitive as a physical act, with reproductive choices managed in a set of sequential decisions during a now foreshortened period between first pregnancy and completed family size. The number of children may be fewer, but successful reproductive management in both cities and villages is still measured in terms of the birth and survival of at least one son with desired outcomes achieved by a variety of pre and post-natal strategies including controls of fertility, pregnancy outcome, birth survival and transfers of children. Across the region, in China, the Republic of Korea, Taiwan Province of China and Viet Nam and in Bangladesh, India and Pakistan, there is an explicit preference for three or two children and a desire centering on either two sons and one daughter, one son and one daughter or, if only one child, one son (Chowdhury and Bairangi, 1990; Freedman and others, 1994; Park and Cho, 1995; Sudha and Rajan, 1999; Yuan and Skinner, 2000).

Preferable sex configurations included MM, FM and MF or MMF, MFM and FFM/M and, where parents naturally achieve such configurations, they are likely to stop child-bearing. However, in order to achieve such configurations, parents are now increasingly likely to be pro-active and to intervene before, during or immediately after birth or later in infancy or childhood. Those with one or two daughters and no sons are demonstrably the least satisfied category of parents and for long they have felt that they had no choice but to continue child-bearing until they had one or even two sons. It is this realization which

was responsible, even in the labour room, for post-partum quietness, disappointment and depression. Parents still go to enormous lengths to have a son by having more children than they want even if this is detrimental to the health of mothers or in defiance of governments' birth control rules. The difference now, in the foreshortened times of small family size, is that parents are more likely to intervene at lower parities and less likely to leave the sex of the second or third child to chance.

In the face of the continuing need and desire for sons, parents have resolved the tension between fewer children and desired sex composition by either resorting to age-old practices such as infanticide or later neglect or more preferably identifying the sex of the child before birth followed by sex-selective abortion. Iterative reproductive decisions are primarily influenced by the gender of the previous surviving child or children and it is the presence or absence of a son which primarily shapes sequential birth plans and the process of reproductive management. In India, field research shows that as parents want fewer children and at least one if not two sons, even second daughters at lower parity births are seen increasingly to "come without being invited" (Jeffery and others, 1989). In China, with stringent one- or two-child policies, the birth of the first and second daughter means that more than ever before, she "takes the place of a son" or constitutes "a lost opportunity for a son" (Ku, 1998). In the more intensive competition between sons and daughters for precious places within smaller families, it has become clearer than ever before that, if parents can manage their reproduction to achieve desired gender configurations, then, quite purposively they will do so.

In China, as more stringent birth control programmes including the one- or two-child rule have become more widespread, field research has suggested that there has been an increase in anxiety during pregnancy and a cumulative increase in the deployment of superstitious practices and herbal remedies to influence the sex of the child and intervene before birth (Honig and Hershatter, 1988; Croll, 2000). In addition, more recent field work by Chinese ethnographers shows that those couples who already had a girl were not only determined to have a second pregnancy, but also made every effort to identify the sex of the foetus even where the use of such technologies was illegal (Xie, 1995; Gu and others, 1998).

In field-group discussions, villagers openly admitted that they would have an abortion rather than a second daughter. "No matter how much money they had to spend it was worth it" so that now they were more likely to know the sex of the unborn child while, on one occasion, an estimated 80 per cent of those carrying a girl in their second pregnancy had an abortion (Xie, 1995). In

other very recent village studies, parents have defied birth control regulation and proceeded to have either two children (FM, MM, or MF) or three children with a configuration of FFM (Liu, 1995; Ku, 1998). In the absence of opportunities to intervene before birth, the figures for infanticide, infant and child mortality have increased and while there are few direct first-hand observations and discussions of such practices, there are rumours of discussions and disagreements between parents as to whether a daughter's birth should be registered, which is usually a sign that it is intended that she survives.

Several recent field studies have also showed that girls are more likely to be born at home where they are knowingly less likely to survive and in infancy and childhood are less likely to receive medical treatment or be taken to hospital. In one recent and comprehensive set of village discussions, parents reported abandonment and infanticide alongside various forms of lesser discrimination such as shorter periods of breastfeeding, smaller food allocations and fewer nutrients.

Most importantly, daughters between one and four years with older sisters and or brothers, had less daily family and health care (Wang and Li, 1994; Li and Zhu, 1999). However, such practices are much less likely to occur in cities and better developed rural areas where sex identification and sex selective abortion is an accepted outcome of reproductive management in order to achieve the same ends. Perhaps there is no greater testimony to the tension between family size and sex configuration and its acknowledged correlative threat to daughters, than the significant modifications made to the single-child family policy in the mid-1980s to permit a second child where the first-born is a daughter. Thus, it contributes to putting in place what is in effect a two-child or a single-son policy. With these concessions, the quest or struggle for a son has been magnified with the birth of a daughter not only still a disappointment, but also increasingly "an opportunity lost" to try for and bear that desired son within a two-child family.

In India, pregnancy is accompanied by much discussion and conversation centering on parental and familial hopes for sons, especially if a couple's previous children have all been daughters. The customary prayers and medicine-taking in the quest for a son, are even more pronounced now that couples hope to have smaller families and at least one or two sons (Jeffery and others, 1989; Jeffery and Jeffery, 1996). Hitherto, the loneliness and plight of the exhausted and sorrowing new mother who in "searching for a boy" has given birth to yet another girl was a familiar figure in the ethnographic literature.

Sometimes, so great was the determination not to have another daughter, that disappointment turned to infanticide. Several discussions in the literature about infanticide show poorer parents to be astutely aware of the contrasting immediate and long-term costs and benefits of girls and boys with the costs of bearing another daughter exacerbated by the likely expenses of her upkeep and dowry set against lesser benefits in terms of long-term care. The escalation in the costs of a dowry make bringing up a girl “very difficult nowadays” and the costs of two dowries prohibitive — so deciding the fate of many a second daughter (Buhniller, 1990). Despite the rising numbers and spread of infanticide already documented in the statistics, the majority of daughters do survive birth, but they are still likely to follow a pattern of continuing disadvantage which, sliding into physical neglect, may threaten her chances of survival in later infancy and childhood. What is noticeable in the ethnographic literature is that very few parents could give exact information as to the cause of a daughter’s death for most had never reached a doctor for diagnosis (Jeffery and others, 1989). The studies document in some detail the frequency of lesser breastfeeding for female infants, less immunization and lesser access to nutritious foods, with unequal distribution of meat, fish and eggs. They also confirm that boys are taken to hospital for common diseases much more often than girls and that there are marked gender imbalances in speed, duration and costs of medical or hospital treatment (das Gupta and Bhat, 1997).

In these circumstances, many are now unlikely to want to continue child bearing in the hope of a son and thus resort in greater numbers and with greater urgency to both conventional and more radical interventions made possible by new technologies. Advertisements openly publicize opportunities for ensuring preferred pregnancy outcomes, and evidence from both consulting-room and community studies suggest that parents are familiar with and accept the use of such technologies which are now widely available at low cost.

Local studies show that the use of new techniques to determine the sex of the foetus followed by termination of a female pregnancy has become common among educated and less educated, rich and poor and in urban and rural locations (Jeffery and others, 1989; Patel, 1989; Basu, 1992; Arora, 1996). In urban consulting rooms, wealthy parents seem most anxious to avoid the sense of inferiority and loss of status associated with the absence of sons (Buhniller, 1990). Most of those who avail themselves of these opportunities already have a daughter or two and want to ensure the birth of a son.

A focus on the strategic behaviour of parents across the region suggests that the reproductive preferences and calculations are the subject of much debate, which has been intensified as a result of fertility decline. There has been much debate about the degree to which new technologies or

prenatal strategies have supplemented or substituted for existing post-natal discriminatory methods (Goodkind, 1996; das Gupta and Bhat, 1997; Sudha and Rajan, 1999). Both demographic and ethnographic narratives suggest both that there has been some substitution as parents turn to newer -technologies instead of infanticide and neglect, and that newer technologies have also led to an increase in excess female mortality in East and South Asia. Monica das Gupta and Marie Bhut concluded that for India, there was an additional 1.3 million girls missing between 1981 and 1991 as a result of biased sex ratios at birth and have argued for an “intensification effect”. Their argument was confirmed by the worsening sex ratios in the most recent census (das Gupta and Bhat, 1997). Moreover, it can no longer be assumed or argued that such reproductive management is “unconscious”, rather the gender of the child, as well as numbers of children, have increasingly been brought within the “calculus of conscious control” to quote Ansley Coale’s (1973) memorable phrase.

A focus on the strategic behaviour of parents also suggests that cultural norms of gender as much as of family systems, critically inform reproductive goals. In sum, ethnographic voices in both India and China still speak of the birth of a daughter with some disappointment and ambivalence and it is clear that with declining fertility and smaller families, there is a new trade-off between the births of sons and daughters with intensified interest in reproductive management designed to achieve twin outcomes: a smaller family size alongside one or two sons. One way of resolving the increased tension would be for girls and boys to be reared similarly and valued equally. But what such interventionist management shows is that, practically and cognitively, girls still cannot substitute for boys and that both stated or inferred rationales underlying intensified reproductive management are firmly rooted in interpretations or reasonings of gender.

The reasonings of gender

In ethnography, personal narratives, interview, ritual and everyday practice whether among the literate or non-literate, employed or secluded, or urban and rural populations in East and South Asia, two powerful messages emerge which have been confirmed by the statistics. The first is that children are gendered; the second is that cognitively daughters are reasoned to be secondary and a supplement, but rarely a substitute for sons. Notions of female secondariness and tmsubstitutability underlie persistent and intensified son preference. Rooted in the culture of gender, they suggest that an understanding of gender identity and the ways in which gender relations are defined and interpreted within everyday beliefs and behaviour, is an important factor in understanding choices and behaviour in familial reproductive management.

It is one of the arguments of this paper that daughters suffer by reason of gender and that this reasoning has been underplayed in previous analyses of son preference. Although daughters are the most junior and under-studied members of the female gender, even the very term “gender” has been used universally as if there is an assumed uniform agreement about its meaning and gender identity and relations are beyond culture. Demographers have given a great deal of attention to inter-generational relations, but until recently they have given rather less to gender relationships in understanding demographic behaviour (Watkins, 1993). Although the intensity of son preference and daughter discrimination has been linked to gender roles, relations and degrees of inequality, few studies have analysed this linkage in any detail and in doing so, interrogated the meanings attached to the term gender.

In ethnography, personal narrative, interview, ritual and everyday practice in cities and villages of East and South Asia, there is evidence of a number of beliefs about expectations and entitlements of sons and daughters which point the way to a distinctive regional culture of gender that emphasises difference, hierarchy, complementarity and unsubstitutability, all of which underlie gender bias and shape the process of reproductive management. The consistent use of gender stereotypes in the field suggests that for parents, whether literate or illiterate, employed or secluded, urban or rural and rich and poor, sons uniquely perform certain roles and activities which cannot possibly be undertaken by daughters. These are grounded in firm and unquestioned beliefs about gendered divisions of labour which have rigid boundaries separating complementary but hierarchical sets of activities that are still difficult to traverse.

Ethnographies also suggest that, in turn, everyday notions of gender identity in both rural and urban communities are constructed around these dichotomous sets of activities and spaces, so that gender itself is interpreted as more of a performative concept rooted in social practice, than of biological or physical attributes and reproductive capacities although these are included. It is not what one is, so much as what one does, that differentiates gender identity (Liu, 1997). The content of the activities categorized as either male or female may vary but there are few overlapping arenas or domains of activities. Indeed, it is a common experience for ethnographers to note that important activities may be left undone rather than performed by the “other” or “wrong” gender. Even tasks undertaken by boys and girls as young as five to six years, are seldom gender-neutral while family plans, expectations and entitlements are clearly rooted in the anticipation that sons and daughters will assume customary adult male and female roles that are not only different but also hierarchical and rarely inter-changeable.

Because male work and contributions to familial security, fortunes and future are considered more significant than those of women, the importance attached to the potential of sons in terms of their type of work, levels of economic support and contribution to familial continuity are such that gender hierarchies abound.

However, notions of gender hierarchy and equality are less important in this cultural context than gender complementarity alongside son preference. It is the emphasis on the recursive notion of complementariness in Asian cosmologies, philosophies, movements and everyday practice which seems particularly relevant in understanding the continuing bias in the values attached to children, son preference and interest in gender balance, all of which characterize the process of reproduction management.

In China, there have been a number of recent articles expressing the increasingly popular view that there is a distinctive female “outlook” and “world” which is inherently different from and complementary to that of the males of their own culture. The women’s movement, there, has taken great pains to stress that it does not wish to denigrate men or take men as their main adversary in a competitive or oppositional stance seen to be so common in the West.

As several feminist scholars in China have argued, the rhetoric of Chinese feminism speaks first and foremost for basic social justice and its concerns are universal to both men and women (Li, 1993; Shu, 1993; Lin and others, 1998). For India, it is similarly argued that it is complementarity which characterizes the relations between men and women, rather than the contradictory and oppositional relations between the sexes that might exist elsewhere (Fruzetti, 1975). Likewise, it has been noted that it is a role allocation on the basis of gender rather than equality between men and women, that is the issue in subcontinental societies (Menski, 1991). Activists in the women’s movement in India have also stressed the divisions between women and men’s separate but complementary spheres and emphasized that “it is really a mistake to see women as competing with and being restricted by men”. Rather, they argue that male and female roles are “clearly distinguished and the sexes are seen as complementary to each other” (Jacobson and Wadley, 1977).

If gender categories are constructed around bounded divisions of labour and activities that are different, hierarchical and complementary, then ethnographic narratives suggest that there may be a number of important differences cross-culturally in meanings attributed to the term gender. In North America and Europe for example, it is common to emphasize the similarities between males and females or qualities common to both, and to emphasize

androgynous or overlapping categories or domains of activities. Notions of progress and development include the reduction of gender hierarchy in order to achieve equity, or at least equality of opportunity and, to achieve this end, relations between males and females are often conceived in terms of competition or opposition.

In comparison, as ethnographic narratives of East and South Asia suggest, there is an emphasis on gender difference or qualities and activities which are unique to females, on divisions, segregation or separation of activities, on complementarity albeit hierarchical rather than equity, and on balance or harmony, rather than competition or opposition. This coherent emphasis on gender difference, complementarity and balance in both China and India, has its roots in ancient Confucian and Vedic philosophic and religious texts which stress the cosmological harmony of complementary spheres, in which each half of the binary dichotomy is complementary, unsubstitutable and more hierarchical than equal. In recent years, this long-standing emphasis on gender difference has been reasserted by manufactures, retailers, Governments and women's movements alike, as they emphasise Asian values or take distinctive responses to globalization that are local or culturally specific. It is this focus on gender difference and complementarity, derived from ancient text and time-honoured perception and reinforced by contemporary assertions of Asian values, that underlies the dominant notion of unsubstitutability that is clearly a recurrent theme in shaping the processes and outcomes of reproductive management across the region.

Without a change in gender reasoning, the rapid decline in fertility and the now preferred or imposed smaller family size in East and South Asia, will mean that daughters, rarely able to substitute for sons, will continue to be subject to new trade-offs as, more than ever before, they "take the place of" or "limit the opportunities for" still preferred sons. However, despite new and significant moves to counter young female discrimination, there continues to be a continent-wide denial by Governments and societies that it is the parental attitudes, choices and behaviours underlying reproductive management which threaten her birth and survival rights. In East and South Asia, it is the continuing invisibility of a daughter's contribution and reliance on son-centered inter-generational contracts based on notions of gender difference, complementarity and unsubstitutability (alongside new technological control over the gender composition of the family), that have meant that daughters are now increasingly at risk.

Until there are new meanings ascribed to gender identity and relations in East and South Asia, further tension and conflict between fertility decline and smaller family size on the one hand and family sex composition or son

preference on the other, is unlikely to be resolved without recourse to gendered fertility controls. In such circumstances, excess female mortality is likely to continue to be, as Amartya Sen (1990) has cogently argued, “one of the momentous and neglected of world-wide problems”.

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Gender and Fertility Strategy in a Yi Community

*Fertility has become a triangular
negotiation between villagers, political
economic forces and tradition*

By Zhihong Bai*

Studies of Chinese ethnic minorities, especially of women's experiences, are few and it would appear to be worth probing what is behind the "voluntary" nature of birth control. Demographic literature tends to emphasize macro policy-making and management of birth control,¹ but the subjects (or objects depending on the perspective one holds) of birth control policies — the experiences of husbands and wives — are often ignored. This paper intends to explore reproductive dynamics in a Yi village² at a particular point in time (two

* Zhihong Bai, from the Department of Anthropology, Yunnan University, is currently a Visiting Fellow in the Department of Anthropology, Division of Society and Environment, Research School of Pacific and Asian Studies, Australia National University.

decades after the two-child policy) by demonstrating how people respond to and deal with birth control policies, and how micro-level fertility in individual households is affected.

With the shift of demographic theories from evolutionary and Eurocentric views of societal development proposed by modernization theories to cultural studies, studies of individual agency and the micro-level social and cultural construction of fertility are becoming more and more common.³ Thus Greenhalgh (1995b), in summarizing classic demographic transition theorists such as Notestein (1945 *ibid*) and Davis (1949 *ibid.*), examines people's decision-making and cultural constraints in modern/pre-modern societies and equate modern societies with active decision-making and pre-modern societies with passive decision-making. Such theories draw a clear line between traditional and modern societies. Leibenstein explores people's passive nature on the basis of cultural convention and maintains that both forms of decision-making occur in both kinds of societies. Carter (1995) disputes the very distinction of two kinds of society and two forms of decision-making; he also deconceptualizes the idea of agency, arguing that such concepts employed in theories of fertility change are "unworkable" and tries to propose instead "an alternative view of agency to free us from the sterile opposition between passive and active decision-making". This is the perspective used here.

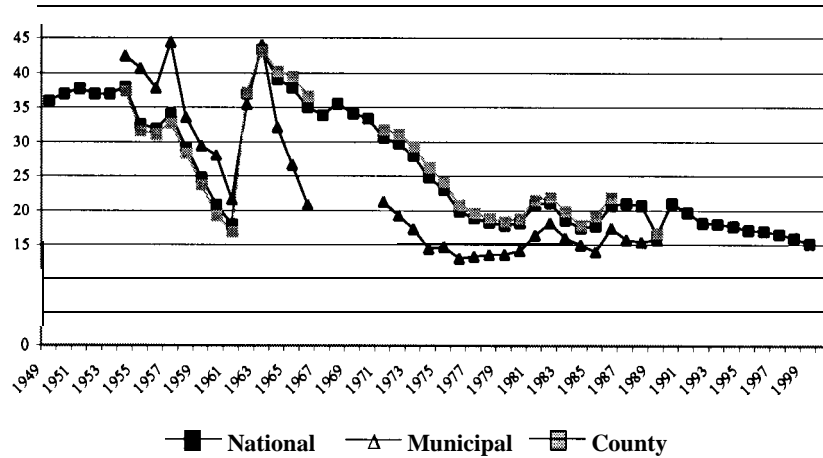
At a time of rapid socio-economic reform and the implementation of a strong birth control policy, the H village case serves to break the binary opposition of tradition/modern societies and active/passive framework in analysing people's decision-making process. The latter is concerned more with desired gender configuration than with family size. Eugene Hammel (1990; in Greenhalgh, 1995a) criticizes such demographic research that draws on old definitions and neglect newer meanings that may have special relevance to demographic behaviour.

To understand fertility decline in China requires first examining the national birth control policy which has shaped fertility behaviour over the past two decades. State policy acquired a special role when fertility concerns shifted from a political economic level to a more social constructive process.

State policy

China set two strategic goals when it started the economic reform of the late 1970s: population control and the realization of the "Four Modernizations" (modernization in agriculture, industry, science and technology, and national defence). Since the start of economic reforms in 1978, the State has been

Figure 1. Total fertility rate



Sources: (1949-1985 data) Almanac of China 1986 version; (1986-1989 data) 1999 version; (1990-1999 data) 2000 version.

loosening its tight control over its people's life, except in the area of population control, because problems of feeding the population and providing employment have become major concerns.

Since the 1970s, the State assumed that China's population growth was blocking its economic development, a theory well founded first in classic evolutionary demographic transition theory, then by Western development research findings before the 1980s, and well accepted by Chinese scholars.⁴ The Chinese Government and its urban elites believed that economic development would lead to social development and that people would reduce the number of children when they were materially better off. Controlling fertility was regarded as an urgent need, a must, and a premise to national economic development. Thus, the goal of fewer births was at the core of national family planning programmes (Wang, 1991a). In fact, since the initiation of some on-and-off family planning programmes in the 1960s, China's total fertility rate has been dropping.

Figure 1 indicates that since the 1970s, national total fertility rate (TFR) had started to decline rapidly, and below-replacement level fertility occurred among the urban population in 1971,⁵ once there was access to free medicare and old-age pension schemes and when there was virtually no unemployment.⁶ At this point, the State assumed people (in terms of the extent of public

acceptance and urban reproductive population) were prepared, more or less, to accept a further birth control initiative, and the nationwide implementation of the one-child policy⁷ took effect.

