Chapter 8
Sex Ratio Imbalances in Asia: An Ongoing Conversation Between Anthropologists and Demographers

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8.1 Introduction

This volume seeks to provide a more concrete discussion of the social impact of and responses to demographic change.[1] Research so far has often found it more expedient to rely on global theories linking high sex ratios to various strands of social disruption (Poston et al. 2011; Hudson and den Boer 2004). Yet these doomsday scenarios are rarely reflected in field-based studies. The chapters in this volume indeed provided little to feed headlines on marriage crisis, rape or trafficking beyond the routine expressions of ordinary gender violence that have long been part of patriarchal settings. They describe in minute detail the mechanisms through which tensions in marriage markets convert into growing psychological anxieties and social marginalization in local rural and urban parts of both China and India. They also show us resources deployed by individuals and families to reverse the demographic odds through bold innovations and normative change. When even archetypal patriarchal institutions such as the *Khap Panchayats* of northwestern India prove willing to revise their tenets in the face of marital imbalances, a new avenue of deep institutional transformations seems possible (Larsen and Kaur 2013).

We can easily restate the actual issue addressed in this book as the following: what do numbers do to social organizations? We already know a lot about sex ratio imbalances at birth in the world, and we are aware of the extreme form of gender bias they manifest (UNFPA 2012). We already have a clear sense of what institutions can do to demographic numbers and, more precisely, how patriarchy can skew the sex ratio at birth. We still do not know exactly how numbers will in their turn

[1] This chapter has benefited from very useful comments by an anonymous reviewer, the Series editors, and Sharada Srinivasan.

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impact the functioning of social organizations. Will demography become the driving force behind the forthcoming transformations in the institution of marriage? This volume showed indeed that marriage finds itself at the crossroads and that two alternatives seem to emerge.

On the one hand, the mounting tensions on the marriage market could lead to a typical *involutive* process of reinforcing and systematically applying long-established rules to avoid the risk of complete collapse of traditional matrimonial arrangements. Following Geertz's (1963) emblematic discussion of involution in Indonesia, both China and India would witness an "overdriving" of existing marriage practices particularly governing endogamous and hypergamous unions. An involutive process corresponds here to a stricter enforcement of matrimonial rules, with only limited adaptation to the changing demographic circumstances of marriage today. The main adjustment may be restricted to an attempt at reviving archaic and long-abandoned practices such as levirate, child betrothal or wife purchase. Such a process leads to the systematic normative exclusion of non-standard practices and a social castigation of deviants, in particular unmarried men and women falling into identified discredited categories (such as *chade*, *malang*, *guang gun, sheng nu*) as described in this volume. For the single population, the situation is even more devastating than for parents without sons, as the accelerated process of social sorting through marriage adds to already unfavourable individual characteristics—from physical to socioeconomic attributes—leading to a new unpropitious marital status that will likely close many social options.

On the other hand, institutions are never permanent even if their enduring features are closely interrelated and mutually reinforcing. Traditional marriage institutions might stop serving as an efficient clearinghouse to match unmarried individuals for an increasing share of the families in China and India, and their self-reproducing properties may be called into question. This volume provided insights on the new scripts that people are trying to put forward though innovative strategies (see for example, Zhang and Bélanger in this volume) such as uxorilocal flexibility, dowry renegotiation, new inheritance rules, old age support from daughters, exogamous unions, and normative contestation. Yet these changes will be difficult for various reasons even when the utilitarian merits of inherited marriage institutions are challenged. First, these institutions often remain controlled by conservative bodies such as married elders unaffected by the demographic crisis. Second, they are dominated by higher-status men who are still expected to fully benefit from traditional hypergamy and resulting hegemonic masculinities. Vulnerable low-status men are mostly voiceless and powerless, and readily attract blame for their own failures and lack of adequate investments in education, social mobility and asset accumulation. Third, the institution of marriage is at the centre of the patriarchal setup. In India, marriage remains somewhat insulated from more disruptive market forces, with dowry functioning over recent decades as the single adaptive mechanism. Advocating for changes in such an institution requires entirely fresh legitimation narratives, and it is not clear where new figureheads may come from to rewrite family scripts. From a power perspective, the fact that the costs and benefits of the imbalances will remain unevenly distributed preserves a system

firmly in the hands of the upper (male) strata. In this regard, changes in China linked to "marriage and its discontents" (Kam 2014) appear to be earlier and broader.