The one-child policy was meant as an essential foundation to accelerate the realization of the Four Modernizations and as an effective way to enhance people's living standards, and in the long run as a solution to employment problems (Wang, 1991b). Family planning policy has been given first priority and is still advocated as "an essential state strategy". Former Director of the State Family Planning Commission, Qian Xinzong explains:

"The promotion of one child per couple by the state at the present is based on the realities of China's economic and population conditions [. . .] Its fundamental purpose is to . . . accelerate the construction of socialist modernization"(Banister, 1987)⁸.

Family planning policy is thought of not only as a cornerstone of national economic and social development but also as an integral part of economic reforms. It received full support from the State and was soon popularized throughout the country.

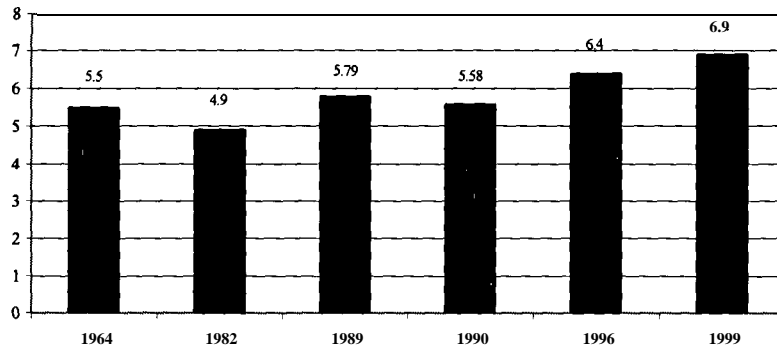
Response to the birth control policy and consequences

External responses

In spite of its alleged necessity and all the groundwork of implementation, the one-child policy received worldwide attention, mostly criticism from the West⁹ and resistance from those affected.

While the Chinese Government vigorously started to implement birth control,¹⁰ Western demographers were studying the determinants of sharp fertility transition and its consequence worldwide,¹¹ but their pertinence to China is different. They maintained that China's induced fertility transition was arbitrary and coercive, describing the Chinese family planning programme as "the world's first national compulsory family planning program" (Banister, 1987) and "the harshest fertility controls in the world today" (Greenhalgh, 1995). Some Western scholars concluded that the Government's family planning policy has been the determining factor for the fertility reduction, since "the level of modernization achieved in China was far from sufficient to effect the reduction" (Mauldin, 1982, 1986).¹² Ye (1991) and Peng (1991) added that a significant rise in woman's social and economic status contributed to the

Figure 2. Old-age proportion



Source: *Almanac of China's Population 2000*

implementation of the policy.¹³ Peng (1991) and G. Wang (1999) emphasized that strong government commitment and an effective family planning programme have played a vital role in bringing down the fertility rate.¹⁴

Internal responses

Because population control came before societal changes in the transition from a planned economy to a market economy,¹⁵ the policy received great resistance from the public. Most people have understood the need to curb population growth because the Chinese people have been facing food shortages for generations, yet when people realize that they are the ones responsible for population reduction, they have a difficult decision. Moreover, the policy had to contend with long-term demographic problems such as an ageing population and sex distortion due to a strong tradition of son preference. While the authority fully recognized a potential sex ratio issue, old-age consequences were rarely addressed by decision-makers in the early days of policy implementation.¹⁶ China had never worried about an ageing population since its old-age population was very low (see **figure 2**). Even in the mid-1980s, neither decision-makers and political leaders, nor the public perceived that elderly dependency was then or could ever be a problem.¹⁷ To date, the ageing of China's population has not reached a crisis level, even though it continues to increase. In China, old-age support has been a family issue confined within the domestic domain for centuries. Old people had never been cared for by non-kin, except in the case of the childless and those without relatives. Both

the constitution and marriage law clearly stipulate that children of both sexes are legally obligated to¹⁸ provide financial support and all necessary care for their aged parents, and traditional cultural values strongly support this requirement.¹⁹ Doubts raised about the difficulties the only child would face at middle age were brushed aside by state officials. A group of American gerontologists who visited China in 1978 noted that their Chinese hosts did not view an ageing population as a problem in their country and that "... they could not visualise the aged as separate from the needs of the whole population".²⁰ The director of the State Family Planning Commission, Qian Xinzhong, pointed out:

"It is without any foundation to worry about the danger of population aging in the promotion of one child per couple. [. . .] Productivity will be greatly developed, and material and cultural standards as well as labour insurance will be greatly improved. It will be completely possible for society to handle the problem of looking after the old. The burden will be taken off the sons and daughters (Banister, 1987)".

Former Vice Premier, Chen Muhua, remarked:

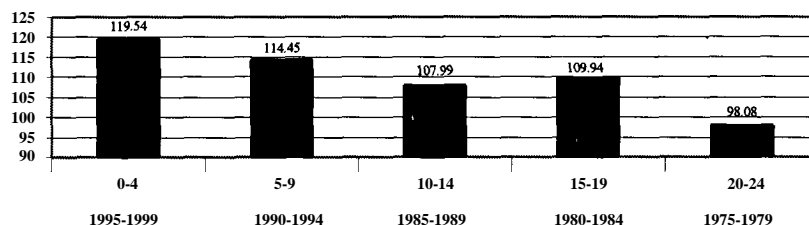
"Some comrades are worried about whether or not the population will become 'old' if each couple has only one child. The increase in support for old people would increase our society's burdens, [. . .] However, we need not worry about the problem of the population 'becoming old' for a fairly long period (ibid.)".

The different reactions of scholars and senior officers over demographers' warnings are clear, but the scholars' clamour had no power to override the priorities of the State. Economic development was taken for granted as all-important, and rapid population growth was a burning issue.

Besides the ageing problem, another consequence of birth control policy is a distortion of the sex ratio.²¹ Son preference and the number of sons have been enduring concerns of most Chinese families. With the implementation of the birth control policy, the number of boys subsequently increased (see **figure 3**), indicating that it took some time (from 1982 to 1989) for people to adopt the various strategies for favouring sons.²²

As mentioned above, it is insufficient to examine only policy at the state level. Throughout history, old-age concerns and son preference have been deeply rooted in traditional Chinese ideology²³ and the basis of the family

Figure 3. Age group sex ratio in 1999



Source: China Population Statistics Yearbook 2000

structure on which Chinese society was organized. Now, I would like to focus on the micro-level cultural factors affecting old-age problems and sex-ratio distortion in the Yi village, where patriarchy and strong gender inequity still prevail.

Demand for children, demand for sons

The H village case draws attention to the impacts of “pre-existing social and cultural arrangements” (Kertzer, 1995) which are of salient importance to understanding the strategies people employ. Pre-existing cultural features condition the way in which people react to political and economic forces. What people perceive as good depends heavily on cultural traditions.

In H village, women are metaphorically referred as [*vi'nuo*] meaning “flowers”, men as [*chetzuo*] meaning “poles”. Parents and elders like to name a boy with words meaning poles, wealth and fortune, and a girl with names of flowers such as chrysanthemum, sunflower, and daffodil... Villagers say: “Sons are like the poles buried into the ground, they are deeply rooted in the household as cornerstones; girls are like flowers, they may blossom anywhere in the mountains. A boy needs bringing up with much care, parents should hold him as something precious in the mouth; raising girls involves washing and cleaning”. Traditional old saying has different expectations for boys and girls as soon as they are born. The poles [*chetzuo*] are expected to be the main supporters and to be responsible for the welfare of the family and farm. The flowers [*vi'nuo*] do not need special soil nor fertilizer, unlike greenhouse flowers in cities; its blossoms in the mountains need no special care and flowers do not have to be planted in the family yard or around the house!

Traditional fertility notions still shape villagers' demand for children, especially in the context of family size and gender configuration.²⁴ Traditional norms, therefore, constrain the behaviour of individuals in the new political-economic context.²⁵ The traditional ideal family size is three sons and two daughters, although the actual births before 1980s usually exceeded this number.²⁶ Now, the ideal offspring set is four children - two boys and two girls; or three children - two males, one female. But to abide by the birth control policy, couples have to settle for two boys, or failing that one boy and one girl.²⁷ The old saying: "sons are descendants, but daughters marry out!" is foremost in the minds of parents. The number of children is not as important as it used to be under birth control policies, but the sex of children counts. The fact that sons are preferred over daughters reflects the desire for things instrumentally related in a community where there is neither social security nor old-age protection.

Traditional fertility norms reflect the expectation that sons should take care of their parents when they get old. Since the family line is passed through sons and daughters marry out, sons remain a major source of economic support for the elderly.²⁸ The birth of a boy or a girl entails expectations of security or insecurity in old age. All the six conditions of old-age concern identified by Nugent (1985, 1990) can be found in H village: (a) absence or inefficiency of alternative methods of asset accumulation or insurance for old age; (b) absence or weakness of formal or informal communal or governmental supported means of dealing with old age, and other needs; (c) believing children to be reliable sources of such support or insurance; (d) no markets for or the non-tradability of the goods and services required by the elderly; (e) no sufficient income; (f) relative importance of old age in the life cycle. Moreover, the villagers' concept of old age starts very young compared with international norms and the period of old age is thus that much longer.

In H village, people define seniors by two criteria: (a) those who have lost their heavy labouring ability (ploughing land, driving buffalo or cattle, and harvesting); and (b) those who have sons who are married or are at marriage age. Villagers classified 212 people as "old" out of a total of 522 in 2001. Of all the 108 households (in 1999), 21 are three-generation families, which refers to seniors living with married sons, thus took up 19.4 per cent of the total households. Yet, this does not mean that all aged parents want to live with their children and grandchildren.²⁹ Six households (5.5 per cent) consisted of seniors living alone, so the "old people" can either live with sons or with their spouse alone owing to a neolocal tradition.

Sons can bring fame and prestige and provide self-esteem. Gaining fame is the dream of all men in the village; fame is supplemental for the welfare of the family. Bearing sons is considered a sign of blessing and is closely linked to traditional ideas of fame/prestige in a patriarchal tradition. To a great degree, clan and family fame and social status have been dependent on the number of sons in a family, consequently the more sons one has, the more influential one is. Bearing sons is also an important way in winning social and self-esteem for the mother who craves for the acceptance and respect of her husband's family and the community. A woman brings her husband fame, enhances her husband and her patrilineal family's power and influence in the village by bearing more sons. She will in turn win respect and an important position inside and outside the household. So bearing sons is a guaranteed way to gain fame for both husband and wife.

But while the number of sons brings a couple fame and good social status, it has different meanings to husband and wife. Husbands are more concerned with their reputation and status in the village and they are content as soon as they have sons; wives are more concerned about their old age. When couple Z was fined for the birth of a son after three girls, the husband said, "You cannot speak as loud as other men; if you have no son, you have no say in the village". Yet this husband does not mind spending the rest of his life with one of his three daughters who works in the nearby city; the son has already brought the father the fame he desires, so old-age security is not necessarily so important.³⁰ Women, however, have a great fear of old-age loneliness. My interviewee, Couple Z (wife) admitted to this:

"I had witnessed that my neighbor (an old woman in her 80s) refused to live with any of her sons who work in the nearby city. Although all her sons were very successful, and had decent jobs in the city, the old woman lived alone and miserably. Life in the village was very difficult for a lonely old woman, she was often short of water [drinking water]. Fortunately, her first son-in-law was very kind and often came over to fetch some water for her. But when festivals or important occasions came, doors were shut close. People would gossip about how the closed house was deserted, as if haunted."

When this old woman was alive, she had insisted on staying at her old house on important occasions.

Apart from old-age financial dependency and social recognition, people (women in particular) also seek filial support. They want to make sure that they can have at least one son to depend on.³¹ The wife above, clearly expressed her strong wish to keep the son in the village, she said: "Now I have my own son, we will stay with my son when we grow old. We will never go to my

daughters, it will make us a laughing-stock in the village if we do so". To this wife, having a son is an essential means to ensure security when they get old. "I will get my son back and take care of the household. I am old [46 years old], I cannot work on the farm any longer". When asked what if the son chose not to come back home and if she would rely on her three daughters who are working near the village, she answered with certainty:

"He will, he said he will return after his service. I am going to get him a Yi wife, otherwise people in the village would laugh at us [if we get a non-Yi wife]. If he does have crush on any girls in this village, I will get someone in another village and hold the wedding in this house".

In the eyes of villagers, this couple is more resolute, capable and more resourceful than most. Villagers all agree it is worth paying a fine for an unauthorized boy, but not for a girl. This couple felt relieved that things had worked out as they had wished.³²

Changes in values after economic reforms add to parents' concerns for the number of sons. Individuals who left the mountain village are regarded as capable and successful persons. Leaving the village is a sign of prestige, honour and wealth. Recently, with rapid urbanization and shrinking arable land, there are better employment opportunities in urban areas, attracting young men and women to migrate at least temporarily. A young husband and wife may also choose to leave the village whenever they can and small families make mobility easier. Children are sent to schools as long as they can keep up in their studies and child labour is not as important as it used to be. When today's children reach working age, they often prefer to leave the village and find jobs in urban areas,³³ only coming home to help when intensive labour is needed in the fields. They remain out of the village as long as they can survive (some are very successful). This new flexible mobility brings new concerns for old age and the number of children. If a family has only one son, he might leave the village for greater opportunities. Despite financial independence many seniors need the day-to-day care of their family members and traditionally sons often share such care: while the youngest sons stay with the old, other sons are expected to buy their parents some food and clothes annually.³⁴

Gille (Peng, 1991) claimed that structural changes must take place before family-planning provision can bring about a fertility reduction. But in H village, there are not many changes in traditional worshipping practices, inheritance customs, marriage systems or property distribution. Fertility decline is a direct result of state policy and economic reform. However, social institutions are not necessarily changing to fit the population policy. Instead,

people have to change their fertility behaviour to adapt to the state birth control policies and achieve their desires in a constantly changing social context.

Thus, an enormous space is created for strategies which are shaped by the family system and by the gender role of an individual as he/she adjusts to new realities, hopes and expectations.

Birth-spacing

As people realise that they have no right to decide on the number of children, they resort to other tactics in order to get their strongly desired sons.

Spacing is crucial in the second or higher order of birth. The state is trying to curb more births by applying spacing regulation. Villagers deliberately violate the spacing regulations to increase their chance of bearing sons within official penalty limits.³⁵ Part of villagers' traditional beliefs is that short birth intervals make it easier for the mother's physical recovery.³⁶ Yet, short spacing has now acquired new meaning and function. To ensure the next birth is a male and for fear of a policy change (to more rigid restrictions), people calculate the timing of the second birth very carefully. If the second child born happens to be a girl, resourceful couples give her away, so that they can soon proceed to bear another child with the chance of a boy.

Local cadres complain that it is comparatively easy to implement the national birth control policy if the couple has two boys or a boy and a girl. The difficulty is with couples that have two girls. Two years after giving birth to a girl, Couple H had their second birth, again a girl. They sent her to a barren couple in a nearby factory.³⁷ The next year, they finally had the long-craved-for boy. Although they were fined 1,500 yuan (10 per cent of their yearly gross income in 1988, US\$1 = Y8.28) for violating the spacing regulation, they think it is well worth paying the fine to have the son. The wife justified their experience by emphasizing that she prefers to bear one child right after another because this is physically easier.

This couple made meticulous calculations for all their pregnancies. When the wife gave birth to their first born, they went to hospital, but she delivered the second and the third children at home in order to avoid registration and reporting of these births. In such a remote village (10 kilometers away from a highway and two hours away from a hospital), this is dangerous for both the newborn and the mother. Besides, deliberate breaking of the state four-year spacing regulation is to ensure the birth of a boy. People want sons; the State wants to reduce fertility. Therefore, deliberate incidences of high-order birth and unauthorized sons inevitably emerge. Here we see two conflicting forces in

train. On the one hand, the State has its birth control plans, on the other, Yi families have their own plans to ensure they bear sons. The disparity between the birth control and actual practice often fails to appear in the census.³⁸

According to *China Population Statistics Yearbook 2000*, in the quality inspection of population data conducted in 1982, underreporting of fertility was 18.3 per cent, and that of mortality was 44 per cent in 1981.³⁹ Undercounting of both male and female births was occurring long before the family planning policy,⁴⁰ as it had throughout Chinese history, yet again it is the implication which has also changed over time. Most undercounting happens to girls, and now it is more than simply ignoring girls, rather a tactic to facilitate another birth, another chance to get a boy. So intentional underreporting is very likely to happen. In Yunnan Province, publicly announced third and higher births were 29 per cent of all births in 1983 (Banister, 1987). People tend to conceal the birth of a child that violates local fertility limits or the spacing requirement.

Women's subjectivity

Women's subjectivity is of particular interest because of the light it sheds on the interactions between people's experiences and the birth control policy, and between women and men. As I tried to explain earlier, political and economic forces have conditioned fertility. This cause-effect relationship is identifiable, yet people's experiences (especially women's) are barely considered in the bright-lit stage of studies of the Chinese demographic transition. It is the couples' (especially wives') agency that has affected fertility outcomes.⁴¹ Women use conscious strategies to get around not only the state policy and its consequences, but also to comply with norms of traditional patriarchal dominance in the community, and this challenges the monolithic model that insists on women's uncompromising opposition to the State and patriarchy.

In fact, enforced birth control often stimulates women into taking steps to struggle for a better position at home. Today, Yi women are still full-time farm labourers. They are also sole caregivers at home, working two or three hours longer than their husbands on average per day. They put a lot more labour and care into cash crops. The overwork of women owing to the double burden also has a powerful "antinatalist" effect (Banister, 1987). Most young Yi women I interviewed (aged 25 to 35) perceive their reduced fertility as advantageous. They do not want to spend all their lives working in the fields, bearing and raising many children as their mothers did. Most of them realize that a small family gives them more freedom and fewer burdens in the prime time of their

lives. They are more interested in the good care of their cash crop and this requires intensive labour and care.⁴² They want to have more leisure time for themselves and make some extra cash, and be more relaxed in daily life and farm work. Rigid birth control has transformed the lives of village women; they have come to use it as a tool to empower themselves.⁴³

Although the nature of the family planning policy is quite arbitrary, there is still space to manoeuvre, despite a “coercive” approach quite outside the state’s initial intention as discussed earlier. The policy, in fact, contributed to the growing sense of self-awareness felt by women who had formerly been totally ignored and excluded in the community (for example, in the annual mountain-gods worshipping festival, initiation rituals, and similar important occasions). Family planning policy brings women from the fireplace to the dining table (women do not traditionally eat at the dining table with men, a reflection of their traditional subservience in the family). Moreover, because the state family planning policy was listed as a women’s issue, women were targeted as the objects of birth control programmes, and most of the “educational and persuasive” work focused only on women.⁴⁴ Women have now become an important part of the decision-making within the family because they are better informed about birth control policy and they know everything there is to know about birth-control techniques. They are able to balance national population planning objectives and their own desire for sons, manipulating the policy’s impact on family life to their own advantage.

Birth control policy unites husbands and wives as they seek a resolution, not necessarily identical, between their own goals and state policy by their collective wits. “Planning decisions” (Ortiz in Carter, 1995) strengthen their solidarity but by compelling men to treat their wives more as equal beings. In order to achieve their goals, men have to cooperate with women. Women have grasped this opportunity to build up their power in the family. Thus, the power relations within the family are now changing, giving women a greater role in determining their own well-being.⁴⁵ Above all, women now have the freedom to reject unwanted fertility. In this way, the patriarchal authority has to give women a place in the new socio-political context.

Traditional gender politics in the family are now being challenged and changes in fertility behaviour bring about changes in gender relations. The family’s hope of winning social esteem through bearing a son is now putting the husband largely in the hands of his wife because of government policy. How she handles it and whether she is cooperative becomes vital. This gives women a chance not only to negotiate with the patriarchal tradition for a better position in the household, but also to exhibit their skills in order to win the

game as regulated by the State. They obviously remain dependent on other agents, such as cooperating with in-laws and family networks, especially women's networks, because they usually seek aid from female friends and relatives before consulting their husbands. Networks seldom cross the gender boundary: women rely more on their networks (female friends and kin) not the husbands, for collecting information, especially during late pregnancy and delivery, they seek strong and intimate female kin as helping hands. In the power relations between men and women, women are no longer voiceless, but are integrated into the whole process from decision-making and careful planning to final performance. Although there is a continuity of internalized patriarchal control and social norms, the new situation leaves much room for significant changes in gender politics in the long run.

Conclusions

Rigid birth control policy has been given new function. For generations, the birth of children has been denigrated by society as women's work, but now it has become a vital part of "fertility dynamics" (Greenhalgh, 1995). Fertility has become a triangular negotiation between villagers, political economic forces and tradition. While the State tries to control population through family planning policies, patriarchy and traditional customs keep struggling for sons and resisting the policy through their women. The women are fully aware of the important place they have been given which provides them with possibilities to play off both the State and patriarchal tradition.