8.2 In the Beginning Was Anthropology

The question of social flexibility and rigidity and the pathways to institutional change driven by sex ratio imbalances are part of an ongoing dialogue between anthropologists and demographers around what the former call gender bias and the latter, sex selection.[2] We will show how dialogue has forged strong links and a mutual interdependence exemplified perfectly by chapters in this volume. Initially, demography required an anthropological perspective to make sense of a distorted preference system that led in China, India and several other countries to an unexpected rise in the proportion of male births. For its part, anthropology required hard numbers to confirm the intensity of the gender bias that its field-based investigations had already documented. A slight tension exists between qualitative and quantitative approaches on issues of causation and manifestation as each discipline may try to project its field- or data-based master narrative. The dialectic of this epistemological divide has provided over the years a rich source of interdisciplinary exchange and has infused the domain of sex selection with all the necessary materials to make sense of gender bias and skewed ratios. We will try to tell this story briefly and show how it has brought us to the contents of this volume.

At a broader disciplinary scale, the convergence of qualitative and quantitative research methods around demographic issues roughly dates back to the 1980s (Kertzer 2006) as illustrated by the pioneering work of John C. Caldwell on migration or fertility in Africa and Asia. This convergence corresponded to the perceived need for a better grasp of the context of demographic choices such as family-building or reproductive strategies. However, the data gathered by demographers were inappropriate to capture the contours of social institutions, and available theories—mostly informed by insights obtained from microeconomics—somewhat ineffectual when trying to explain their logic. In contrast, anthropologists probably felt less attracted due to these technicalities and restricted topics of demography. Demographers who lack micro- and macro-theoretical tools are at times content with a crude conceptualization of the plasticity of social arrangements. What is labelled as "culture" often corresponds to the residual factors that their statistical models fail to account for. Yet the limited capacity of the dominant economic reasoning to explain variations in demographic behaviour—from high to ultra-low fertility—within similar socioeconomic contexts forced demographers to adopt "thicker" social sciences and a more anthropological approach. This new perspective

[2] For simplicity's sake, we bring together several other disciplinary strands such as statistics or economics, and gender studies, sociology or history under the respective umbrellas of "demography" and "anthropology".

was rapidly extended to other fields relating to population such as mobility, mating choices or health behaviours, with gender and patriarchy gradually added to the scope of demographers.

On sex selection, the groundwork was done by anthropologists, who for long had access to rural communities—especially in India where village studies flourished since the 1950s. The reconstitution of families and lineages clearly established the dominance of patrilineal institutions and the prevalence of patrilocality (Karve 1968). Fifty years ago, matrilocal practices had almost disappeared from Kerala and the few surviving matrilineal societies were confined to Lakshadweep and Meghalaya in India, Yunnan in China or the Central Plateaus in Vietnam.

In the 1980s, anthropologists started to look more closely at how patriarchy was being implemented. They discovered that gender inequality could result in tangible consequences for society, leading to a need for more quantitative evidence. The first demonstration of the powerful combination of field observations, demographic measurements and ethnographic monographs appears in work on female neglect and kinship in India by Barbara Miller (1981). Her study offered a detailed mapping of marriage practices and related them to various forms of gender inequity. In the process, she proposed an innovative disaggregation of India in terms of regional gender institutions that would later prove essential for deciphering the geography of discrimination in South Asia. The next strand of research examined more directly the demographic and economic implications (Dyson and Moore 1983; Agarwal 1994), and in-depth fieldwork strived to capture the local contours of patriarchal practices and mindsets within specific contexts (Jeffery and Jeffery 1997; Kapadia 1995). At the same time, new data on excess mortality among young girls in Punjab and Bangladesh suggested that such mortality resulted directly from biased local gender norms (D'Souza and Chen 1980). This issue was later popularized in 1990 by Amartya Sen, who captured the multifarious evil of Asian patriarchies in a stunning demographic summary ("More than 100 million women are missing") focusing on excess female mortality.

Some qualitative surveys started describing how new reproductive technologies were applied in a patriarchal context. First reports surfaced from India depicting the formidable demand for prenatal diagnosis and selective abortions during the late 1970s (Ramanamma and Bambawale 1980; Jeffery and Jeffery 1983). They stressed in particular the inclination by Indian middle-class women to resort to prenatal diagnosis as a way to redesign their family strategies by terminating unwanted female pregnancies. Anthropologists clearly demonstrated that the new reproductive technology responded to an underlying unmet demand for gendered fertility control before traces of sex imbalances showed up on the statistical radar screen (Khanna 1997).