Thus, fertility strategies become "reflexive" (Giddens, 1991) as a result of political and economic forces, shaped both by national policy and traditional institutions in terms of social structures, family systems, gender roles, and the traditional neolocal post-marital residence. When these strong forces clash, people seek their own solutions within the parameters of physical and economic possibilities and the tolerance of the State. Although the entire range of structural and cultural variables is not presented in this paper, the variables dealt with are the fundamental forces in motivating villagers to bear sons, for "a significant shift in the institutional setting and cultural condition"⁴⁶ has not occurred.

Traditional notions of family size and son preference are reduced to bearing sons for prestige and to the concerns about old-age security. Under the strong government policy, demographic actors are fine-tuning and micro-modifying their reproductive activity (Greenhalgh, 1995) to achieve desired outcomes. Women are put in the front line in dealing with the state policy and

traditional patriarchy. The national birth control policy has allowed women to stray out of patriarchal control and acquire some autonomy. Women are able to affect their own position by tinkering with state policy and traditional patriarchy.

There are some reports that people are having “heightened receptivity”, or “lowered resistance” (Wang, 1999). When Banister warns against such words as “voluntary” and “willing” (1987: 194-195), she is more concerned with the freedom of birth choice. My thesis is that the H village case illuminates an alternative explanation: if we put people (especially women) into what appears to be a passive and helpless position, we often fail to see what is under the surface since strategies and women’s subjectivity are not and have never been straightforward.

However, if we look at the strategies people take (successfully or unsuccessfully), we can enrich our understanding of the underlying dynamics and power relations involved. My research echoes Anthony T. Carter’s (1995) assumption that the active/passive model is not enough to explain reality because people can be both at the same time. At the macro level of economy and politics, people consciously act to achieve expected benefits; at the micro level of tradition, they still adhere to their inherited past in the pursuit of status and old age security through bearing sons.

F. Arnold and Liu (1992) argue fertility decline is closely related to income in East Asia, arguing that son preference has not been a substantial obstacle to achieving fertility declines in Hong Kong, China; Japan; the Republic of Korea; and Taiwan Province of China, and are implying that GDP contributes more to fertility decline. Banister (1987) emphasized a close association between a nation’s per capita income and fertility reduction, and Skinner and others (2000) also put considerable weight on socio-economic differentiations in the spatial variations of fertility levels in China. Yet, E. Hammel (1995) questions the validity of economic explanations of fertility behaviour.

The H village case shows that current unauthorized births occur most often in these families with more economic resources, and with the social capital both to afford government fines and to smooth out any disputes. The link between income and fertility therefore takes on a new significance and looks to becoming a new indicator of wealth, prestige and higher social status in this mountainous ethnic community. High levels of gender equity in individual institutions, education and mobility will equip couples with more resources to achieve their desired offspring.

Fertility is “spatially, temporally, and culturally specific” (Greenhalgh, 1995). Even if socio-economic conditions change, spatial and regional differentiation persists. In this paper, I have tried to “situate” fertility strategy as part of an “invisible culture” (Fuchs and Moth, 1995) in one ethnic village, hoping to portray a different picture of fertility decline in China. The State is still an important actor in people’s reproductive life, yet demographic outcomes depend more and more on people’s perceptions and strategies. Fertility is not simply reducible to demographic outcomes. Instead, it is humanly constructed. It can demonstrate, to borrow Caroline Bledsoe’s (1995) word, “signs” of power relations both in the economic-political as well as in the domestic domains.

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Endnotes

1. Worldwide studies of women’s reproductive experiences often focus on the nature of social construction and cultural elaboration.
2. I use the term “Yi” to refer to this ethnic community who call themselves Nusepu and who are officially labelled as part of the pan-Yi category in the 1950s. H Yi Autonomous Village (hereafter: H village) is located in the mountains in the north east of Yunnan Province. There were 108 households and 442 people in the village by the end of 1999. Except for 15 married women from other non-Yi villages, all of them are Yi. There is a strong sense of gender difference expressed in legends, social values, rituals, social norms, and the division of labour, religious activities and accessibility of resources.
3. China-based literatures on demographic transition (Peng, 1991; Wang, 1991a; Zen, 1991 and 1992) put much weight on the overpowering influences of restrictive policy. I am not denying the significant role state birth control policies have played, but given the sharp rural-urban difference in China, it seems equally important to look at the rural and ethnic “periphery” areas so as to avoid stereotyping the fertility decline in China as a one-way (top-down) model and to mistake external sociopolitical context as the only force that is shaping fertility in China today.

4. Ma Yinchu pointed out that population outgrew capital accumulation and limited the country's development, but he did not receive recognition then (Banister, 1987). G.Wang (1999) echoes this point. In an open seminar entitled " Science, Modernity, and the Making of China's One-Child policy" at the Australian National University on 21 March 2002, Susan Greenhalgh elaborated on the decisive roles of a group of Chinese demographic scientists in bringing about the nationwide one-child policy by constructing a set of "scientific and modernization discourses" to orient the link between population and living standards.
5. Also see Lee-Jay Cho (1992), G. Wang (1999) and T.H. Hull (1991) for relevant discussions of the 1970s and 1980s.
6. At least one of each couple used to have socialist social welfare security.
7. The one-child policy was enlisted in the constitution in 1979, but the policy for one-child per urban couple and two for rural ethnic couples was implemented in 1982 (rural Han were included years later). Rural ethnic couples should leave a four-year space between the two children (a five-year space among the Han). To fulfil the population goal, a number of other well-organized policy packages were established varying in detail according to region.
8. A meticulous network of family planning programmes was formed nationwide. Grass-roots government agencies combine the goals of the family planning programmes with the production responsibility contract and opportunities in career attainments. Economic measures consisting of incentives and including disincentives are designed to curb the violation of the plan (Wang, 1991b). All government officers are put in charge of family planning programmes, in addition to their regular responsibilities.
9. Most Western scholars' studies look into specific problems, paying much attention to the impacts of population policy within the historical and cultural contexts of a certain area, but giving little attention to people as agencies.
10. Research on contraceptive methods is well sponsored. Methods of contraception have been widely spread and facilitated. The importance of population control for national development and for individual well-being is repeatedly emphasized among the public (Peng, 1991).
11. See Banister (1992) for detail.
12. J. Bongaata and S.C. Watkins (1996) also emphasize fertility decline is more related to "the level of development when the transition began".
13. For a theoretical analysis on the relationship between gender and fertility, see McDonald (2000).
14. Also see Skinner and others (2000). In December 2001, the Director of China Family Planning Commission, Mr. Zhang Weiqing, admitted that low fertility was brought about via "administrative restrictions, and the desired number of children still outnumbered family planning goals". Source: <http://www.chinapop.gov.cn>. Yet, G. Wang (1999) argues that the successful implementation of the policy lies in "the convergence of diverse circumstances" within Chinese society and in non-policy factors, such as the economy, health care, education, social security systems, and women's social status. Wang's argument reflects the ideal many Chinese leaders hold (see Banister, 1987 for detail). However, these are only true in the urban areas where most women work; the rural population never had such services.

15. Although some of the deep societal changes engineered by the Government may have contributed to spontaneous fertility decline or created the context in which the family planning programme could succeed (Banister, 1987).
16. Susan Greenhalgh's (1992a) survey shows only in the late 1980s did population studies put weight on urbanization, ageing and the aged persons.
17. The rising aged population is due to birth control policy and prolonged life expectancy. There is an incentive - "five guarantees" - a welfare system, providing minimum food, clothing, shelter, medical care and burial expenses to aged childless persons. However, the provisions are meagre and the five-guarantee subsidy leaves them on the poverty level.
18. The most recent social security reform of 2000 only covers those who work for the Government (although private sector is supposed to provide the same, its practice is very variable).
19. Rural society has its own backup methods of providing for those older people with no living sons.
20. Jacobs, Grace (1978). "Speaking of seniors", in *Long Life: Aging in China*, notes of a delegation of gerontologists to China, 206.
21. G. Wang's (1999) data show historically the sex ratio was always high, which balanced a high mortality, but this no longer suffices to explain current high sex ratios in some rural areas.
22. According to Hull and others (1991), the rising sex ratio occurs in three different ways: abortion of female foetuses, female infanticide and unreported female births.
23. On a national scale, China has had a pronatal orientation in its nation-state building for centuries. Increasing its population has had a strong and long history in China. Overpopulation had never been a problem in the eyes of Chinese elites before 1954 (the total population almost doubled in five years from 1949 to 1954). To the rulers, population has always been used as a tool to seek manpower to enhance productivity and hegemony of the nation-state. A variety of measures have been proposed to encourage human reproduction by prestigious scholars such as Guan Zhong and MO Zi (468 B.C. - 376 B.C.). Modern Chinese intellectuals such as Liang Qichao (1873-1929), Chen Duxiu (1879-1942), and Liao Zhong Kai (1877-1925) all dispute Malthusian theory, holding that enhanced productivity can offset overpopulation problems. Mao believed that a large population was essential to the country; a large population meant strong national defence and more political power. Raising several children is no different from raising one child in the consumption of time, money and energy by most Chinese people.
24. For discussion of demand of children, see Lee and Bulatao (1983 and Ye, 1991:50 for detail); for family size in overall China, see Peng (1991).
25. Surveys show that son preference is rooted primarily in the desire for support in old age, only secondarily in such factors as the desire to carry on the family line, the need for labour power, and the like (Zhou L.R and C.Z. Zhu, 1983, *Renkou Yanjiu*, 4:47). Scholars have listed a variety of reasons for son preference. F. Arnold and Liu (1992) have listed two advantages in rural China: support for their parents in old age and the provision of labour for the farm or family business. In 1999, there were 40 under-16-year-olds in H village, taking up 13.8 per cent of the total labour force.
26. In reality, some cases show that having many sons does not necessarily ensure a good life for the aged, which is another stimulus to bear more sons to maximize the chance of having a dutiful one.

27. Whatever the actual number of children is, there always exists an unmet demand. Most couples of childbearing age openly claimed they would be as happy to have girls when they have already had a son.
28. Since the introduction of the “responsibility system” after the economic reform in 1980s, the Chinese peasant family has once again become the major unit of production in the countryside.
29. For a detailed discussion of traditional Chinese household formation and residential patterns, see Zhao (2000).
30. At the end of my fieldwork, when this man sent me home, the first thing he said to my parents was: “How lucky and blessed you are! Your three children bear you three grandsons”.
31. As Peng (1991) pointed out “having sons to look after you when you are old is not only a traditional attitude, but also reflects a practical problem”.
32. Most of my interviewees proudly stated that as long as they can move, they prefer to live all by themselves when both the husband and wife are still alive and in good health. When heavy labour is needed in the farm work, they make their sons come and help out.
33. Mostly construction work or self-employed in small private business.
34. Married out daughters are not expected to take care of the old and have no right to inherit family property. Daughters have no say in their parental family, they have no commitments/obligations to their parents and no share of the family property right after their marriage, not even women married in the same village. The strength of such socially dedicated responsibilities varies according to the particular characteristics of sons by birth order.
35. Zhai Zhenwu points out that “sex ratio at birth increased along with the increase of birth order. In 1998, the sex ratio at birth of the first child is 105; the second child is 139 and the third and above is 144. In 1999, these figures increased to 104, 142 and 147 separately” in his presentation entitled “Social and Economic Consequences of Rapid Fertility Decline: Case Study of China” on the international workshop “Fertility Decline, Below Replacement Fertility and the Family in Asia: Prospects, Consequences and Policies”, held at the Asian Metacenter, National University of Singapore from 10 to 12 April 2002.
36. Greenhalgh and Bongaarts (1992b) study also shows that rural couples would prefer to have one or two years’ space.
37. No further investigation was conducted out of respect to the informant’s privacy. For details about infant abandonment and adoption in China, see Johnson and others (1998); about prenatal sex determination in rural China, see Chu (2001).
38. Part of the reason is underreporting, manipulation of birth figures and continuing weakness in the statistical system have resulted in substantial underreporting of the birth rate and annual population increase rate (Banister, 1987).
39. Banister (1992a) argues that usually 10 to 20 per cent of deaths are not reported, 15 per cent or more of the deaths apparently are never formally registered. If a baby died before being registered, there might be no incentive to report either its birth or its death (see Banister, 1987:239-87 for discussions on underreporting.)
40. Banister notices birth reporting “became tainted by falsification” when grass-roots cadres find they are not able to meet the target (Banister, 1987: 289).

41. In history, Chinese people have consciously adjusted their fertility according to what they already achieved in reproduction. For a detailed discussion from a historical perspective, see Zhao (1997).
42. People can always hire hands in times of need or pool labour to help out each other in the clan or community as they used to.
43. Supported by men and a patriarchal tradition, they might have more confidence in confronting the State (than confronting the patriarchy).
44. There was a time when men were also ignored in demographic studies. For discussion of a general absence of male reproduction roles in demographic accounts, see Greene (2000).
45. According to the headman's estimation, about one third of the households are headed by women although only 4 per cent are openly registered.
46. Which is listed as a necessary condition for fertility decline by McNicoll (in Peng, 1991). In Peng's eyes (1991), the direct role played by family planning is limited, nevertheless, because the future success of population control largely depends on changes in old-age security and traditional family norms.

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Reproducing the Asian Family Across the Generations: “Tradition”, Gender and Expectations in Singapore

*In the context of constructions of the Asian family,
relationships between the generations play a central part*

By Elspeth Graham, Peggy Teo,
Brenda S. A. Yeoh and Susan Levy*

“It would be the mother of all ironies if we succeeded in every endeavour but failed to reproduce ourselves and sustain our continuity”,

(Straits Times, June 1999)

* Elspeth Graham, University of St Andrews, United Kingdom; Peggy Teo, National University of Singapore; Brenda S. A. Yeoh, National University of Singapore; Susan Levy, University of St Andrews, United Kingdom.

Throughout the developed world, with declining fertility and historically high divorce rates, the role of the family in society is changing (Sardon, 2000; Allan and others, 2001; *Time International*, 2001). In Britain, for example, there is an ongoing debate about the future of the family and politicians periodically reaffirm the importance of a stable union between a man and a woman as the best setting for raising children. In Singapore, similar concerns are evident, despite lower rates of births outside marriage and apparently different conceptions of the nature of the family. With fertility now below replacement level among the majority Chinese population and lowest among university graduates, the Government is clearly worried about the implications of low fertility and its correlate, “the declining family”. In particular, the family as a setting for the care of the elderly has become a major focus of concern. Moreover, for more than a decade, the Singapore Government has been proactive in its attempt to halt fertility decline by offering inducements, such as tax incentives, to have “three or more if you can afford it” (Drakakis-Smith and others, 1993; Graham, 1995). The introduction of the Baby Bonus Scheme in April 2001 is merely the latest in a series of measures designed to persuade Singaporean women to tailor their reproduction to the perceived needs of the State (Pyle, 1997).

What is particularly remarkable about these measures, however, is that their message has changed dramatically. Whereas in the 1970s the population was educated in a vigorous antinatalism by the political elite, by the 1990s, a clear, albeit qualified, pronatalism was in place. According to the People’s Action Party (PAP), which has been in power for over four decades, the old policy had become a victim of its own success and new policies were needed to effect “population rejuvenation”. Both of Singapore’s major newspapers, *The Straits Times* and *The Business Times*, have been vehicles for communicating these messages to the wider populace and have run numerous stories over the past 15 years explaining the negative consequences of below replacement level fertility, an ageing population and, more controversially, a “lop-sided” pattern of procreation. Earlier headlines captured the thinking behind the Government’s selective pronatalism:

“Fewer kids of graduate mums could lower society’s IQ levels”

(Straits Times, September 1994)

These have been replaced by more inclusive laments to:

“Singapore’s baby blues”

“...The stork hasn’t been doing its job; the population isn’t replacing itself”.

(Business Times, October 1999)

Given the extensive press coverage of the new policies, there can be few Singapore residents today who are not aware of the pronatalist stance of the Government or who have not been exposed to the message that the Singapore 21 vision¹ of continued prosperity and economic growth is threatened by “unfavourable demographic trends”. Yet, there is little evidence that the population is responding to the educational campaigns and inducements by increasing its fertility.

This paper examines the wider context of the Government’s pronatalism to ascertain how ordinary Singaporean women are interpreting the Government’s message. Many aspects of what the Government is now representing as its pro-family initiative are worthy of attention, not least the blurring of the distinction between public and private spheres (Teo and Yeoh, 1999) and the assumed need for the good of the community to prevail over individual choice. It is, however, another aspect of the PAP’s interventionist population strategy that frames the analysis of this paper, namely the gendered nature of the policies. Throughout the post-independence era, the Government has sought to shape women’s choices to fit national priorities. As Davidson (1999) points out, along with policy change, “identity and culture and the definitions of women as mothers, workers and citizens have been constantly (re)constructed in line with current economic and planning demands”.

In 1983, when the then Prime Minister Lee Kuan Yew addressed the nation in his National Day speech, he urged that steps be taken to refocus women on their “primary role as mothers”. By doing so, he not only discursively positioned women as citizens with a special responsibility as “creators and protectors of the next generation” (Jose and Doran, 1997) but also placed a heavy burden on their shoulders in circumstances where fertility decline is seen as problematic. Such discourses have endured and the role of women in the family and in society are currently matters of some debate. Changing the attitudes and behaviour of women, it seems, is yet again seen as the key to realizing national economic goals.

The pronatalist policies of the 1990s appear as a radical break with past antinatalism but they also display a more profound continuity in ideas about women (PuruShatom, 1992). As Quah (1990) points out, using the family as an instrument of social change was as much a feature of the old population policy as it is of the new. Thus, the identification of women with family reproduction ensures that they remain the main targets of policy intervention. In this respect, Singaporean women are now receiving “mixed messages” from the Government (Goldberg, 1987). On the one hand, they are encouraged to pursue education and contribute to the growth of the national economy in the public sphere of paid employment. On the other, they are being urged not to

jeopardize the stability of the family but to stay at home and raise the next generation.

The obvious conflicts in fulfilling both roles are most often expressed in public debate in terms of the tensions created by the dual demands of caregiving and waged-work. Yet suggested solutions, such as more flexible working hours and paid maternity leave, fail to address wider issues of gender equality. As PuruShatom (1992) argues, "the concern of the government has never been with how the nation can save women from the fetters of social, cultural, political and economic discrimination and exploitation". Recent policy developments do little to empower women and look set to entrench the confusion around women's identities as good citizens.

The last decade or so, has seen attempts to redefine the family in line with so-called "Asian values" (Heng and Devan, 1995). The success of antinatalist measures in demographic terms is now represented as having been achieved at the cost of eroding traditional Asian thinking on the family (Kuo, 1987). Singapore's ambition to be the model for Asian development is, thus, thought to be threatened by "the cultural penetration of the hedonism and excessive individualism of the decadent West" (Jose and Doran, 1997). The family is to provide the bulwark against such damaging influences but, to do so, it must reassert its Asian identity. Vasil (1995), for example, notes the Government's determination "to Asianise Singapore and restore the Chineseness of the Chinese". The Government sees Confucian ideals - such as loyalty, obedience and collectivism - as fundamental to this project but maintains a certain generality in its pronouncements, mindful of the varied ethnic backgrounds of Singaporeans. The result has been a failure to articulate a comprehensive family policy reflecting clear and shared values on the type of family the nation wishes to promote (Quah, 1990). As another commentator puts it:

"...when confronted by the politician's campaign against declining fertility, people have not asked which family these politicians are referring to" (Rajakru, 1996).

The appeal to "Asian values" may be designed to counteract the perceived influences of Western decadence but, if it is also to further pronatalist aspirations, then we must ask which traditions PAP have in mind and how they are likely to affect the lives of women in Singapore.

The project of "Asianising" Singapore brings with it a further set of "mixed messages" for women. In a speech in 1989, President Wee Kim Wee declared that Singapore had been sustained and guided in the past by the "traditional Asian ideas of morality, duty and society" that were now

threatened by Westernization and a self-centred outlook on life (Wee, 1989). For him, as for others in the political elite, the project of Asianization meant returning to older “traditional” values in order to ensure the preservation of the family as the building block of society. Among many Chinese Singaporeans, this is interpreted as an appeal to Chinese or Confucian ideals (Vasil, 1995) characteristic of Chinese culture in the wider region and grounded in a patrilineal family system that undervalues daughters relative to sons.

Although Croll’s (2000) extensive survey provides evidence that such attitudes persist across Asia, it is clear that global economic and demographic changes are reshaping the relations in the Chinese family in many countries, including China (Salaff, 2002). Salaff argues that a “dependency squeeze”, resulting from the older population having fewer opportunities to work at the same time as fewer offspring to support them, has resulted in daughters playing an equal role in supporting their parents and hence has increased their value within the Chinese family. Indeed, in Singapore, the Government promotes such gender equality through its expectations that both daughters and sons will support their parents in older age, and through its housing policies which give priority to adult children (whether male or female) who wish to live with, or in close proximity to, their parents.

The messages about women’s role in society enshrined in these policies appear to be at odds with a re-emphasis of their “primary” role as mothers or a return to older “traditional” values associated with the Chinese family. This is not to suggest that the PAP wishes to re-inscribe discrimination against girls as part of their promotion of a cultural heritage for there is evidence to the contrary². However, the lack of clear articulation of what is meant by “traditional” values in relation to the family, leaves room for a variety of interpretations and an attendant confusion about women’s position in an Asianized Singapore. The ideological contradictions in state policies are neatly summarized by Kong and Chan (2000):

“The state, in its pragmatic emphasis on economic development, exhibits full concern for the importance of the family and the role of women in maintaining it as homemakers, childbearers and childminders because they serve to reproduce the labour force. The state is thus unequivocally patriarchal in this sense; yet patriarchy is sometimes handmaiden to pragmatism. At the same time, in what may seem paradoxical, the state in Singapore has set up some conditions that reconfigure gender roles and relations, for example by facilitating women’s entry to the labour force in the education they receive, and in reconditioning household

arrangements so that familial support assures the possibility of women's re-entry into the work force after child bearing. The state's role is thus indisputably pragmatic in this instance; patriarchy is occasionally sacrificed in favour of pragmatism".

Where messages are mixed, understanding how Singaporean women themselves view "tradition" and family values becomes an essential prerequisite to any assessment of the likely impact of the Government's current pro-family policies on fertility. Where "tradition" is constructed as "a past way of thinking", it may be dismissed as irrelevant to contemporary fertility choices. Further, where "tradition" is associated with negative consequences, such as the undervaluing of female offspring, discourses on the "traditional Asian family" may be resisted rather than embraced, thus undermining the Government's attempt to encourage child-bearing through a re-emphasis of the importance of the family.

Several questions arise: Have conceptions of "traditional" values in relation to the family changed across the generations? How are these conceptions influenced by intergenerational relationships? And how are they related to decisions about fertility? This paper addresses these questions through an analysis of the life stories of two groups of women. It focuses on how ideas about the family and the role of women have changed over time, and highlights the importance of women's agency, which has sometimes been obscured in more structural analyses of Asian women and the family (Ong, 1999). In particular, it attempts to move beyond cross-sectional comparisons by recognizing the interplay between the generations and examining the possibility that, paradoxically, attitudes redolent of the antinatalist years (when the emphasis was on smaller families) may be strengthened rather than weakened by attempts to reinscribe the ideal Singaporean family as "traditionally Asian". Before discussing attitudes and ideas, however, we place these women in context by outlining their own experiences of family reproduction.

Women of their time?

The data on which our analysis is based are all derived from in-depth interviews with eight Chinese Singaporean women in the reproductive age groups (the parent generation) and their own mothers (the grandparent generation), conducted towards the end of 2001.³ The eight target women vary in age between 27 and 38 years, they all have tertiary education and their economic circumstances are such that they, arguably, can afford to have at least three children. They are thus, among those whose fertility behaviour the Government has been most anxious to influence. Their mothers range in age

Table 1. Mean age at first marriage of resident ever-married females by year of marriage

	1960 or earlier	1961-1970	1971-1980	1981-1990	1991-2000
Chinese females	20.7	23.3	24.3	26.1	26.9
University graduates	24.5	25.3	25.2	26.3	26.9

Source: *Singapore Census of Population, 2000*, Advanced Data Release No. 8, Marriage and Fertility.

from 49 to 70 years, although most are in their 50s or early 60s and were exposed to antinatalist campaigns during their reproductive years. Although it would be foolish to claim that these women are representative of their respective generations,⁴ it is interesting to note the extent to which their reproductive behaviour conforms to the norms of the time.

Even in this small group of women, mean ages at marriage are indicative of a more general change over time. Whereas the older generation shows a mean age at marriage of 22.1 years, their daughters married, on average, more than three years later at 25.5 years. This mirrors a national trend which saw mean marriage ages for Chinese brides rise significantly from 20.7 years for those who married in 1960 or earlier to 26.9 years for those who married between 1991 and 2000 (see **table 1**).

For the Singapore population as a whole, the rise in female marriage age has been associated with fertility decline and the mean number of children born fell from 3.9 for the pre-1950 birth cohort of females, to 1.8 for the 1961-1970 birth cohort (*Singapore Census of Population, 2000*). Our eight interviewees from the grandparent generation were born between 1931 and 1952 and between them produced 29 children, or an average of just over 3.6 children per woman. Their reproductive behaviour was, therefore, fairly typical for women of their generation. In contrast, our group of interviewees from the parent generation have produced 9 children between them to date, or an average of around 1.1 children per woman. It seems that the reproductive behaviour of this small sample is also typical of their generation.

The impact of national trends towards later marriage and lower fertility can be seen in another comparison between the two generations of our interviewees. By the time that the women of the grandparent generation were the same ages as their daughters were when interviewed, they had produced 27 children, whereas their daughters had produced only 9 offspring, or 2.25 fewer children on average. In every case, the women of the grandparent generation

Table 2. Percentage resident ever-married female university graduates by selected age group and number of children born

Age group (years)	Number of children born			
	None	1 child	2 children	3 children
25-29	65.1	28.0	6.0	0.3
35-39	14.1	25.6	43.5	13.8

Source: *Singapore Census of Population, 2000, Demographic Characteristics.*

had produced more children than their daughters at the same age. Moreover, a comparison with national figures from the 2000 census suggests that the pattern of reproduction of our sample group from the parent generation is not a typical of female university graduates of a similar age (see **tables 2 and 3**). Small numbers in the sample group make direct comparison impossible but, apart from the absence of an interviewee aged 35 to 39 years with only one child, the national pattern of a median of 2 children for the older age group in the table and the prominence of women with none or one child in the younger age group is echoed in our sample.

None of the parent generation interviewees currently have more than three children and, despite differences in fertility behaviour within our younger interviewee group, we have found little evidence that these well educated Chinese women have so far responded to the Government's inducements to increase the size of their families. The question then arises, "what factors are influencing their fertility decisions?"

The conflicting demands of work and parenthood undoubtedly have an important impact and have become a focus of recent debate. In April 2000, an article in *The Straits Times* based on responses from 300 readers declared that Singapore mothers are willing to have more children but also want more support in their work and child-care arrangements. The issues of flexi-hours and the time demands of childrearing also came up in our interviews. The

Table 3. Number of graduate interviewees of the parent generation by age group and number of children born

Age group (years)	Number of children born			
	None	1 child	2 children	3 children
25-29	2	2	0	0
35-39	1	0	2	1

Source: Interview data.

situation is not as simple as this particular newspaper's claim may be taken to imply, however, since demands on women in the current parent generation are multiple. They are known in Singapore as the "sandwich generation" and, as the same newspaper put it in an article the following year:

'Squeezed between the demands of children and ageing parents, and often holding down a job as well, life can be intolerable for the sandwich generation' (*Straits Times*, April 2001).

The article addresses the stress experienced by working women when trying to provide care to two generations at once by advocating a sharing of the burden with other family members. It is notable, however, that men are mentioned only to note that they are the traditional breadwinners and usually have less time for care-giving work, thus tacitly endorsing a whole suite of patriarchal attitudes that have long been associated with "traditional Asian values". If the Government's programme for redefining the family (re)emphasizes such attitudes, it surely runs the risk of undermining its fertility ambitions by placing too many demands on women.

Further, women of the grandparent generation, whose husbands most likely assumed the role of traditional breadwinner, may have been convinced by the benefits of smaller families in circumstances where male participation in caregiving was minimal. As a result, they may be reluctant to encourage their daughters to have more than two children. At the very least, it is unclear how enhancing the family's Asian identity will have the desired impact on fertility. A greater understanding is needed of how ordinary Singaporeans represent the intersections between "tradition" and "gender", how these have changed over time and how they influence fertility decisions. As a first step, we now turn to the voices of the 16 women we interviewed in order to gain some insight into these issues.

The grandparent generation

An understanding of what is meant by "traditional Asian values" and how they might impact on fertility behaviour seems to us to be lacking in current government policies towards the family. Tradition is socially constructed, an idealized or selective version of the past, sometimes even a fiction (Hobsbawm and Ranger, 1983). Yet, inscriptions of tradition can be powerful influences on individual behaviour as they seep into the collective consciousness of a population. By their very nature traditions are not fixed, however enduring they might seem (Toren, 1988). Thus any appeal to tradition, like any writing of history, tells as much about the present as it does about the

past. Families can play an important role as bearers of tradition by socializing their children in particular ways of thinking and acting, although discursive constructions of tradition as “old-fashioned”, along with the power of individual human agency, leave open the possibilities for change.

The relationship between values, traditional or otherwise, and behaviour is not a deterministic one. Other studies point to the possibility of resistance to dominant cultural discourses on fertility and the family (Saavala 2001) and the variety of assumed values is often revealed in descriptions of experience or in judgements of behaviour as appropriate or inappropriate, good or bad. In the context of family reproduction, it is also clear that the details of particular circumstances impact on such judgements. However, the power of particular ways of thinking should not be underestimated, as they are embodied in social norms which set up expectations of “appropriate” behaviour. Take the Confucian ideal of obedience that the Singapore Government seems anxious to encourage; in the setting of the Asian family, this is often constructed as obedience to the older generation, or filial piety (Soin, 1996). It can thus inform judgements about what it is to be a “good son” or a “good daughter” and may serve to perpetuate a patriarchal structure within the family. A “good daughter” becomes one who lives up to the expectations of her parents or her parents-in-law and thus perpetuates their “traditional” values.

If filial piety is to be maintained, or even strengthened, in twenty-first century Singapore, then the values or ideals espoused by the current grandparent generation become a matter of some importance because they set up expectations that “obedient” daughters may try to live up to. And here, we meet a possible contradiction in the thinking of the policy-makers, for, while an emphasis on filial duty may contain the costs of elder care within the extended family, its impact on fertility must depend on what the relevant expectations and ideals of the older generation actually are.

Further, the experience of the grandparent generation during their own reproductive years has been one of rapid change. In their time, Singapore has been transformed both economically and socially. Smaller families became the norm under the “stop at two” policy, financial security was greatly enhanced for both individuals and families, and opportunities in education and employment - at least for their children - dramatically extended. These changes were associated with modernization inofficial rhetoricand counterposed to older ways of behaving which had resulted in large families and poverty. If Kuo (1987) is right and the transformations of the 1960s and 1970s have “debunked traditional values” - such as preference for large families and for sons, as well as perceptions of children as security in old age (cited

in Quah, 1990) — then we must ask what expectations this generation has for their adult children. We start by examining the understandings of “traditional values” among our older interviewees.

Zhong nan qing nu: son preference

A strong preference for sons over daughters has long been associated with Asian thinking on the family (Chen and others, 1982; Croll, 2000), as the narratives of many of our interviewees attest. Among the grandparent generation, Madam Siu.⁵ (whose narrative is translated from Mandarin) says of her hopes before she had children:

“My ideal was to have a boy as my first child. Later on, if I were to have girls, I didn’t have to be bothered. I wouldn’t have to be worried because during our time, for the older folks, they preferred the boys, particularly because . . . [my husband] is a Hokkien. He likes boys”.

And, reflecting on her own mother’s attitudes, she comments:

“My mother favoured boys and not girls, but she still doted on us. But she was still more open minded. She was not so traditional”.

To Madam Siu, what is “traditional” is identified in terms of the views of an older generation who favoured boys over girls and which have been kept alive in the attitudes of her husband as part of his cultural heritage as a Hokkien. Despite distancing herself from these views, they clearly impacted on her own family life through her role as a wife in a patriarchal household. She describes her relief after her first child, a son, was born, adding: “I was not afraid. After that, it didn’t matter whether I had girls or boys”.

Differences in attitudes to boys and girls are highlighted in the narrative of Madam Sim (translated from Mandarin) and echoed in the life experiences of other women of the grandparent generation we interviewed. Madam Sim recalls her mother-in-law’s reactions when she gave birth to a second daughter and the pressure she felt under to produce a son:

“But because I gave birth to two daughters, my mother-in-law was not happy, so I tried for a third child, so finally gave birth to a son. So, I gave birth to the third child. If not, I would not have wanted a third child”.

She describes herself as having “no choice” because she lived with her mother-in-law who would come to her everyday and nag her to give birth to another child, saying “there is no grandson, no grandson,. . .”. Yet on the birth

of the grandson, the grandmother's attitude to her daughter-in-law changed radically from having refused to speak to her after the birth of the second daughter to treating her very well:

"She treated me very well. Waited on me like I was, an emperor. During the confinement, I did not have to do anything. She will bring everything into the room for me. When I gave birth to [my daughter], she did not even come into my room. She was from China, my mother-in-law came from China".

The special treatment and social esteem which Phua and Yeoh (2002) suggest pregnant Chinese women enjoy was apparently accorded to Madam Sim only on the birth of a son. The implicit equation of being from China with son preference is also evident in this passage. When asked if her own parents favoured boys over girls, Madam Sim replies:

"My mum used to be like this but now she has changed. She used to dote on boys but now because my younger brother disappointed her . . . She said that daughters are still better. Her daughters give her allowance monthly. Her sons never give her any money. . . . That's why she changed her thinking. In the past, she loved sons more than daughters".

This recollection acts as a reminder that traditional ways of thinking can be changed or modified by experience, especially when expectations are "disappointed". But more than that, it also calls attention to the functional aspects of cultural values where preference for sons is repaid later in life in the form of financial support in older age. Daughters thus become "better" when they fulfil the functions previously expected of sons. Where the function itself becomes redundant, the basis of intergenerational relationships is likely to change leaving an opening for new attitudes to children to emerge. Perhaps this, in part, explains Madam Sim's own views on sons and daughters:

"I prefer daughters. Because daughters get along better with us. When you talk to sons, they'll talk back to you in a loud voice. Not that he is naughty or bad but we cannot communicate".

Among her own siblings, it is the daughters and not the sons who have provided old-age support for their mother. That in itself marks a shift in attitudes, but a more profound change is inscribed in the reasons Madam Sim gives for preferring daughters. They have nothing to do with the economic functions of the family. Rather, they denote an orientation towards what Ogburn (1964) has called "affectional functions", where parent-child relations

are seen in emotive terms. For this mother, daughters are better companions. The temptation to see this as an irreversible consequence of changes in economic dependencies with the family must be resisted, however, since Madam Sim might be responding only to her current circumstances. At 50 years old, she is one of the younger interviewees in the grandparent group and may not yet have given serious consideration to support in older age.

Madam Tong, on the other hand, is the oldest of our interviewees and her health is not so good. She contrasts her own views on gender preference with those of her mother, which she also identifies as part of a cultural heritage. (Her narrative is translated from Mandarin.)

“My mother preferred boys. She didn’t like girls. . . . People from China are like that. . . .She came from China. That is the mentality of people from China”.

“I didn’t think in that way. It is good to have boys and it is good to have girls. I don’t think about it [preference for boys] ”.

She herself has six children, two boys and four girls, the eldest of which is a daughter. Yet later in the interview, she reveals another aspect of son preference when talking about her decision on where to live after being widowed and giving up work.

“I never thought about staying with the daughters. I wanted to stay with my son. . . .I wanted to stay with him so that I can look after the children. I need not live with the son who has a maid”.

Although her stated reasons for choosing to live with her elder son rather than her younger son are linked to their respective financial circumstances (one can afford paid help and the other cannot), her preference for staying with a son was strong enough to preclude her entertaining the possibility of living with a daughter. Abandoning the favouritism shown by her mother towards boys during childhood, she nevertheless assumes a special relationship with her sons in older age. Madam Tong’s narrative suggests that the values of an older generation may be selectively (re)constructed by the succeeding generation.

Madam Yuen, in contrast, whose only grandchild is a girl, shares her husband’s much clearer preference for sons. (Her narrative is translated from Mandarin.)

“In our way of thinking, it is still better to have a boy. No matter what, it is better to have a boy”.

She has told her daughter that “the next one will be a boy” but also thinks that the younger generation “are able to be independent” and that parents of her generation “no longer have the right to interfere”. What is interesting about this last comment is the underlying assumption that relations between the generations have changed and that the change is linked to a break from past dependencies.

Chu jiu: marrying out

Many of the older women in our sample, mention experiences of poverty during their own childhoods, and economic realities of the time clearly constrained possibilities for setting up independent households on marriage. However, such circumstances merely underpinned traditional and patriarchal thinking that saw a woman as “marrying out” of her birth family and into her husband’s family, frequently living as her husband’s wife in her parents-in law’s house as Madam Sim did. Madam Yuen also moved in with her mother-in-law and father-in-law on marrying their only child and explains:

“There were only my mother-in-law, my husband and myself.
Three of us. That was why I had to stay with her”.

It subsequently becomes clear that her father-in-law was also part of the household but it was her relationship with her mother-in-law that impacted most on Madam Yuen’s early married life. She was 21 years old when she married, having given up her job as a sales assistant to do so, and had her first child soon after. “We did not know how to practise birth control”. She represents her dependent position in the household in terms of the common experience of the time:

“In the past, the husband would only give you money for the household expenses. If you need money for other purposes, you had to earn it yourself. . . . At home, your mother-in-law would be unwilling to look after the children for you. As a result, you could not go out and work. That was because my mother-in-law was more traditional. You could only work if you could take care of the needs of the family”.

As well as economic dependence on her husband, Madam Yuen’s role in the household was also constrained by the strictures of her mother-in-law. She was expected to fulfil her duties as a filial daughter and wife but in circumstances where the bloodline was seen as predominant. As she notes:

“She [her mother-in-law] felt closer to the grandchildren. The daughter-in-law was an outsider. That was the way she thought. She came from there [China]. The influence she got

was also traditional. Her mother-in-law was also rather strict. That was why she was also rather strict with us. We had to submit to her just like the way it was in China. . . . Those were her ideas. That was why it was more difficult to get along unless you could tolerate. Then, things would be fine. That was the way things were”.

“Marrying out” was a difficult experience for Madam Yuen who remains convinced that her mother-in-law did not like her. She also suggests that her own experiences were not unique but were simply what happened more generally “in the past”. Interestingly, only two of our eight older interviewees lived with their mothers-in-law after marriage and other research has pointed out that multi-generational households were never typical in Singapore (AWARE, 1996). Nevertheless, the attitudes that Madam Yuen records are also evident in the narratives of others in the grandparent generation. Madam Tong, for example, who also came from a very poor family and describes herself as “illiterate”, explains her own mother’s preference for sons in the following terms:

“She said that once a girl is married, she belongs to others. The sons are our own. That is what she thought. The people in the past think in that way”.

Madam Tong’s mother came to Singapore from China and viewed daughters as being “owned” by the husband’s family after marriage, in contrast to sons who remained part of their birth family. Madam Tong, though, distances herself from her mother’s views by describing them as “in the past”. She also declares, “I did not pass these ideas down. I did not teach them [her children] such and such”. This marks a break with the past where one generation comes to see the ideas of their parents as “old fashioned” and declines to reproduce them in the education of their own children. Madam Tong was born in the 1930s and raised her six children during the 1950s and 1960s. Perhaps, this was the period when attitudes began to change. Madam Sim, herself born in 1951, provides further evidence when she records her father’s thinking as more open than others of his generation:

“When my father was alive, he loved all of us. Before he passed away, he gave money to all his children. Everyone had a share. He did not show favouritism. He does not have that thinking. Like when I got married, he was not like others that asked for a bride price and things like that. He said that if you like it then get married. He did not demand for this or that. My father was very open”.

The purchase of brides through dowry arrangements was evidently not unknown in Singapore at the time Madam Sim was married, and that was as recently as 1970. In the mid-1970s, Chinese men and women in Singapore were found to have a strong preference for sons (Chen and others, 1982). However, attitudes already appear to have been changing, even among men. Without reading too much into Madam Sim's words, it is possible to discern a contrast between a way of thinking characterized by son preference and "marrying out" on the one hand and her father's "very open" way of thinking on the other. The former she sees as demanding, possibly constraining, and it may in part be a reaction to this, coupled with the possibilities opened up by her father's attitudes, that has encouraged her own conviction that having boys is not better than having girls.

"Marrying out" is part of a narrative which extends well beyond the economic expediency of living with in-laws and encompasses a sweep of patriarchal attitudes that the older women we interviewed variously characterized as "a past way of thinking", "coming from China" and "old fashioned". Such attitudes informed the early life experiences of all these women to a greater or lesser degree but "tradition" has been reinscribed selectively before being passed on to the current parent generation.