A later important development also came from anthropology—a discipline whose scope is often limited by its emphasis on cultural specificity and on the primacy of contexts—when Croll (2000) attempted a cross-national analysis of gender discrimination in Asia. A later synthesis by Miller (2001) provided the first international comparison of sex-selective abortions from Pakistan to Taiwan in relation to

"patriarchal demographics." This analysis was complemented by a comparative anthropological overview of son preference in three different contexts (Das Gupta et al. 2003). Independently, Kaser (2008, 2012) and his team in Graz assembled a similar combination of historical and ethnographic evidence to delineate the contours of patriarchy in Eastern Europe at a time when the presence of prenatal sex selection in this part of the world was completely ignored.

Yet, despite their correct intuition about the surge in sex selection, anthropologists were poorly equipped to capture the magnitude of the phenomenon they had described. Anthropologists rarely venture into a systematic demographic inventory of the communities where they work—a rather tedious and time-consuming task—and lack the probabilistic tools to determine whether their research locality meets the gold standard of representativeness. They run the risk of missing the overall demographic forest for their local trees as micro-level statistical data provide but a tenuous picture of the broader contexts. This is even truer with birth masculinity, since the computation of the sex ratio at birth requires large samples, rendering micro-level measurement in field sites often pointless.

8.3 The Demographer's Turn

Prenatal sex selection had initially attracted only descriptive or speculative research among demographers (Chahnazarian 1988; Bennett 1983). The sex ratio at birth seemed largely biologically determined and therefore remained mostly an object of statistical curiosity. Demographers were not really listening to what anthropologists were saying about emerging sex selection. They waited for census evidence to emerge in China and India in the early 1990s. After census figures confirmed the presence of a suspect surplus of male births, demographers spent years debating the possible factors of sex ratio imbalance (enumeration issues, biological features, hepatitis, post-natal discrimination). In Eastern Europe, for instance, no one noticed the simultaneous rise in birth masculinity observed after 1991 for almost 15 years. Facing the obvious traces of deliberate prenatal gender discrimination, many demographers remained reluctant to accept the statistical prominence of an otherwise well-kept family secret.

Once demographers became convinced of the existence of "social sex selection," they started providing a regular mapping and monitoring of the phenomenon, going far beyond what local field studies had been able to uncover (Banister 2004; Arnold et al. 2002). For instance, demographers produced annual estimates showing variations and trends in prenatal sex selection. They also produced maps outlining the dramatic disparities in the sex ratio across China and India (Guilmoto and Attané 2007). Looking at the hotspots of birth masculinity in northwestern India, there is little doubt that areas of high birth masculinity closely coincide with the most rigid forms of patrilineal and patrilocal kinship already established by anthropologists. In countries such as Indonesia and Vietnam, it has even been possible to confirm the

statistical link between male-biased kinship structures and prenatal discrimination (Guilmoto 2012b, 2015). Economists went further searching for correlates of all kinds. They often did so with little theoretical baggage, except a basic demand framework of gender valuation. High sex ratio at birth, for instance, was related to unexpected variables, such as the price of tea in China (Qian 2006). Such work heralded a new trend in which hurried correlations would provide a substitute for a more grounded theory of gender bias, especially in countries where field research proves less feasible than elegant econometrics. However, all possible economic correlates of high sex ratio appear of little significance compared to the anthropological circumstances of its emergence.

The demographic depiction of imbalances in China and India was reinforced by the censuses of 2000 and generated a more alarmist literature, feeding in particular on the millions of "forced bachelors" predicted for China and India. Even in childhood, these males were predicted to exhibit potential unruly and antisocial behaviour as adults. The growing surplus of men was notably construed as a growing international security issue, with potentially major repercussions on migration, sex work, hyper-nationalism or violence in Asia (Hvistendahl 2012; Poston et al. 2011; Hudson and den Boer 2004). The first sign of a "moral panic" around local surpluses of men and overly masculine countries date from this period. Newspapers carried many reports along these lines, in which the excess of males was perceived as a dangerous population bomb undermining the social harmony traditionally ensured by universal heterosexual marriage.

Several studies also traced links between male surpluses and unsavoury social outcomes such as sex work, sex crimes, trafficking, AIDS or violent behaviour (South et al. 2014; Kaur 2013; Edlund et al. 2013; Bien et al. 2013; Trent and South 2012; Tucker et al. 2005). Because these studies were based on statistical evidence derived from various proxies of sex imbalances and social outcomes, they must be considered with some caution for different reasons. First, it was often too early to expect anything concrete to happen in affected societies. Most of the surplus men were still younger than 30 and the marriage squeeze was far from observable.[3] Second, doing fieldwork was more complicated than assembling data, especially in countries such as China. Third, feared consequences such as sexual violence, trafficking or AIDS are facilitated by institutions and criminal practices prevalent in Chinese and Indian societies long before the emergence of high sex ratios. In fact, they proceed from the same local patriarchal institutions that recently nurtured prenatal sex selection, and it is difficult to distinguish causal factors from consequences. Northwestern India, the hotbed of sex ratio imbalances at birth, is a textbook case with a long history of gender, family and community violence (Drèze and Khera 2000).