Madam Yuen's story is instructive. For her, "marrying out" meant learning to live in a household in which she occupied a subservient position, both as a wife and a daughter-in-law. Although she recognizes that her husband also had to submit to his mother, she adds "It was just harder for me". She reveals resignation to the circumstances of her early married life but also a recognition of the difficulties of "traditional" intergenerational relationships. It is hardly surprising that she feels that women of the current parent generation are more fortunate than she was, nor that, like Madam Tong, she is determined not to reproduce the "traditional" relationships she experienced when younger. Reflecting on her attitude to her own children, she says, "I did not expect and insist on certain things", although she has also told them, "You can do anything but you have to respect senior folk". In Madam Yuen's story we can see "traditional" Asian values being transformed by life experiences. Even if her son lives with her and her husband after he marries, it will be his choice and she will not assume the role of the "traditional" mother-in-law as she experienced it. At the same time she is anxious to instil in her children a respect for elders that has much older roots in narratives about the Asian family and society. As a bearer of tradition, then, Madam Yuen has socialized her children in particular ways of thinking but has played an active role in changing older narratives by selecting only those aspects of her own socialization which appear to have continued worth. Along with other women

of her generation, she has changed the construction of Asian values as they have passed on to the next generation. These changes are given voice in the stories of our younger interviewees from the parent generation.

The parent generation

Women in the current parent generation in Singapore differ from women in the grandparent generation in many ways. Not only have they tended to marry later but they are better educated and play an important role in the national economy as skilled and professional workers. Their fertility is also lower than that of their parents. Of our younger interviewees, two do not have children, one having failed to conceive and the other because she does not want children. Another is currently pregnant with her first child. In addition, all have tertiary education and a financial security less frequently experienced by women in their mother's generation. Their views on the family might be expected to show a similar contrast. Certainly they speak much less of "traditional" values than do those of the older generation among our interviewees. Some, however, do claim to be "traditional" in their thinking while others see "tradition" as irrelevant to their own choices and behaviour. Whatever their stance, the key question here is "how do they characterize tradition in the context of the family?"

***Nei sun*: grandchildren hearing the family name**

For the grandmothers, economic dependencies within a patriarchal family structure went hand-in-hand with son preference and "marrying out". This is not the only context that provides a rationale for preferring sons over daughters, however, and the idea of continuing the family name is also linked to traditional values. May Ling (daughter of Madam Sim) talks of her preference for her own mother as caregiver to her only child, a daughter, and provides a fascinating example of how "traditional" relationships between the generations are being reconstructed in contemporary Singapore. Asked what she would do if her mother-in-law expressed a willingness to look after the granddaughter, she replies that she would "try it out":

"... if my mother-in-law kind of like tell me that oh she doesn't mind [looking after the child], I guess I will try it out. That means the practical thing is I will probably try out with her first. . . . And if things really aren't too, looking too good, then I will change over to my mother. . . . But if not I will then er you know respect my mother-in-law's wish, since it is her, you know, direct grandchildren. My mother is the maternal side you see. [I am] still very traditional . . .".

Despite emphasizing that “emotionally” she would want her mother to do the childcare, she sees her mother-in-law as having a closer tie with the grandchild through the paternal line and equates this with being “very traditional”. Yet there are limits to her “obedience” in this respect. Unlike some of the older generation, she is unwilling simply to go along with her mother-in-law’s wishes and to “tolerate” the outcome if this means compromising the care of her child. She sees herself as having the final say in the matter of childcare for her daughter and “traditional” values associated with continuing the family line are only one element influencing that choice. Her stated reasons for saying that she would “try out” her mother-in-law first reveal a mix of traditional and much more pragmatic thinking. Her mother-in-law lives in the same block of flats as May Ling and her husband, while her own mother lives some distance away. Practical considerations associated with proximity and being able to see her baby every day clearly influence May Ling’s reasoning but, most important, she is not economically dependent on either set of grandparents and sees herself as having a choice.

In fact, May Ling’s mother-in-law has not expressed a desire to look after her granddaughter, so her own mother (Madam Sim) is providing the care during the week while May Ling is working. Madam Sim’s own preferences, as we have seen, are for girls rather than boys and May Ling says of her mother “. . . she feels very proud when she brings [her granddaughter] down to the neighbours lah”. May Ling, too, likes girls because, she says, she knows how to take care of girls being a girl herself. Nevertheless, her ideal would be to have a son as the second child, although she and her husband do not want to give themselves “a lot of pressure”. She identifies the paternal grandparents as a possible source of pressure. Her husband is the younger of two sons but his parents do not yet have a grandson and have conveyed their hope that the couple’s next child will be a son. May Ling comments, if she does have a boy:

“Ah then that will in a way, if I can lah. [laughs] It will neutralise some of the expectations, I guess. . . . Parental expectations. Ah then you can have the third one, then you can have a girl again”.

May Ling is evidently aware of her in-laws’ wish for a grandson and would like to fulfil their expectation *if she can*. At present, her own attitude seems fairly relaxed, however, and she appears to assume no responsibility for providing them with a male heir to continue the family line. Like her views on childcare, what she sees as “traditional” values influences her own thinking only to a limited extent and she certainly does not feel bound by them. Indeed her expressed preferences emphasize the maternal line, highlighting intergenerational relationships between grandmother, daughter and granddaughter.

Most of the other women in the parent generation whom we interviewed discussed their thinking about the gender composition of their family without reference to “traditional values”, with some preferring girls and others a mix of boys and girls. Only one of these eight women situates her preference for a boy in a more patriarchal narrative about the role of women in the family but, even so, the need to continue the family line was not uppermost in her thinking.

Ling Hui (daughter of Madam Seow) is 38 years old and has been married for 10 years. She wants a child but has, in the past, failed to conceive despite undergoing fertility treatment. She is still hoping to become pregnant. Asked what sex she would like the child to be, if she had a choice, she replies:

“Er, I would prefer a boy. . . The reason being because that’s what my husband likes, prefers. . . . Personally I don’t, I don’t, I mean, I am really fine with either. I would be happy if I had a girl, you know. I have no preference for a guy. But, er, I want a boy because if that is the only time I am going to have a baby, I would like to have a baby that’s what my husband wants. Yah. So a boy”.

Her main motivation for wanting a boy is to please her husband and she distances herself from his “preference for a guy”. Although she is willing to speculate on why her husband wants a boy, she has “never really asked him”. She says:

“Yah, so. Yah, maybe because he grew up in, he has no sister, you know. They are a very traditional family with boys. Because right now my brother-in-law has got kids now, so I guess the pressure on him is not so much anymore. Otherwise, you know, he being the eldest of the family will also think that, you know, should have a boy to carry the family line, carry on the family line. Yah”.

Ling Hui describes her husband’s family as “still pretty traditional people” to whom continuing the paternal line remains important. Her parents-in-law are apparently able to influence their sons’ fertility behaviour through the pressure the sons feel to produce a male heir. At the same time, Ling Hui’s own lack of preference for a baby of a particular gender may be influenced by her own circumstances in which any baby would be welcomed. She is well aware of the limits that biology places on her choices and, as a professional woman with an independent income, there is no way of knowing what these choices might have been if she had been able to conceive earlier in her marriage and how she might then have responded to pressure from her

parents-in-law. She understands “traditional” values to include continuing the bloodline but, for her, the emotive bond between husband and wife is the most important consideration.

The narratives of May Ling and Ling Hui both illustrate the complex ways in which different constructions of “tradition” are influencing thinking about fertility and the family in contemporary Singapore. These graduate women from the parent generation articulate their own views in a way which recognizes “traditional” Asian values but also reflects their limited influence. Ultimately, other considerations can and do outweigh the pressures of tradition. Emotive ties, between mother and daughter or husband and wife, override feelings of duty to reproduce the patriarchal family.

The narratives of the other six graduate interviewees show less sensitivity to any imperatives of tradition and their silences on motivations such as continuing the family line could be taken as an indication that, for them, traditional thinking on the family has no contemporary relevance. This, we think, would be to overstate the case, but these women do clearly relegate *some* aspects of what they perceive as traditional thinking to the past and are at pains to point out that they themselves think differently. For example, Shu Fen (daughter of Madam Yang) has two children, both girls. She is unlikely to try for a third but has not definitely decided. If she does have a third, however, she would like a boy. As she comments,

“Er, I guess I would probably like to have at least one boy not because: you know, not because of the Chinese tradition but just experience of bringing up different kids. And especially, er, you know, I came from a family of all girls so it’s quite nice to see what a boy is like but the two [her daughters] have been such a, you know, such a joy that girls are really fun to be with, yah”.

In several ways, Shu Fen’s narrative resonates with those of other younger women in our sample. Like the majority of her peers, she sees advantages in having a mix of boys and girls but does not want a large family. She clearly has strong emotional bonds with her daughters and the wish for a son has not (yet) persuaded her to try for another child. Further, she recognizes traditional Chinese thinking as encompassing son preference only to point out that this is not part of her own motivation. If she does increase the size of her family, then it will not be in response to “traditional” Asian values but rather to ideas of balance and gender mix that cannot be identified with distinctively Chinese ways of thinking.

The stories of these Chinese graduate women in the parent generation, compared with those of their mothers, suggest an increasing marginalization of the “traditional” values of son preference and having grandchildren bearing the family name. While the grandparent generation in our sample discursively reconstructed tradition in a selective manner, their daughters are more likely to see “traditional” thinking as irrelevant to their own fertility intentions and decisions. Changes in intergenerational relationships, though perhaps in more subtle ways, appear also to have largely dispelled “traditional” pressures to continue the family line. For the younger women we interviewed, intergenerational relationships and conceptions of the family are being reconstructed along less gendered lines. The valuing of female bonds among the generations suggests that “traditional” motivations for large families have been weakened, if not abandoned, and that the family is being reproduced by these women in a different form. Recognition of the value of daughters hints at a change in attitudes of and towards women in the family which may prove resistant to any reinscription of “traditional” social forms. This must throw in doubt the efficacy of any official policy designed to increase fertility among graduate women through a re-emphasis of Asian family values.

Conclusion

The narratives of our sample group of eight graduate women and their mothers reveal the variety and complexity of experiences of fertility and family. We have picked out only one element of this for discussion by looking at the intersection between “tradition” and gender. To some extent, the life stories of these women resist dissection in this way, for each has its own coherence and continuity. Yet, there is also a broader story being told as revealed in the comparison between the generations. Although inscriptions of the characteristics of the “traditional” Chinese family vary, son preference, marrying-out and grandchildren bearing the family name are enduring themes. This does not imply that “tradition” is fixed, nor that those who articulate these themes live by them. Rather, discursive reconstructions of what is “traditional” open possibilities for change, while the marginalization of “traditional” values in motivational discourses introduces other ways of thinking and behaving. In the context of constructions of the Asian family, relationships between the generations play a central part.

The older women we interviewed are aware of their role as bearers of tradition within the family and some have chosen not to reproduce the intergenerational relationships of the past. Experiences of “marrying out” and pressure from mothers-in-law to produce a son and heir are now recollected in terms of the constraints imposed on their own lives and not as ideal forms of family life. They see the younger generation of women as different, and as

having choices that they did not have. A recurring motif in their life stories is that young women of their generation did not have the time or opportunity to make choices as their energies were spent on ensuring that their families were supplied with the basic necessities of food and housing. Although not true of all our interviewees, this is a reminder that we have paid scant attention to the changes in economy and society more generally which have allowed or even encouraged women to make choices. Increasing prosperity and financial independence for married couples and for women may well be the driving forces of family change.

Graduate women of the parent generation among our interviewees feel different constraints to their mothers but they are also making different fertility choices. The conflicting demands of paid employment and looking after children figure highly in the life stories of this “sandwich generation”, although none of our younger interviewees has yet been called upon to provide care for ailing parents. Indeed, it is the grandmothers who are often providing care for their grandchildren. The relationship between the generations is more than an instrumental one, however, and hints at a strengthening of emotive bonds within the extended family. These women do not see themselves as belonging to their husband’s family in the way that narratives around “marrying out” imply. Even those who represent themselves as being “traditional” in certain respects, offer little evidence that ideas of son preference or ensuring the reproduction of the paternal line are influencing their fertility choices. On the contrary, several of the graduate women interviewed express a preference for daughters, reflecting perhaps their close relationship with their own mothers.

Another recent study of the Chinese middle class in Singapore (Koh and Tan, 2000) found a dramatic shift in parental attitudes within one generation, from open favouritism towards boys to espousing an ideology of fairness. The respondents in that study placed an emphasis on compatibility and companionship in their relationships with their children. Our respondents reveal another dimension of family change in the interactions between grandmothers and their adult daughters. Strong emotional ties have been maintained after marriage and they too are affecting family relationships, in this case through childcare arrangements. And these changes do not appear to have been contained within a single generation, as Koh and Tan claim, but to have evolved over a longer period of time as the grandparent generation selectively reconstructed “tradition” in the socialization of their children. As an element in the social reproduction of the family in Singapore, the selective re-inscribing of ‘tradition’ by these women provides further evidence of the vibrancy of human agency elucidated by Phua and Yeoh (2002) in their recent study of embodied reflexivity among pregnant Chinese Singaporean women.

The nature of changes in intergenerational relationships becomes a matter of particular importance in the light of attempts by the state to promote pronatalist attitudes through a wider rhetoric on the family that emphasises “Asian values”. On the one hand, the fluidity of “tradition” inevitably clouds the message; on the other, the identification of “Asian values” with patriarchal family structures endangers the message. In any event, it is unclear how official reassertions of the Singaporean family as distinctively “Asian” will serve to encourage an increase in fertility. The most recent census (*Singapore Census of Population 2000*) shows a strong correlation between family size and the educational attainment of women, with graduate females having the fewest children. Over a decade of incentives would seem to have had little impact on their reproductive behaviour. None of our graduate interviewees thought the financial payouts had been a decisive influence in their fertility choices, and most considered them irrelevant. Perhaps it is in response to such a negligible impact that the Government is seeking additional ways to encourage child bearing.

Emphasizing community and the family, as well as highlighting the perceived dangers of individualism and consumerism, is part of the current strategy but its efficacy in increasing fertility is also uncertain. If the Government’s aim is to persuade women to put family before career, for example, in the hope that they will consequently be persuaded to have more children, then this will be a difficult task. Several of our interviewees of both generations commented on the social benefits of working outside the home. Further, after investing so much in the education of their children, the expectations of the grandparent generation are that their daughters will work and reap some of the rewards.

Finally, there is an abundance of evidence in the narratives we analysed, that intergenerational relationships and the family remain central to the lives of graduate women in Singapore (Kau and others, 1998). It is just the nature of relationships within the family that has changed. If government policy on the family fails to acknowledge the complexities of this change, then, it stands little chance of developing a coherent and effective pronatalist strategy. As one of our grandmother interviewees remarks, “Every policy has to match the times”.

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Endnotes

1. Singapore 21, launched in 1997, “seeks to articulate a vision that Singaporeans can reach out for together” (<http://www.singapore21.org.sg>) and focuses on “strengthening the “heartware” of the people, on intangibles like social cohesion, political stability and the collective will, values and attitudes of Singaporeans” (<http://www.gov.sg>).
2. In addition to the gender equality apparent in policies related to housing and elder care, the Singapore Government was careful, during the antinatalist years, to emphasize the equal value of daughters. For example, a prominent poster used during the “stop at two” campaign represented the ideal Singaporean family as a mother, father and two daughters.
3. The interviews selected for this analysis are part of a larger ongoing project examining intergenerational relationships, fertility and the family in Singapore that includes interviews with non-graduate women, with husbands and with mothers-in-law. We have chosen to concentrate on the majority Chinese population since the other main ethnic groups (the Malays and the Indians), with their differing cultural heritages, are likely to interpret “tradition” differently and hence demand a separate study.
4. The sample of 16 women is clearly too small to afford useful generalizations which could be applied to the whole population and is, in any event, highly selective with its focus on married female graduates. Nevertheless, it does provide an insight into the process of normative change by highlighting the substantial individual variation and ambiguity within it. The larger project, of which the 16 interviews considered here are only a part, will seek to extend that insight.
5. All names have been changed to ensure anonymity.

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The Effect of Social Interaction on Fertility Goals and Behaviour Among Women in Bangladesh

*Changes in social institutions, mobility
and communications led to new patterns of social
interaction in Bangladesh, which may have
contributed to declines in fertility*

By Lisa Marten*

Until recently, much of the literature concerning population issues in Bangladesh has stressed the presence of conditions that would inhibit a fertility transition — limited opportunities for women in the job market, son preference (Lindenbaum, 1975), the value of children for ameliorating risk (Cain, 1986)

* Dr. Lisa Marten studied international development at the Kennedy School of Government, Harvard University and reproductive health at Columbia University School of Public Health. She is now a visiting fellow at the East West Center, Honolulu, Hawaii and a student at Columbia University School of Public Health.

and providing familial labour (Caldwell, 1982), the poorly managed national family planning programme (Hartman, 1987), and high infant mortality. Bangladesh is still largely impoverished and agricultural, infant mortality is still high, education levels among women of reproductive age remain low and traditional cultural institutions strong. Yet in this unlikely setting, the total fertility rate has declined from around seven in the late 1970s to well under four in 1994. The fertility transition in Bangladesh was achieved almost exclusively through the use of birth control methods (modern and traditional), with use increasing dramatically from 8 per cent in 1975 to 45 per cent in 1994. Since that time, fertility has remained constant, while contraceptive use has increased to 53 per cent. (Razzaque and others, 2002).

Limitations of economic theories to explain fertility transitions in Bangladesh, Europe and elsewhere that occurred under varied social and economic conditions (Van de Walle and Knodel, 1980; Coale and Watkins, 1986) among others have rekindled an interest in theories based on the diffusion of ideas and cultural change (Pahnore, 1967; Freedman and Takeshita, 1969). Rather than seeing people as adapting to changing incentives in the environment, these theories focus on the introduction into a given environment of new attitudes regarding fertility control and family size, and of effective techniques. In this school of thought, the mechanisms by which ideas and cultural norms are transmitted, evaluated and altered are referred to as “social interaction”. New studies have sought to gather both qualitative and quantitative data on social interaction (Watkins and others, 1997; Montgomery and Casterline, 1998).

Recent attempts to explain the unexpected fertility change in Bangladesh have recognized social change and the diffusion of new ideas as a potentially important contributing factor, particularly in reference to the role of family planning outreach workers (FPW)¹ (Rahman, 1986; Cleland and others, 1994). This article analyses the effect of various forms of social interaction in Bangladesh on the demand for and use of contraceptives.

Analytical framework

Social interaction, as categorized by Montgomery and Casterline (1995), is broken into social learning, social influence, and institutional constraints in this study. Social learning refers to the accumulation of information by each individual through inferences made from the experiences or views of others with whom the individual interacts, as well as impersonal sources such as mass media. More information may provide a couple with new opportunities by giving them additional reproductive strategies from which to choose.

Couples may or may not act upon knowledge acquired through social learning. The knowledge gained must be evaluated to determine its functional

value for oneself and the risks or rewards that one can expect as a result of the behaviour. Others exert social influence when they contribute to the outcome of the evaluation. By changing an individual's preferences, social influence may alter the reproductive strategy chosen from the potential choices known.

Institutional constraints are socially constructed. They either enable or restrict behavioural choice. Thus, institutional constraints may diminish the range of opportunities available to an individual, regardless of preferences.

I hypothesize that a fertility transition is likely to occur when these three dimensions of social interaction favour small families and fertility control. That is, when individuals are exposed to more information on the concept and methods of fertility control, when social support is in place for fertility control and when social structures allow those desiring to control their fertility to do so.

Data and methods

This paper uses the nationally representative 1993-1994 Bangladesh Demographic and Health Survey (BDHS), and ethnographic interviews of 40 fecund, married women.

BDHS

The two measures of demographic change used in this paper are the proportion wanting no more children and the proportion using either traditional or modern methods of fertility control. Basic demographic characteristics that define both who a woman is and the context in which the interaction takes place, are included as background variables.² The social learning variables all measure increased opportunity to learn through increased exposure to or contact with the world beyond the household compound or neighbourhood. The social influence variables measure the support to be expected from peers and husbands for family planning. The institutional constraint variables measure access to contraceptive methods.³

In order to make the analysis more meaningful, the respondents were divided into sub-groups sharing definitive characteristics. In the analysis of wanting no more children, women with the same achieved family size were compared with women with two, three and four children. These are the critical family sizes where decisions regarding fertility goals are made in Bangladesh today.⁴

In the analysis of current contraceptive use, women were divided into those who said they did not want any more children (limiters) and those who said either they want more or are unsure (spacers). Bivariate relationships between the independent and dependent variables and the sample size for each subgroup are shown in **table 1**.

Table 1. Bivariate relationships between dependent and independent variables and sample sizes for subgroups

Independent variables	Dependent variables	Desire to limit births (by living children)						Use contraceptives					
		2		3		4		Spacers		Limiters			
		Per-centage	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber	Per-centage	Num-ber
Region	Barisal	61	108	83	92	96	62	35	196	61	323		
	Chittagong	45	391	66	342	81	273	16	984	47	1,108		
	Khulna	69	239	88	186	93	306	40	420	73	629		
	Rajshahi	70	441	90	342	94	238	40	796	73	1,212		
Residence	Dhaka (ref.)	60	545	84	437	90	306	25	1,109	66	1,420		
	Urban	72	230	94	176	96	109	38	336	71	597		
Consumer durables (n is mean)	Rural	58	1,494	80	1,224	88	877	27	3,170	63	4,093		
	0	59	2.5	75	2.4	85	2.3	17	2.5	58	2.5		
	2	58		84		88		27		62			
	4	59		83		92		34		69			
Have electricity	Yes	65	377	86	255	94	187	39	646	69	947		
	No	59	1,347	80	1,143	88	798	26	2,849	63	3,738		
Have land	Yes	58	971	81	758	90	552	31	2,060	66	2,644		
	No	63	753	82	640	88	433	25	1,435	62	2,041		
Living children	5 or more	0	0	0	0	0	0	17	70	64	1,354		
	2-4	100	1,724	100	1,400	100	986	34	1,053	67	3,057		
Living sons	0-1	0	0	0	0	0	0	26	2,383	35	279		
	1 or more	67	1,368	85	1,255	91	943	35	1,467	66	4,301		
Education	none	36	356	51	145	51	43	23	2039	47	389		
	None (ref.)	58	933	80	811	88	597	21	1,795	62	2,754		
	some primary	64	296	84	241	90	185	31	6,213	63	851		
	Primary complete	53	183	87	142	88	89	27	386	68	451		
Organization member	Secondary or more	66	313	83	205	97	115	44	704	74	634		
	Grameen Bank	69	145	85	167	95	93	32	219	70	480		
	Other organization	64	220	86	175	93	140	35	304	68	612		
	None (ref.)	59	1,365	80	1,067	87	597	27	2,996	63	3,635		

NGOs in community (n is mean)	0	63	2.2	82	2.3	89	2.2	27	2.1	61	2.2
	3	54		77		84		27		60	
Work outside home	Yes	77	98	88	74	94	42	36	108	74	251
	No	59	1,626	81	1,326	89	944	28	3,398	64	4,439
Travel to other parts	Every month	64	434	83	330	92	236	30	829	67	1,160
	Several times/year	61	698	85	610	90	397	31	1,288	65	1,942
	Less than once/year	57	388	78	318	87	263	25	7,318	61	1,079
	Never	56	203	73	142	83	88	25	654	59	506
Heard media message	At least one source	64	807	86	597	90	415	32	1,583	67	2,075
	None	57	917	78	803	89	571	25	1,923	62	2,615
FPW discussion	At least one	59	753	80	631	93	440	49	1,917	72	2,027
	None	61	971	83	769	87	546	17	2,289	58	2,663
Most peers use	Yes	64	1,279	85	1,045	94	705	35	2,216	69	3,507
	No	48	445	70	355	78	281	16	1,290	49	1,183
Recommended family planning	Yes	67	810	88	642	95	450	43	1,119	74	2,229
	No	54	913	76	758	84	536	21	2,386	55	2,461
Spouse family planning attitude	Positive	64	1,486	85	1,199	93	830	34	2,730	69	4,099
	Negative	34	237	58	201	67	156	7	772	30	591
Discussed spouse	Yes	63	1,554	84	1,245	93	842	34	2,858	67	4,120
	No	38	170	64	155	67	144	4	648	45	570
Seeks health service	Can alone	-	-	-	-	-	-	34	1,120	69	1,907
	can with children	-	-	-	-	-	-	30	1,188	62	2,082
	cannot	-	-	-	-	-	-	21	1,198	55	701
FPW gives methods	Yes	-	-	-	-	-	-	29	3,255	65	4,416
	No	-	-	-	-	-	-	17	53	55	59
Miles to clinic (n is mean)	0	-	-	-	-	-	-	30	2	64	2
	2	-	-	-	-	-	-	31	5	67	5
Miles to hospital (n is mean)	3	-	-	-	-	-	-	36	5	66	5
Have satellite clinic	Yes	-	-	-	-	-	-	24	2,341	65	3,210
	No	-	-	-	-	-	-	29	985	63	1,349
Total		60	1,724	81	1,400	89	986	28	3,506	64	4,690

Note: A dash (-) indicates that the variables concerned have not been included in the analysis.

In-depth interviews

The data used in the second phase of this study was collected through semi-structured taped interviews in Sitakundo thana, Chittagong District. Communication networks and social support are identified through conversations women have with others relating to contraceptive use decisions. The interviews elicit the content of informal conversations that are relevant to contraceptive behaviour, with whom they are held, in what settings, and the reactions they provoke in participants and observers. Basic demographic information was also analysed.

Results of BDHS

Want no more children

Logistic regressions with the outcome “want no more children” were run separately for women with two, three and four living children. The results, presented in **table 2**, indicate that social influence affects wanting no more children in the expected direction but social learning does not.⁵

The background variables with the most powerful influence on the desire to limit births are age, having one or more living sons, and region of residence. The strength of the effect of not having a living son increases with family size — even with larger families, many women still hold out for a son. In contrast, as family size increases, the regional and residential differences for wanting no more children disappear.

The hypothesis that increased opportunities for social learning will increase the desire to limit births is not supported by the measures available in BDHS. While the percentage of respondents wanting no more children was greater among those with more opportunities for social learning as measured by several of the variables, these relationships were not statistically significant when controls for other characteristics were introduced.

The variables chosen as proxies for positive attitudes within one’s social group all have consistent effects in the expected direction. Thus, the hypothesized effect of social influence is supported by the data in BDHS. Husband attitudes are very influential among women with two living children. As family size increases, interaction with peers and discussion with husbands also become influential.

Table 2. Logistic regression coefficients of “want no more children”

Independent variable	Number of living children		
	2	3	4
Background			
Age	0.08 ***	0.10 ***	0.09 ***
Region of residence: ^a			
Barisal	0.03	0.16	2.15 ***
Chittagong	-0.47 ***	-0.65 ***	-0.07
Khulna	0.51 ***	0.81 ***	0.59
Rajshahi	0.43 ***	0.79 ***	0.85 **
Urban residence	0.48 **	1.28 ***	0.65
Wealth:			
Number of consumer durables owned	0.03	-0.12	0.07
Possession of electricity	-0.08	0.04	0.63
Possession of land	-0.33 ***	0.05	-0.18
At least one living son	1.36 ***	1.99 ***	3.12 ***
Level of education: ^b			
Some primary	0.02	0.01	-0.60 * ^d
Finished primary	-0.28	0.54 *	-0.77
Secondary or more	0.05	-0.36	0.59
Social learning			
Member of: ^c			
Grameen Bank	0.38 *	0.19	0.56
Other women’s organization	0.11	0.17	0.25
Number of NGOs working in the community	4.01	0.09	0.04
Works outside home	0.34	4.06	1.22
Travels to other parts of residence	0.03	0.10	0.22
Media exposure to family planning messages	0.16	0.38 **	-0.79 *** ^d
Discussed methods with a FPW	-0.39 *** ^d	-0.75 *** ^d	0.27
Social influence			
Perceives peers use contraceptive methods	0.18	0.29	0.68 **
Recommended family planning to someone	0.19	0.52 ***	0.62 **
Husband attitude positive on family planning	0.95 ***	1.02 ***	1.01 ***
Discussed family planning with husband	0.33	0.60 **	1.30 ***
Number of cases	1,746	1,402	978
Log likelihood	-998.850	-509.035	-227.727

* p < .1; ** p < .05; *** p < .01.

^a Reference category is Dhaka.

^b Reference category is no education.

^c Reference category is no membership in any organization.

^d Relationship of coefficient is in the direction contrary to that expected.

Contraceptive use

Logistic regressions were run separately for women who want no more children (limiters) and those who do want more children or are uncertain (spacers). The results are presented in **table 3**.

Background variables of family size and one living son are positively associated with contraceptive use for all women. Contraceptive use is significantly associated with region of residence in a pattern that corresponds with wanting no more children. As age increases, women are more likely to use contraceptives to limit births. Contrary to expectations, education increased the likelihood of contraceptive use only among women who have achieved the highest levels of education (secondary school or more).

The data support the hypothesis that increased opportunities for social learning, as measured by some of the variables, increases the likelihood of using contraceptives for both limiters and spacers. The variable with the strongest effect is discussion with a FPW. The size of the effect of this variable is greatest for women using contraception to space births, making them almost twice as likely to use a method. Work outside the home has moderate effects on women's contraceptive use for limiters.

The hypothesis that social influence affects contraceptive use among both spacers and limiters is strongly supported by the analysis of BDHS. All variables were significantly associated with contraceptive use in the expected direction. For spacers, both variables representing interaction with their husbands have a stronger effect than those that represent interaction with their peers. For limiters, the variable representing the husband's attitude towards family planning has a particularly strong effect.

The hypothesis that institutional constraints decrease the likelihood of using contraceptives is not consistently supported by the data. While a higher percentage of women who can seek health services use contraceptives for both spacing and limiting, the relationship is not significant when background and other social interaction variables are controlled for.

The variables representing service availability do not display the expected relationships consistently. The lack of consistent effects for FPW provision of methods could be due in part to the fact that almost all communities have a FPW providing methods. Despite this uneven distribution of values, women who do not have access to a FPW who provides methods is significantly less likely to use contraceptives to space births.

Table 3. Logistic regression coefficients of “current contraceptive use”

Independent variable	Desire for children	
	Want more or are uncertain	Want no more
Background		
Age	0.04	0.25 ***
Age squared	0.00	0.00 ***
Region of residence: ^a		
Barisal	0.31	-0.15
Chittagong	-0.36 ***	-0.55 ***
Khulna	0.78 ***	0.54 ***
Rajshahi	0.74 ***	0.42 ***
Urban residence	0.03	0.10
Wealth:		
Number of consumer durables owned	0.06 *	
Possession of electricity	0.33 *	0.03
Possession of land	-0.04	-0.08
Family size:		
2, 3 or 4 children	0.54 ***	0.75 ***
5 or more children	1.45 ***	0.40 **
At least one living son	0.59 ***	0.33 **
Level of education: ^b		
Some primary	0.19	-0.11
Finished primary	0.02	-0.01
Secondary or more	0.56 ***	0.16
Social learning		
Member of: ^c		
Grameen Bank	-0.16	0.22 *
Other women’s organization	0.00	-0.02
Number of NGOs working in the community	-0.01	0.04
Works outside home	0.08	0.36 **
Travels to other parts of residence	-0.02	0.06
Media exposure to family planning messages	-0.17 * ^d	0.01
Discussed methods with a FPW	1.07 ***	0.46 ***
Social influence		
Perceives peers use contraceptive methods	0.28 **	0.27 ***
Recommended family planning to someone	0.39 ***	0.41 ***
Husband attitude positive on family planning	0.79 ***	1.30 ***
Discussed family planning with husband	1.30 ***	0.33 ***
Institutional constraints		
Autonomy to seek health services	0.10	0.02
Accessibility:		
FPW in area provides methods	1.30 ***	0.40
Distance to clinic	0.06 ***	0.03
Distance to hospital	-0.04 *** ^d	0.00
Satellite clinic comes to village	-0.01	0.02
Number of cases	2,984	4,133
Log likelihood	-1,396.593	-2,276.085

* p < .1; ** p < .05; *** p < .01.

^a Reference category is Dhaka.

^b Reference category is no education.

^c Reference category is no membership in any organization.

^d Relationship of coefficient is in the direction contrary to that expected.

Results of qualitative study

BDHS analysis confirm that social interaction matters, but the variables are subject to interpretation and the concepts are abstract. While analytically distinct, the processes of social learning, social influence and institutional constraints may all occur in one conversation with the same person. Therefore, this section will be broken down along the lines of conversational partners and the three types of social interaction will be discussed for each group as appropriate .

Discussion here is limited to the three sources of interaction found to have the strongest impact in BDHS: FPWs, husbands, and peers. The interviews also supported this choice. While family planning is a prominent issue that is actively thought about and discussed by married women in rural Bangladesh, it is discussed only with those deemed by social convention to be related in an appropriate way. "Formal" discussion aimed at promoting family planning is largely restricted to female programme staff, usually FPWs. Women did not welcome intrusive and "shameful" questions from male programme staff in their villages. Husbands are the only male with whom women generally discuss family planning issues. These discussions tend to start early in the marriage if the husband is interested in family planning and somewhat later if the wife initiates the discussion. The third common group of conversational partners are female relatives and neighbours. Within this group, only women of the same age cohort or those related in specific ways (for example an older brother's wife, but not one's own sister) are normally considered appropriate conversational partners. New brides are especially restricted in whom they can talk to as they generally marry into strange households.

FPWs

FPW spans two types of social interaction: they are the source of social learning when providing information and a means of overcoming institutional constraints when providing supplies. FPWs do try to promote small family size ideals. However, as the benefits of small families are widely known, this information is not valued in the same way as information on contraceptive methods and access to them. This may explain why FPWs do not affect wanting more children but strongly affect contraceptive use in the BDHS analysis. FPWs were not commonly credited as being a source of social influence - that is, someone who persuaded a woman to change her mind regarding her choice of reproductive behaviour. Although FPWs are often referred to in kinship terms, nobody expressed a social obligation to take their

advice in the same way they did for real kin. One respondent describes the FPW that visits her house:

Interviewer: “Did she influence you all to use family planning methods?”

D: “It is her job and she tries her best to convince us. First, she asks us how many children we have and if we are using anything or not, then she explains that she has new pills and we can try them, but it is a personal matter, and what people decide to do is their own personal decision”.

Interviewer: “So she never forced any of you to use anything?”

D: “No. She gives us pills and if we don’t take them, it is our own mistake. But she tries her best to explain what the advantages of having a small family are. She said: ‘I am doing a job and my husband is also working, and you women do not have jobs but you have four or five children in your family. Look at me, I have only two children and I can give them everything they want from me. I can buy school bags, shoes, sandals and other things. But you don’t have that ability to give your children these things, you can’t even afford to give each child one taka everyday. So it is a problem for you, and to solve the problem what you have to do is to have two children”.

Being close to the culture of the clients is likely to increase the credibility of FPWs and enables some, as illustrated in the excerpt above, to use their own experience as an example. Because they share some of the clients’ attitudes, they adapt the programme messages to conform to local values. For example, two respondents were discouraged from using family planning because they did not have a son. Also, in counselling women on side effects, some FPWs reinforce local beliefs about the interaction of contraceptives with one’s body. Such information may not be consistent with programme goals. One respondent describes how she was dissuaded from using a method. “I heard about them [pills] from a FPW. She said that if I took pills I would have a space between each child. But I was scared so I didn’t take pills, because she also said that if I

took them I had to eat eggs and drink milk regularly. But we are poor, so what do we choose — milk and eggs or rice? I couldn't afford to buy these foods so I didn't take pills, if I have many children, I don't care. It happens”.

The qualitative analysis revealed that while both aspects of interaction with FPWs are important, FPWs serve more women as a source of supply than as a source of information. This may be true in part because women no longer need information once they have settled on a method they find acceptable, but they continue to need supplies as well as services to alleviate side effects. FPWs provided pills to the majority of users. Also, FPWs accompanied most women seeking long-term methods to the hospital or clinic and made all the necessary arrangements for them. This was true even when a woman's husband or other relative also came along.

Those most strongly influenced by the advice of FPWs tended to be older women who started childbearing at an earlier point in the fertility transition. This was the case for H (41 at the time of the interview) who had six births in rapid succession and was pregnant again when a FPW came to visit. H describes her experience:

H: “I heard about ligation from her [the FPW], and then I thought it wasn't smart to suffer with children and I told my husband I was going to get a ligation.. . He said that it was my decision, I could use whichever method I thought was good for me. I told him there is no point in having more and more children. We cannot control them; we can't educate and feed them. There is no need to just having children like a dog or cat, and I also felt sick and weak”.

The FPW then took H and her niece to the hospital where H had an abortion followed by a tubal ligation.

The importance of FPWs as a source of supply for women without other sources of support is illustrated in the story of P. With encouragement from her peers, P is willing to use birth control despite her husband's opposition. However, the FPW has not come to give her pills for two months, and she is uncertain she will be able to prevent pregnancy.

Interviewer: “If they [FPWs] don't come, will you go get pills alone?”

- P:** “How can I go alone? They used to come every month. They don’t come; they don’t even send word. If I go there [the community centre] and can’t find them, what will I do? If they don’t call me, how can I go?”
- Interviewer:** “If you don’t hear from them, what will you do?”
- P:** “That is my only headache now”.
- Interviewer:** “Can you get some from anybody else, or buy it from a shop?”
- P:** “I can buy it from a shop, but who will buy it for me? I can’t get it from anyone else without my husband’s help and he will not go there. I’m scared, that’s why my heart is pounding. If I stop taking pills, I will be pregnant again”.

Not all women use FPW services — some self select out of the services because they prefer other sources of information and supplies. Wealthier women tend to buy social marketing brands (perceived to be of higher quality) and their relatives tend to travel with them to the hospital or clinic.

Husbands

All but one respondent reported talking to her husband about family planning issues — even young women who did not yet want to stop or space births. Husbands were the most powerful source of social influence, but contributed new information (social learning) in only a few cases. When a woman counted on support from her husband, institutional constraints became less relevant. In these cases, the husband will generally help his wife overcome problems in accessing services by buying methods for her, accompanying her to seek services, or giving her the resources and permission she needs to seek services without him. This interaction may explain in part why the variable representing a woman’s ability to seek health services becomes statistically insignificant when social influence variables are controlled for in the BDHS analysis.

When both husband and wife desire to use a method and discuss it, they are able to generate the momentum to use a method successfully. Even so, there was often a significant lag before a suitable method was found (during which time unwanted pregnancies resulted). Also, when both members of the couple wanted to use a method, women tended to switch rather than drop

methods when experiencing side effects. Joint initiative was especially common among younger couples using a method to space their families. The importance of mutual support between husband and wife for timely contraceptive use is explained by R, a young woman who has successfully used contraceptives to achieve her fertility goals.

R: “Nowadays everybody says that a small family is a good family, but if a husband and wife don’t agree about this - maybe one wants children and the other doesn’t — they end up with a big family. Most of the husbands want big families. Wives don’t want to give birth to many children because it is very hard to give birth. But husbands refuse to understand this problem. Some husbands make an effort to understand the problem and some don’t. Those who understand it early on have small families, and others after already having a big family, realise the problem. At that point they cannot give their children food, clothes, and education and they realize their family is too big”.

Women were more likely than their husbands to want to stop births and use a method. Those who wanted to use a method generally asked their husbands for permission and support before starting. Husbands that refused did so because they either wanted more children or were morally opposed to family planning. Husbands exert considerable influence, as evidenced by the unwanted children borne by women whose husbands prohibited family planning on religious grounds. Women seemed unconvinced by their husbands’ religious beliefs, thus the main reason that they bore unwanted children was to preserve marital harmony or to preserve their own health. Using a method without a husband’s permission increases the health risk, as there may be no financial support if the woman requires treatment for side effects. The comments of one respondent illustrate the importance of having the permission of one’s husband: “If I did anything [use a contraceptive method] without telling him, then had a problem later, he would never help me and he would tell me that he had told me not to do it. And I know in such a case he wouldn’t give me any money for treatment, and where else would I get money for treatment? I would die, and then what would happen to my children? That is why I am not taking anything”.

For each woman, however, there appears to be a threshold parity where they will use contraception despite negative social influence from their husbands, sometimes secretly. One respondent explains: “He [my husband] always says if Allah is giving the child, you have to take it. But he never understands that Allah will not give us food to eat. . . . Will Allah give me food from the sky? We women understand these things, but never men. They don’t want to understand”. She is willing to disobey her husband only within limits — she took out the intrauterine device (IUD) she secretly had inserted when her husband became angry because she was bleeding a lot. Now she takes pills but considers a tubal ligation too “big a step to take” without her husband’s permission.

Women whose husbands want more children may disregard his wishes when they believe their husband is unable to take care of more children. These women reach a threshold where they are willing to create disharmony by using contraception when they still have relatively few children. When a man cannot feed his family he loses face, and with it the power to control his wife’s behaviour. Three women accused their husbands outright of being unable to care for his existing children and use methods with his knowledge. L, for example, works to support herself and her children and lives with her own family, who all supported her decision to cease childbearing. When asked if her husband had told her not to take pills, L said: “I didn’t bother to listen to him since he cannot feed my children, I didn’t pay attention to his words”.

In a minority of cases, men wanted to use a method but their wives were opposed. Wives opposed in some cases because they wanted a child and in others because they feared side effects, but never on religious grounds. If a woman refused her husband’s request to use a method, her husband usually tried to convince her, but seldom took control of the situation by using a method himself. When a husband was supportive, he was generally able to influence his wife to use a method in spite of her reservations. One woman who feared getting a tubal ligation reported she finally relented and overcame her fear owing to her husband’s daily “brain washing”. Another example is J, whose husband claimed he wanted only two children because it is the “government rule” and he “would not be able to hold his head up” if he had more. Despite her own objections, J had abortions at her husband’s insistence.

J: “Many people say that I have committed many sins by having my abortions”.

Interviewer: “Who said that?”