[3] Heyer's study in this volume is unique since it focuses on a Tamil community that was affected by high sex ratios for several decades thanks to the presence of selective infanticide and sex selection.

8.4 Predicting a Marriage Squeeze

After confirming the presence of prenatal sex selection, demographers started to indulge in their favourite activity: drawing population forecasts and predicting future social change. It was relatively easy to convert skewed levels of birth masculinity into predicted sex imbalances among adults after a few decades. The sex ratios among birth cohorts are bound to remain more or less the same until adulthood, and only sex differentials in migration or mortality could affect them later in life.

It proved more complicated to assess the potential impact of sex ratio imbalance on demographic mechanisms such as union, household formation, ageing or migration. One idea emerged: a male surplus was bound to disrupt the workings of the marriage system in the future, as basic arithmetic suggested that a sizable proportion of men would remain unmarried. The marriage issue came to dominate the debate over the consequences of a sex ratio imbalance at birth, with far less attention accorded to other demographic processes related to household composition, mortality, sexual behaviour and migratory behaviour.

Statisticians tried later on to figure out more precisely what current imbalances at birth would actually imply for marriage behaviour in subsequent decades. This attempt turned out to be a more demanding enterprise than demographic forecasting. Describing a marriage squeeze involves a complex set of hypotheses about future marriage dynamics. As the female marriage age has increased in both China and India, the current exceptional pace of social and economic transformations suggests that the institution of marriage will continue to change. Indeed, the most advanced countries in Asia have unexpected stories to tell about the delay in women's marriage. The rise of singlehood among women in Japan, South Korea, Myanmar, Thailand or Singapore has forced sociologists to recognize a gradual "flight from marriage" in these countries. This makes drafting future scenarios of marriage patterns complex.

An additional issue in forecasting the marriage schedule is that the age at marriage itself may be influenced by basic supply and demand demographic constraints. The standard safety valve in a marriage system is the age at marriage, and the surplus sex may simply have to defer marriage. More precisely, the spousal age gap can absorb some of the shock linked to demographic imbalances. This is, of course, what is already happening in parts of China and India, as several studies in this volume demonstrate. Realistic simulations of the forthcoming squeeze should therefore anticipate not only the potential rise in the age at marriage for men and women, but also an increase in the age difference between spouses as a response to the imbalances. Based on these parameters, forecasting marriage imbalances involves simulating the behaviour of birth cohorts over the years. For each five-year period, birth cohorts are "married" according to the expected marriage probability by age and sex. The simulations are conducted for the male and female single populations, and when men are in surplus during a period, a proportion among them are unable to marry and will try to marry again during the next period. Surplus men may therefore accumulate over the years, and some ultimately will not be able to marry

by age 50—the usual age limit for marriage. Since women are in deficit, they will be married according to this model exactly according to the marriage schedule.[4]

Simulations allow for the computation of two new indicators. One is the proportion of never-married men at age 50 in the future. The second is the intensity of the squeeze itself. It is expressed as the ratio of single men and women "trying to marry" during each period. "Trying to marry" means the probability of marriage according to the marriage schedules used in the computation. The squeeze is therefore the sex ratio of expected marriages during a given period.

We thought it important to give a concrete illustration of what the marriage squeeze looks like. In the next section, we present results from a set of estimates prepared for China and India. We will briefly sum up its basic parameters, which illustrate how demographers can simulate the functioning of a marriage system. We will also see the conclusions that may be derived from such results as well as their obvious limitations.

The model used is based on standard population forecasts of the populations of China and India until 2060 (see Guilmoto 2012a for technical details; other studies of the marriage squeeze in China include Huang 2014; Jiang et al. 2014).[5] The only adjustment pertained to trends in the sex ratio at birth. For both countries, we posited a regular decline in birth masculinity from a high point in 2005 (SRBs of 120 and 113 in China and India) to a normal level of 105 by 2025. This rapid decrease may sound overly optimistic, but it corresponds to the downward trend already observed in China and India. This scenario aims in fact to describe the least severe development possible—rather than unchanging scenarios of high sex ratio leading inevitably to more catastrophic outcomes.

We are also forecasting the rise in the age at marriage as well as a rise in spousal age gap. The age at marriage is assumed to increase gradually by 3 years in China and by 4 years in India for men and women. In addition, the spousal age difference is expected to grow from 2 to 4 years in China and from 5 to 7 years in India. This rise represents the first response to the mounting demographic imbalance. In theory, the age gap could broaden much more, but there is no reason to believe that women would accept a larger increase.