J: “People said so. They said that I will be guilty before Allah because I did this, I will have to answer to him when I die. But I think that I didn’t do the abortions, it was my husband’s decision, so he will have to answer to Allah. But my husband says we didn’t commit any sins. When I went to get my MR [abortion] and the doctor was ready to do it, then I jumped up from the table and said I couldn’t do it, I was scared, it was a great sin, it is not good... The doctor told me that your husband was telling you again and again to get a MR outside this room, he doesn’t want the child. So my husband forced me to do MR”.

Social influence has more impact when it includes a commitment to participate in the family planning process. Some wives refused their husbands’ requests to adopt a method when that request was not accompanied by support. Though B agrees with her husband’s desire to stop childbearing, she does not use a method because her husband does not offer her the support that she needs to feel safe. Should she experience side effects, she is afraid her husband will let her die rather than pay for her medicine because he has a second wife to fall back on. She indicates that she would be willing to use a method if he would help her.

B: “I’m scared because if I get sick taking a method I have no one to go to. Otherwise, my husband is telling me to take something all the time. But I’m not doing anything; I’m following my own thoughts. Otherwise, he is always scolding me. Day and night, constantly. . . . My husband could take me with him to get a method, but he just told me to go on my own. If we went together, then maybe. But he will never take me with him. He just told me to go by myself. In our house nobody knows much about these things.

Peers

Peers are a common source of social influence, and to a lesser degree of social learning, regarding desirable family sizes and contraceptive use. In some cases, they also assist women in accessing methods, thus acting to reduce

institutional constraints on contraceptive use. Peer influence is aimed largely at encouraging women to have small families and to use contraceptive methods. However, peers also influence women against using specific methods of birth control as they warn women of real and imagined dangers associated with the methods. This influence may stop a woman from practising family planning if there are no alternative methods of birth control available to her which are deemed acceptable by her peers.

The conversations between peers are informal and may take place whenever women cross paths. Some women, particularly unmarried women, do not feel comfortable talking about contraceptive use specifically but will still talk about family limitation in general. The majority, however, seem fascinated by the topic of contraception. There seemed to be little privacy regarding reproductive behaviour among women, even for women hiding use from her husband and for abortion which is a morally contentious method. The frequency of and interest in these conversations is illustrated by the comments of one woman who reported that, as “now in every house there are wives and daughters, and also many methods, so there are many stories to discuss,” women talked about family planning “whenever they have time”.

There is little controversy associated with family size ideals. Conversations tend to reaffirm the benefits of small families given the cost and work involved in raising children properly. About one third of the women interviewed reported that their neighbours and relatives told them repeatedly to have no more children or to keep their family small. While such advice from other women did not carry the same weight as a request from their husband, several women said that advice from a neighbour or relative caused them to start using birth control. S gave birth to five children without using a method, but has been using a mix of pills and injections continuously for the last five years. During the interview, S recalled the conversation that spurred her to start taking pills. “When I went to my parents house last time, my brother got married and the new bride said to me, ‘Apa [elder sister] why aren’t you using anything? How can you go on this way? Do you want more children?’ I said ‘No’. Then she told me to start taking pills right away”. Many of the respondents claimed to be on the other end — they told others who were not using a method to do so.

Those who want large families are considered out of date, and others try to bring them up to speed. While a large family may have once enhanced the prestige of the parents in the community, now it is considered unfortunate and even shameful by most to have many children or children in rapid succession. Describing the numerous children of a nearby household inspired snickers in S

and her neighbours to listen to the interview. The interviewer asked, “So, here you laugh at people who have many children?” S replied that they did laugh and that “it is embarrassing” to have many children.

While most women argue that small families are better than large ones, there is still debate as to what number of children denotes a “small” family, what gender compositions are acceptable and the appropriate timing of the births. The label “small family” was used by the respondents to describe a range of family sizes from those with only one child to as many as seven children. While sons were viewed almost universally as desirable, there were those that argued that having a son (or an additional son) did not compensate for having a large family. Many women related sad stories of people who had many daughters they would have to marry off only because they kept trying for a son. Women also reported discussing how many sons were necessary to ensure old-age support. While many argue for at least two sons, others maintain that one good one is enough. A minority of the respondents indicated that in these times, educated daughters could take the place of sons as they can work like men.

Peers are a source of social learning and social influence in discussions regarding contraceptive use, as well as those regarding family size (indeed these topics are often discussed jointly). They influence women through their recommendations on specific contraceptive methods and through providing emotional and logistical support to those seeking to use methods. While many women had been advised by peers against using specific methods or against using a method before a first child, peers generally advocated contraceptive use. The information shared by peers tended to be less focused on the methods themselves and more on the experiences that they or others they knew had with the methods. When a relative or neighbour had explained the advantages of the method that she herself used and encouraged the respondent to try it, it carried more weight. Hearing of a method from the FPW was sometimes not enough — a few women said they had heard of a particular method, but could not try it as they did not know personally anyone (or enough people) who had used it.

In several cases, the neighbour or relative took it one step further and brought the respondent a method or accompanied her to get a method from a clinic or hospital. A couple of the respondents and their neighbours seemed to have appointed themselves informal FPWs and regularly supplied neighbours with methods or took them to the hospital. One woman told of her sister-in-law who helped women access abortions, IUDs and sterilization. “She is a very brave girl. She gives advice to everybody and takes them to the hospital”.

There were also several cases where small groups of women went together to get methods, reducing the fear and anxiety associated with the experience. During one interview, the respondent claimed: "She [indicating her brother's wife] forced me to come with her to get a copper-T [IUD]. Me, my brother's wife and this woman [indicating a neighbour], we got copper-Ts together". Especially since the respondent's husband was opposed to family planning, these women undoubtedly were a crucial source of social support.

The importance of interaction with peers for learning about and using contraceptives can be seen in the stories of women who lacked that interaction. Of 40 women, only five women claimed to have little interaction with their neighbours. All of the isolated women were at a disadvantage for acquiring information on methods and modes of access. Also, in all of these cases, they had unwanted pregnancies. All but one of these women were educated and socially isolated because of it. Their formal education, which did not include family planning issues, did little to help these women meet their fertility goals.

The more popular and controversial topics of discussion involve side effects that reportedly accompany specific contraceptive methods. Three quarters of the women interviewed mentioned hearing complaints and rumours of side effects (ranging from normal to bizarre) and this information inhibited contraceptive use for many women. Even women with few and infrequent social contacts could describe various side effects that befall users of certain contraceptive methods.

Many side effects are recognized as being related to certain methods such as bleeding from IUDs and nausea from the pill. Many others are not related to contraceptives in a known way. For example, it is rumoured that ligation can cause the death of one's family members.

Where motivation is very strong, women may use a method despite their fear of its side effects. However, such strong motivation may arise only after bearing unwanted children. K's motivation to plan her family may have just reached the point where it overrides her fear. She is currently pregnant and tried to induce abortion with an expensive pill that made her very sick but didn't work. She did this even though she heard that two other women from her community had died from taking this pill. After her failed abortion, K went to see a spiritual healer in her village and was told that if she did anything else to try to induce an abortion, she would certainly die. Now she is resigned to having this child, but is determined to stop future births. K has canvassed the neighbourhood to gather information so she can choose a method. Though she has been informed that women with ligations suffer pain like childbirth in their

stitches when there is a full moon, she is still determined to go ahead. She claims, “To me it is better to die than to live like this. Nobody has had a ligation before in my family, but I want to do it because I am sick and tired of being ill and I think that it is more important to raise my children, I don’t want more children”.

Patterns of interaction have changed over time. Half of the respondents interviewed had never heard of family planning before marriage and many did not hear of it until several children had been born. When asked if she used a method right after marriage, N commented on the general ignorance prevailing when she started her family. She replied, “Who could have taught me at that time? People then didn’t know as much as they do now. Now we know about pills, but before we had never heard of pills.... After 4 children I heard about pills”. Several respondents (or elder women observing the interview) commented that the elder generation did not have methods and therefore could not use them, but that they approved of use now that methods are available.

Discussion and conclusion

Changes in social institutions, mobility and communications led to new patterns of social interaction in Bangladesh, which may have contributed to declines in fertility. The results of this study offer compelling evidence that more extensive social interaction, and social interaction which is supportive of family planning, are both associated with smaller family size desires and increased contraceptive use in Bangladesh. Furthermore, in the BDHS analysis, the effect of social interaction is more powerful than that of other factors that are generally credited with influencing fertility behaviour — education, wealth and urban residence. These findings are further supported by the qualitative study which found that women actively discuss issues of family planning with neighbours, relatives, husbands and health workers, before making decisions regarding their own fertility behaviour. They often credited these interactions with helping to determine the point in their childbearing when they become interested in restricting births and whether they successfully accessed and used a method. Generally, increased interaction is associated with support for family planning that leads to desires to restrict family size and assists women in accessing and choosing methods. However, increased interaction can also expose women to more information on method side effects (both real and perceived), which can make it more difficult for a women to find an acceptable method.

The BDHS analysis also revealed that the influence of social interaction on contraceptive use is greater than it is on wanting no more children. This may be attributed in part to greater variation in fertility behaviour than in fertility desires in Bangladesh. The patterns found in the qualitative portion of this study are compatible with this finding. There tends to be more consensus in women's conversations on issues of family size and more controversy when the conversations regard contraceptive use, especially specific methods.

The BDHS analysis also brought out the relative importance of specific types of social interaction for contraceptive use. At the current stage of the Bangladeshi fertility transition, social learning as defined by the variables available has a weak effect relative to social influence in formulating family size desires. Family size ideals are fairly uniform and low, indicating that small family norms have already diffused. This is evidenced in the qualitative study by statements that appeared to mimic family planning programme educational messages. Regardless of their own family sizes, most women made declarations along the lines of "a small family is a good family" and could support this statement by listing problems associated with large families. While some of the problems mentioned were tied to personal experience or observation of others, the majority of women repeated standardized lists, including various expenses and the inability to "raise good human beings" if one has many children.

It seems that in this scenario, it is not the abstract information that small families are possible and desirable (social learning) that shapes personal fertility goals, rather it is the evaluation of this information and the interpretation of its applicability for each individual's particular situation (social influence). The results of these personal evaluations are not uniform and they are accomplished with the assistance of those who know and understand one's needs best — peers and spouses. Numerous conversations were reported in the qualitative study which described pressure to stop childbearing (or to continue in a minority of cases) because of personal economic hardships, inappropriate gender mix of one's children, or health problems.

This suggests that fertility behaviour depends more on interaction with people who can provide emotional and other types of support, rather than just ideas and information. The importance of interpersonal encouragement and support is not surprising given the ambivalence and fear surrounding contraceptive use in Bangladesh as evidenced in the qualitative study.

There is evidence that the social norms regarding fertility behaviour in Bangladesh are changing from stigma associated with contraceptive use to

stigma associated with failure to use contraceptives. A small proportion of the respondents referred to husbands or others who oppose family planning on moral grounds. The majority of the respondents, however, view raising their children as “proper human beings” to be a moral duty which takes precedence in their own eyes. They indicated that it is not possible to fulfil this duty when one bears many children. Thus, those who do not plan their families are regarded by some as irresponsible parents and become the subject of gossip, pity and even ridicule.

A new ethos, which places the burden of social approbation on non-users of family planning rather than users, may represent the single most powerful force able to stimulate contraceptive use. If this force is coupled with access to acceptable services and better information flowing through social networks, it would be reasonable to expect fertility in Bangladesh to continue to decline to levels compatible with stated fertility goals.

This study supports the inclusion of measures of social interaction in all future studies of fertility. It also suggests that programmes promoting family planning can improve their outcomes by actively targeting husband, and by stimulating community discussion through existing formal groups (such as women’s organizations) and informal groups (such as neighbourhoods) rather than just targeting clients as individuals.

Endnotes

- 1.** Unfortunately, much of the evidence gathered is from the area of Matlab, where an intensive health intervention and research programme make the relevance of the results to the rest of Bangladesh unclear.
- 2.** Age and possession of consumer durables are continuous variables while the rest are dummy variables. The variables region and education have categorical answers with more than two possible outcomes. For these, a reference category was selected (the region of Dhaka and no education) and used as the basis of comparison for the other categories. The contraceptive use models include a variable representing age squared to adjust for the inverted U-shaped relationship between contraceptive use and age.
- 3.** Of the social interaction variables, the number of organizations working in a woman’s community, distance to the nearest clinic and hospital are represented by continuous variables. The remaining variables are dummy variables.
- 4.** Most respondents (over 90 per cent) with five or more children say they don’t want any more and most with less than two children (over 90 per cent) want more children or are unsure. While achieved family size may be higher, desired family size is narrowly constrained to 2 or 3 children for most women who have not yet exceeded these family sizes.

5. The lack of relationship found between the social learning variables and wanting no more children and between some of these variables and contraceptive use, could be due to the cross-sectional nature of the data. Longitudinal data might indicate that these same variables were important in exposing the forerunners of the fertility transition to new ideas about small families and the possibility of limiting families when these were in fact new ideas. The lack of a consistent observed effect may also be due to limitations in the variables. The independent variables are necessarily crude proxies for presumed exposure to social learning.

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Patrilineal, Patrilocality and Fertility Decline in Viet Nam

*Viet Nam's fertility decline implies an
ongoing rise in the proportion of couples failing to
meet the demographic preconditions for fulfilment
of a patrilineal, patrilocal model*

By John Bryant*

The 90 per cent or so of the Vietnamese population who belong to the Kinh ethnic group (Vietnam, 1991: volume 1, table 1.4) have a patrilineal, patrilocal family system. To conform to the rules of this system, a couple must have at least one biological or adopted son, Viet Nam's dramatic fertility decline has, however, entailed a rise in the proportion of parents unable to fulfil this condition. What does this imply about the strength of Viet Nam's patrilineal, patrilocal norms, now and in the future?

* John Bryant, Independent Researcher, Phu Vieng, Thailand, aree_john@yahoo.com

Patriline and patrilocality in Viet Nam

Patriline and patrilocality

A patriline is, ideally, an unbroken line of descent running from fathers to sons through the generations. Descent lines are recorded in genealogies, and celebrated at ancestral altars. In Viet Nam, as in China, families try to increase the patrimony handed down with the family name (Yang, 1945; Hickey, 1964; Nguyen Due Truyen, 1994).

Patrilines sometimes form the basis of lineage organizations. The classic example is the lineages of pre-revolutionary southern China, which sometimes had thousands of members, genealogies running back several dozen generations, complex internal organization, and substantial communal property (Freedman, 1958, 1966). Lineages in Viet Nam never seem to have reached this scale, but many have traditionally had lineage land (*huong hoa dim*, or 'fire and incense land') used to defray the costs of ancestor worship, and wealthier lineages have constructed ancestral halls. Members of poorer lineages have at least tried to live near one another (Lusteguy, 1935; Hickey, 1964; Woodside, 1971).

Under the Vietnamese patrilocal household formation system, one married son and his family, typically lives with the sons' parents, while any other married sons set up independent households. In Viet Nam, as in China, the cultural ideal is in fact for somewhat more complicated households, consisting of more than one married brother and several generations. Most scholars accept, however, that the stem household formation system has long been followed by the majority of the population (Juong, 1989; Nguyen Tu Chi, 1993).

One practical implication of patrilineality and patrilocality is the expectation that old-age support will be provided by sons (Gammeltoft, 1999). A son who has been thoroughly socialized in his debts to previous generations, who will receive or has already received family property, and who lives with his parents faces strong pressures to provide such support.

Historical origins

Linguistic evidence suggests that present-day northern Viet Nam once had a bilateral kinship system like most of the rest of South East Asia, but that northern Viet Nam's absorption into the Chinese empire in the second century B.C., was followed by a switch to a patrilineal system (Rambo, 1972). The people of northern Viet Nam attained independence from China after about one thousand years. Evidence on the family system between this time and the

twentieth century is scarce, and historians have relied mainly on a close reading of the medieval Le Code, a system of basic laws promulgated by the Vietnamese State. Passages of the Code dealing with the lineage land (*huong hoa*) clearly show that the family system of the time was patrilineal (Haines, 1984). Compared with similar sets of laws promulgated in China, however, Viet Nam's system was somewhat less male-centred. For example, the Code made provisions for daughters to inherit equally with sons, and it envisaged that children would not claim their inheritance until the mother, and not just the father, had died (Woodside, 1971; Ta Van Tai, 1981).

Even by the early nineteenth century, Viet Nam was a far less Confucian society than its rulers would have liked. In 1825, the Ming-Mang emperor complained that Vietnamese peasants, unlike Chinese peasants, still did not understand the laws properly. Many aspects of popular culture, from the blackening of teeth to the relatively high status of ordinary women, were still prototypically South-East Asian (Woodside, 1971; Reid, 1988).

This was particularly true in the southern reaches of the country. Ethnic Vietnamese had been gradually migrating south from the Red River Delta, displacing or absorbing existing cultures, for hundreds of years, but Vietnamese settlement of much of the Mekong Delta did not occur until the eighteenth or nineteenth century. Vietnamese officials in the nineteenth century still saw the South as "crypto-Cambodian" (Woodside, 1971). In modern-day Viet Nam, the percentage of the population who belong to the Kinh ethnic group is approximately the same in northern and southern Viet Nam (Vietnam, 1991: volume 1, table 1.4). Scholars generally agree, however, that Kinh in the South place less weight on lineages and patrilocal residence rules than Kinh in the North (Donoghue, 1962; Do Thai Dong, 1991). Hickey (1964) states that the departure from northern norms is greatest in the southernmost part of the Mekong Delta.

After establishing control over the North in 1954 and the whole country in 1975, the new communist Government launched a comprehensive programme of social modernization, which included an attack on "feudal" aspects of the traditional family. Patrilocality and patrilineal inheritance do not appear to have been targets, but many of the principles which underpinned patrilocality and patrilineal inheritance were. Elaborate altars and ceremonies for ancestor worship were attacked as wasteful and superstitious (Kleinen, 1999). Children publicly denounced parents during land reform, upsetting the generational hierarchy (Luong, 1992). The Government attempted to raise the standing of women with measures including the promotion of female cadres, the promulgation of laws calling for equal inheritance between sons and

daughters, and emulation campaigns aimed at promoting a democratic, egalitarian “new culture family” (Ginsburgs, 1975; Eisen, 1984). None of these campaigns were, however, as radical or as thorough as the Chinese equivalents such as the Cultural Revolution.

Loopholes

Patrihneal descent and patrilocal residence make families vulnerable to the “demographic lottery” (Smith, 1984): without sons, the prescriptions cannot be followed. It is therefore not surprising that the Vietnamese patrihneal, patrilocal family system, like other family systems, includes institutionalized loopholes in the form of adoption and alternative types of marriage.

Hickey describes adoption in the northern Mekong Delta in the early 1960s: .

“If, after several years of marriage, a couple does not have a child or if they have had numerous daughters, they will adopt a son to maintain the lineage and the Cult of the Ancestors.. It is preferable that the child be very young and a member of the husband’s lineage, but if this cannot be arranged the couple looks for a male infant in the village. Some compensation may be offered if the family is not related to the couple, although there is no evidence of systematic selling of male infants. Should a family be very impoverished, however, and have numerous sons, they may let it be known that one or several are available for adoption...Adoption of girls also occurs in the village, although much less frequently” (Hickey, 1964).

Much the same could probably be said for other parts of Viet Nam during other periods. However, Hickey’s description seems to refer mainly to adopted children who take on all the rights and responsibilities of biological children. As in China (Wolf and Huang, 1980), this is only one end of a spectrum of possible forms of adoption. Sometimes, children such as nephews or grandchildren are nominated as descendants, but are not expected to live with the couple who has adopted them (Jamieson, 1986; Vuong Xuan Tinh, 1994). Others live with the adopting couple and look after them in their old age, but do not act as descendants (Gammeltoft, 1999). Some types of adoptive children are eligible to receive inheritance and others are not. There have traditionally been elaborate rules governing such things as an adopted child’s rights if a biological child is subsequently born (Jamieson, 1986).

Vietnamese couples with daughters but not sons sometimes look for a son-in-law who will be willing to take on the duties of a son. In anthropological jargon, this is known as uxori-local marriage, and in Vietnamese as *lam re*. In both Viet Nam and China, men who are willing to forsake their own filial duties by accepting a uxori-local marriage, are generally looked down upon, and most men marrying in this way are poor (Wolf and Huang, 1980; Gammeltoft, 1999). The stigma is presumably less, however, in southern Viet Nam, as co-residence with the wife's parents is common among the cultures which the southern Vietnamese displaced. In China, uxori-local marriage, like adoption, has traditionally taken many different forms, with different combinations of rights and responsibilities. Some sons-in-law take descent from their fathers-in-law, while others do not; some live permanently with the wife's family, while others live with them for a specified number of years, or not at all (Wolf and Huang, 1980). The same is presumably true in Viet Nam. In both China and Viet Nam, uxori-local marriage can perhaps be considered as a type of adult adoption, since it involves the contractual transfer of a son from one family to another.

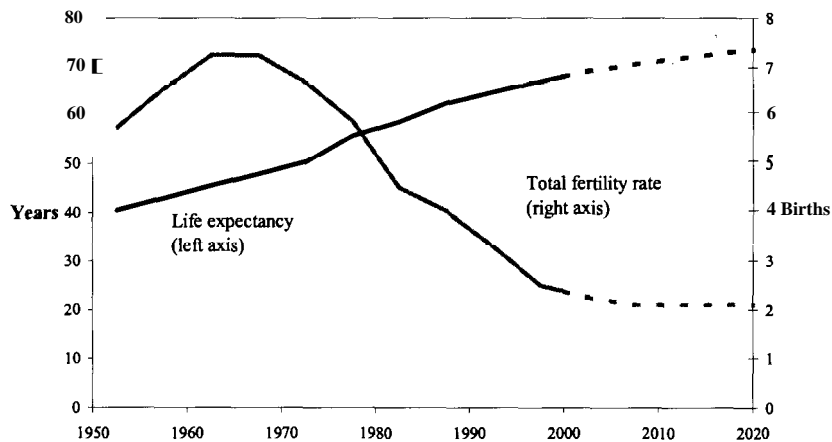
The demographic transition and the feasibility of patrilineal and patrilocality

For a couple to conform to the prescribed patrilineal, patrilocal model, they need at least one adult son, through adoption or through rearing the son themselves. The proportion of couples in each cohort who meet this precondition varies with the cohort's position in the demographic transition.

Fertility and mortality, 1920-2020

The outlines of Viet Nam's demographic transition are shown in **figure 1**, which presents United Nations' estimates and projections of fertility and mortality from the 1950s to the 2020s. The estimates for the 1950s and 1960s should not be taken too literally. In particular, all the published vital registration data and all the estimates based on indirect methods, suggest that the United Nations has been unduly pessimistic about mortality levels during the 1950s and 1960s (Jones, 1982: table 3; Savitz and others, 1993: table 1, 3; Hirschman and others, 1995: table 4). It is nevertheless clear that fertility began to decline at a national level some time around the late 1960s or early 1970s. In addition, a comparison with available data for the colonial period suggests that fertility in the 1950s and 1960s was roughly comparable to that of early times, while mortality was much lower (Gourou, 1936; Anon, 1945; Jones, 1982: table 3; Banister, 1985: table 5).

Figure 1. United Nations estimates and projections of mortality and fertility



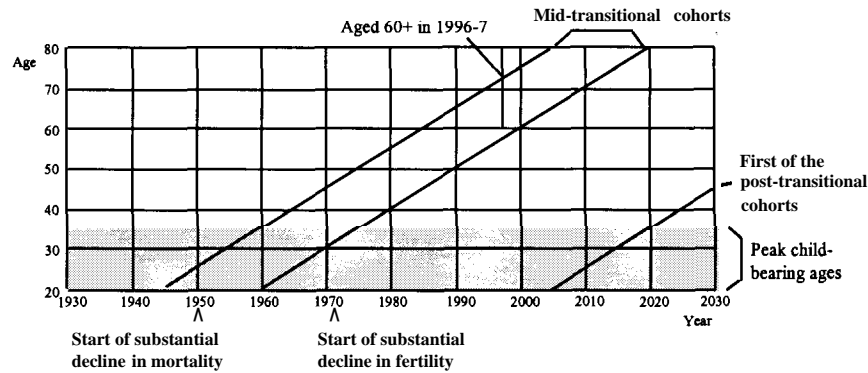
Source: United Nations Population Division, World Population Prospects, Population Database, <http://www.esa.un.org/unpp/>

Mid-transitional cohorts

“Mid-transitional” cohorts are those whose peak reproductive period falls mainly in the middle of the demographic transition, when mortality rates have declined substantially but fertility rates have not. As is apparent by comparing **figure 1** and **figure 2**, the mid-transitional cohorts in Viet Nam are those who reached age 20 during the late 1940s and the 1950s. Mid-transitional cohorts have significantly more children reaching adulthood than earlier cohorts, because they have about as many children as earlier cohorts, but their children face lower mortality rates.

Documenting this precisely, requires detailed tabulations on trends in numbers of surviving children and surviving sons. Unfortunately, compared with many other South East Asian countries, relatively little data on fertility has been made public in Viet Nam. In Viet Nam, analysis is also complicated by the Second Indochina War of 1965-1975. As can be seen in **figure 2** the older of the mid-transitional cohorts will have been reaching 40 years of age by the start of the war and 50 years by the end. Many of their sons would have reached combat age during the war. Hirschman and others (1995, table 7) estimate that the war raised annual death rates among males aged 15-29 by somewhat less than one percentage point. Moving from a life expectancy of

Figure 2. Lexis diagram



around 35 years to around 45 years, usually increases the percentage of children surviving to age 5 by around 10 percentage points. It therefore, seems unlikely, even for the older of the mid-transitional cohorts, that the war cancelled out all the beneficial effects of the earlier increase in child survival. Moreover, the war is unlikely to have had a large effect on the number of surviving sons of the younger mid-transitional cohorts, since few of them would have had children old enough to tight. The Second Indochina War, probably only slowed the initial increase in average numbers of adult children per couple.

Though limited, the available statistics provide at least some feeling for the impressive reproductive levels of the mid-transitional cohorts. The results from two surveys carried out in Hanoi and surrounding provinces and Ho Chi Minh City and surrounding provinces in 1996-1997 are shown in [table 1](#) (Truong Si Anh and others, 1997). The surveys were among people aged 60 and over; as apparent in [figure 2](#), this group overlaps substantially with the mid-transitional cohorts (especially since high mortality at older ages means that the sample was weighted towards people in the 60s.) Among those surveyed, only 2 per cent in northern Viet Nam and 6 per cent in southern Viet Nam reported that they did not have a living child. Results from two more surveys are shown in [table 2](#). The mean age of the respondents was 66 years in the national survey and 68 years in the Hanoi survey. Both surveys report found very few respondents to have no living children, and over 80 per cent to have three or more living children. The average number of surviving children was around 4-5.

Table 1. Data on surviving children and residence patterns of old people, 1996-1997

	Hanoi and surrounding provinces	Ho Chi Minh City and surrounding provinces
Per cent of old people with at least one living child	98	94
Per cent of old people with at least one living child who live with at least one child aged 18+	14	85
“Patrilineal ratio” ^a - single children only	0.9	1.1
“Patrilineal ratio” ^a - married children only	8.2	1.8

Source: Truong Si Anh and others (1997:table 3, 5).

^a The proportion of old people living with at least one son divided by the proportion of old people living with at least one daughter

Even though the data refer to numbers of children rather than numbers of sons, it is safe to assume that a large majority of couples in the mid-transitional cohorts have managed to raise at least one son to adulthood. For these cohorts, the demographic constraints on fulfilling a patrilineal, patrilocal model have been very loose. Indeed, many couples have probably had too much of a good thing: they have had more sons than they have been able to provide with land and housing. This, in turn, implies that conditions have been exceptionally favourable for those without sons of their own, who have wished to take advantage of the loopholes of adoption and uxrilocal marriage. Among all the couples with surplus sons, some have presumably been willing to part with them, either as children, through adoption, or as adults, through uxrilocal marriage.

Table 2. Number of surviving children of people aged 60 and over, from two 1993 surveys

Population surveyed	Distribution by number of living children (per cent)							Mean	n
	0	1-2	3-4	5-6	7-8	9+	Total		
All Vietnam	2	14	26	34	18	6	100	5.0	501
Hanoi	3	16	57	21	3		100	4.4	196

Source: All Vietnam: Dang Thu (1994:tables 12, 13); Hanoi: Institute of Sociology (1993: Question B6).

Post-transitional cohorts

The United Nations predicts that Viet Nam will reach replacement level fertility at around 2005. Whether fertility will continue falling and what distributions of surviving children will result, are unknown. It is, nevertheless, possible to build a model of family formation which will give some insight into patterns likely to be experienced.

The exercise undertaken here is inspired by Wrigley's (1978) attempt to model distributions of couples by numbers of children in pre-industrial Europe. There are, however, two major differences. The present exercise is simpler than Wrigley's in that it ignores child deaths; given the low mortality expected for post-transitional cohorts, this is not a serious limitation. The exercise is made more difficult, however, by the fact that the Vietnamese population, unlike European populations, shows clear evidence of son preference: among couples with the same number of children, those with the fewest sons are most likely to have another child (Haughton, 1999). Any model of Vietnamese childbearing needs to make allowance for stopping rules like this. Also, notwithstanding Government regulations banning them, it seems likely that sex selective abortions will become more common in Viet Nam, so that it is necessary to allow for higher sex ratios at birth than the usual 105-106 males per 100 females.

The model has two principal inputs. The first is the sex ratio at birth, which is used to calculate s , the probability that newborn baby is a son. The second is a set of sex-specific parity progression ratios $p_{00}, p_{01}, p_{02}, p_{03}, p_{10}, p_{11}, p_{12}, p_{20}, p_{21}, p_{30}$, where, for instance, p_{12} , is the proportion of couples who go on to have another birth, given that they already have one son and two daughters.

Any given sex ratio at birth and set of sex-specific parity progression ratios implies a distribution of couples by final numbers of children. The proportion, for instance, of couples whose completed set of children consists of one son equals $p_{00}s(1-p_{10})$, the probability of having a first birth times, the probability that the first birth is a son times the probability of having no more births after that. The proportion of couples with two daughters is $p_{00}(1-s)p_{01}(1-s)(1-p_{02})$. Other proportions are calculated analogously. Once the whole distribution has been worked out, the average number of children per couple can be calculated.

Son preference is modelled here by the extent to which couples with i sons and j daughters, where i is less than j , are more likely to have another child than couples with j sons and i daughters. Thus, if son preference is 15 per cent, $p_{12}=1.15p_{21}$, $p_{01}=1.15p_{10}$, and so on.

Table 3. First hypothetical distribution for post-transitional cohort

Sex-specific parity progression ratios					Resulting distribution by number of children ^a		
Sons	Daughters				Sons	Children	
	0	1	2	3			
0	0.90	0.95	0.41	0.17	0	0.27	0.10
1	0.83	0.30	0.14		1	0.46	0.10
2	0.36	0.12			2	0.23	0.53
3	0.15				3	0.04	0.24
					4	0.00	0.03
					Total	1.00	1.00
					Mean	1.05	2.00

^a Assuming sex ratio at birth of 110.

The creation of a hypothetical distribution of couples by numbers of children begins with the selection of values for the sex-ratio at birth, the average number of children per couple, and the extent of sex-preference. A set of sex-specific parity progression ratios which fit these constraints is then found. I have done this by starting with an actual set of parity progression ratios and adjusting them by trial and error until all the constraints were met. Although it might be preferable to use a more systematic approach, in practice, the range of allowable values seems fairly small. Once an acceptable set of parity progression ratios have been found, the implied distribution of couples by numbers of children can be examined.

One hypothetical distribution generated using these procedures is shown in **table 3**. The selected sex-ratio at birth was 110 (to allow for the possibility of some sex-selective abortion), the average number of children was two, and son preference was 15 per cent — a somewhat higher level than the one found in the 1992-1993 Vietnam Living Standards Survey. The right part of the table shows the associated distribution of couples by numbers of surviving sons and numbers of surviving children. Even with the choice of a moderately high sex ratio, near-replacement fertility, and moderately high son preference, 27 per cent of couples have no sons.

To what extent does the proportion without sons change with different sex ratios at birth or different levels of son preference? **Table 4** gives one example. The sex ratio at birth is 150, and son preference is 30 per cent. The associated proportion without sons is 21 per cent. In other hypothetical distributions, not shown here, which assume normal sex ratios, limited son preference, and 1.8 children per couple, the proportion without a son rises to around one third. All these values are, of course, hypothetical, and

Table 4. Second hypothetical distribution for post-transitional cohorts

Sex-specific parity progression ratios					Resulting distribution by number of children ^a			
Daughters					Sons		Children	
					0	1		
Sons	0	0.90	0.98	0.47	0.13	0	0.21	0.10
	1	0.75	0.45	0.13		1	0.44	0.14
	2	0.36	0.10			2	0.29	0.44
	3	0.10				3	0.06	0.28
						4	0.00	0.03
					Total		1.00	1.00
					Mean		1.05	2.00

^a Assuming sex ratio at birth of 150.

different sets of parity progression ratios give slightly different results. But experimentation consistently shows that, even with quite high sex ratios and son preference, a significant minority of couples do not have a son.

In fact, the deterioration, compared with mid-transitional cohorts in the demographic conditions for fulfilment of the patrilineal, patrilocal model is greater than the figures on proportions without sons suggest. In the mid-transitional cohorts, those without sons have been well placed to adopt a son, because many of their contemporaries have had surplus sons. As implied by tables 3 and 4, in the post-transitional cohorts, many couples are likely to lack sons, and very few are likely to have a surplus: an increased demand for adoptive sons will meet a decreased supply. For the post-transitional cohorts, the traditional demographic loopholes will be largely closed off.

Viet Nam's fertility decline, in sum, implies an ongoing rise in the proportion of couples failing to meet the demographic preconditions for fulfilment of a patrilineal, patrilocal model.

Evidence on the strength of patrilineal, patrilocal norms

Does the existence of a growing proportion of couples willing to sacrifice the model for the sake of reduced fertility mean that the patrilineal, patrilocal norms in Viet Nam are not particularly strong? There are, in fact, scholars who claim that the patrilineal, patrilocal model is not strong, and who argue that the Vietnamese family should not be grouped with the patrilineal, patrilocal families of East Asia (Whitmore, 1984; Hirschman and Loi, 1996). Evidence with which to assess these claims is much more plentiful for patrilocality than for patrilineal.

Patriline

For the rural areas of northern Viet Nam, there is a great deal of evidence that the maintenance of patriline is very important to most people. Surveys on childbearing invariably find that the maintenance of patriline is one motivation for wanting sons (Tuong Lai, 1992). Another motivation for wanting sons is to secure support in old age; as noted above, old-age support by sons is underpinned by patrilinearity, and patrilocality. Ethnographic studies have also found that patriline is strong, and ancestor worship is still practised (Luong, 1992; Gammeltoft, 1999; Kleinen, 1999). Lineage organizations have become important again in many parts of northern Viet Nam (Phi Van Ba, 1992).

Evidence for or against the continued strength of patriline in urban areas or the South is scarce. Among a small, highly educated urban elite, belief in ancestor worship was already declining during French colonial times (Nguyen Van Huyen, 1944). There is, however, no evidence of such changes occurring among ordinary urbanites.

Patrilocality

The most informative measure of adherence to stem household norms like those of Viet Nam is the extent to which old people with living children co-reside with their children. One set of estimates comes from surveys cited in [table 1](#) (Truong Si Anh and others, 1997). Among elderly with at least one living child, around 80 per cent live with a child, though the figure is slightly lower than this in the North and slightly higher in the South. Eighty per cent may not appear high, but it is comparable to figures from stem family systems elsewhere in South-East Asia and is “high enough to suggest no major decline is likely to have occurred”.

For this household formation system to be considered patrilocal, stem households must consist of elderly parents and the families of their married sons. To measure the extent to which old people lived with sons rather than daughters, Truong Si Anh and colleagues constructed the “patrilineal ratios”¹ shown in the third and fourth rows of table. These ratios are defined as the proportion of old people living with a son, divided by the proportion living with a daughter, calculated separately for single children and married children. As expected under a patrilocal system, the ratios are roughly 1 for single children, but are well above 1 for married children. Consistent with standard view about the attenuation of the patrilocal rule in southern Viet Nam, the North’s ratio of about 8 is much higher than the South’s ratio of about 2.

Table 5. Percentage of respondents who lived with grandparents or other relatives while growing up^a

	Lived with grandparent or relative			Did not live with grandparent or relative	Total	Number
	From mother's family	From father's family	From both families			
Northern village	2	14	5	78	100	139
Northern town	1	43	6	49	100	67
Southern village	1	22	14	63	100	72
Southern town	0	19	38	43	100	21

Source: Hirschman and Vu (1996:table 2).

^a Limited to people aged 15 and over who had both mother's family and father's family living in the same neighbourhood or village when they were growing up.

Belanger (Belanger, 1998:table 5) has used the 1992-1993 Vietnam Living Standards Survey data, a national survey of 4,800 households, to make similar calculations, but from the point of view of the married children rather than the parents. Belanger looked at married couples in which both the husband and wife had a surviving parent. To be included in the calculations, the wife had to be aged 15 to 34, and the couple had to be living with a parent of either the wife or the husband. For this group, the ratio of couples living with the husband's parents to those living with wife's parents was just over 50 in the Red River Delta, and almost 5 in the Mekong Delta and South-East. These results confirm the regional pattern found by Truong Si Anh and colleagues, but seem to imply a much stronger patrilocal tilt. Until the discrepancy is explained, or new data collected, Truong Si Anh and others' results should perhaps be treated as a lower bound, and Belanger's results as an upper bound, on the tendency towards patrilocal residence.²

An additional source of information on household formation is the 1991 Vietnam Life History Survey. The sample for this survey was drawn from a northern town, a northern village, a southern town, and a southern village. Although the survey was very small - the combined sample was 403 households - it deserves attention because it is one of the rare attempts anywhere in the world to obtain longitudinal data on household formation and because results from the survey have been used to argue against the existence of a strong system of patrilocal residence in Viet Nam (Hirschman and Loi, 1996).

Table 5 shows results from the survey. These results refer to respondents aged 15 and over, who had both their father's family and their mother's family living in the same village or neighbourhood when they were growing up and

thus had kin available to co-reside with. The fourth column of the table shows that most respondents did not in fact co-reside. Hirschman and Loi (1996) argue that the figures in column four suggest a departure from a Confucian model of co-residence after marriage. It is not clear that this is true. Knowing that the respondents' *families* lived nearby is not sufficient; what counts in a stem household system is whether the respondents' *grandparents* lived nearby. In addition, many parents may have co-resided before the respondent was alive but not be included in the calculations — especially if periods of co-residence were typically brief and if the respondent was not the first-born.

Weighing up all the available survey evidence, it seems that when Vietnamese meet the demographic prerequisites to follow patrilocal household formation rules, they generally do. The recent ethnographic evidence — which unfortunately comes entirely from northern Viet Nam — points in the same direction. Luong (1992; see also Gammeltoft, 1999), for instance, writes that in the village he studied “patrilocal residence was taken for granted”.

Conclusion

A micro-level counterpart of Viet Nam's rapid fertility decline has been a fall in the proportion of couples fulfilling the demographic prerequisites for the patrilineal, patrilocal model. This might be taken as evidence for the weakness of the patrilineal, patrilocal model. The available evidence suggests, however, that the model is still strong, and that fertility has declined in spite of its continued vitality.

Fertility decline in Viet Nam appears to have entailed couples making difficult trade-offs between conformance with the patrilineal model and other objectives. Recognition of such trade-offs is a useful corrective to accounts which posit a smooth adjustment in “wanted fertility” as attitudes are modernized. It also sits uneasily with accounts which posit a single level of “wanted fertility”. Suppose that a couple have two daughters whom they can barely support, but that they are worried about fulfilling their filial duties and about receiving support in their old age. If the wife becomes pregnant, how should she answer a survey question on whether the forthcoming birth is “wanted”? If she gives birth to a daughter, how should she answer?

The existence of difficult trade-offs may also presage a change in Viet Nam's patrilineal, patrilocal norms. There is abundant social-psychological evidence that when people have chosen one course of action, they tend to reassure themselves about the wisdom of their choice by retrospectively downgrading the potential benefits of alternative courses of action (March, 1994). Accordingly, when a couple has a third daughter and, to protect their

standard of living, decide against trying again for a son, they are likely retrospectively to downgrade the importance of the patrilineal, patrilocal model. The continuing fall in numbers of children per couple implies that more and more couples have been placed in this situation. If sufficient couples respond by downgrading the patrilineal patrilocal model, norms will change.

It might be objected that in pre-transitional Viet Nam, where the average number of surviving children per couple was also low, many couples also failed to produce an adult son, and yet patrilineal, patrilocal norms did remain strong. Under the pre-transitional demographic regime, however, the lack of a son was likely to have been due to death or reproductive failure, rather than to conscious decision. The need for self justification and retrospective downgrading was correspondingly weaker.

This ought to provide encouragement to policymakers wanting to change aspects of Viet Nam's patrilineal, patrilocal model. Campaigns in recent decades to, for instance, increase inheritance by daughters, have faced unfavourable demographic conditions, since never before have so many couples had sons. Campaigns in coming decades face much more favourable conditions: many couples will not have sons and will not be able to adopt sons. These cohorts will presumably be more receptive than their predecessors towards messages about the equal value of daughters and sons.

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Endnotes

1. A better term would be "pattilocal ratio". "Patrilineal" refers to descent, *patrilocal* to co-residence.
2. Part of the difference is probably due to differences in sampling frame, but not all. Most elderly parents live with just one married couple, so calculating ratios for parents, as Truong Si Anh and others do, should not give dramatically different results from calculating ratios for couples, as Belanger does. It is also hard to see why the restrictions on the age of the wife, or the requirement that parents of both spouses be alive, would have a major effect.

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