8.5 The Demographics of a Squeeze

The first results from this set of simulations refer to adult sex ratios until 2060 (Fig. 8.1). These sex ratios have been weighted by marriage rates to factor in the age and sex distributions and the corresponding probabilities of marriage. Unsurprisingly,

[4] A more refined model (based on the "harmonic mean" model) assumes that both sexes adjust to the imbalance. Yet assuming a gradual *decline* of the female age at marriage as a response to the oversupply of single men is not a sociologically sound assumption in Asia where female age at marriage has been increasing over decades.

[5] We tried to update the model with recent United Nations 2015 population forecasts, but failed due to the implausibility of parameters describing gender bias.

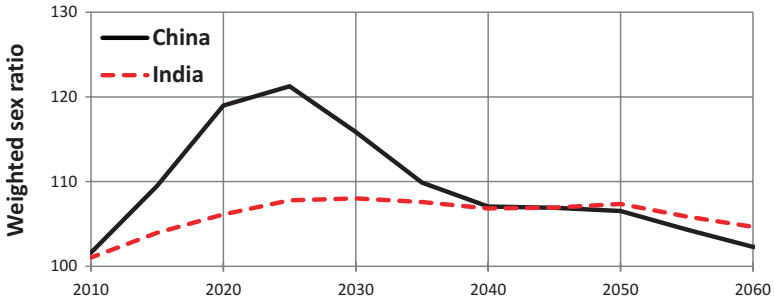

Fig. 8.1 Weighted adult sex ratio in China and India, 2010–2060 (Source: see text for detail)

such marriage-corrected adult sex ratios tend to resemble the original sex ratio of the same birth cohorts 20–30 years earlier. They reach 120 for China in 2025, but the rise is moderate in India where the ratio attains only 108 in 2025. In the absence of migration, the surplus of male births in a population translates into a similar surplus of men of marriageable age after 30 years.

Interestingly, China's adult sex ratio declines gradually after 2025, when the sex ratio at birth of the cohorts starts decreasing, and it finally falls below 105 after 2050. But India's adult sex ratio stays above 105 longer and overcomes that of China by 2050. This somewhat unanticipated demographic outcome is the consequence of India's long-term reduction of the size of its birth cohorts. Since women in India marry older men, they are born in more recent cohorts, which are also much smaller cohorts. Given that the age gap is deemed to increase to 7 years, the sex ratio imbalances will remain significant in India, even after the sex ratio at birth returns to normal.

Still, this approach does not capture the severity of the squeeze, as it fails to account for the growing number of unmarried men crowding the marriage market. In fact, younger birth cohorts with a male surplus will be added to the pool of bachelors attempting to marry over an extended period.[6] After the imbalance is computed from the more realistic number of single men trying to marry, the squeeze grows much faster than sex ratios. As indicated earlier, the indicator used here is the sex ratio of single men and women expected to marry according to predicted marriage patterns.

The order of magnitude of the squeeze is quite larger than that of the original birth imbalance, as shown in Fig. 8.2. According to sex ratios, the surplus would plateau at 20% in China, whereas the imbalance between potential grooms and brides reaches 17% in 2020 and 59% in 2040 in China. The male surplus levels off thereafter at a level close to 45% and drops only after 2060. The squeeze in India is also much more pronounced than sex ratio measurements would have us believe.

[6] The easiest analogy is the queue for a given show at a movie theatre. Beyond the new batch of prospective viewers, the line is likely to swell if people who could not get seats for the previous shows are still waiting.

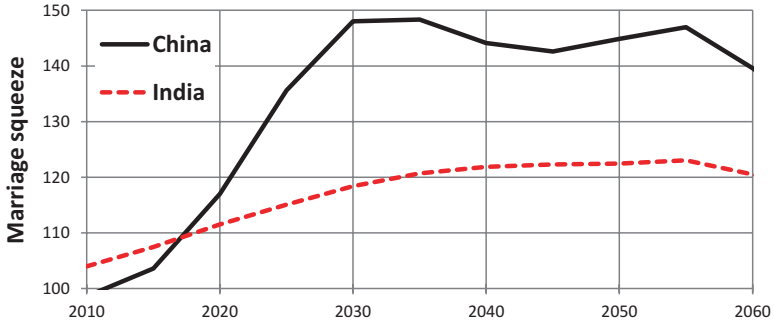

Fig. 8.2 Marriage squeeze in China and India, 2010–2060 (Source: see text for detail)

It reaches 11% in 2010 and 18% in 2020, plateauing at 22% from 2040 onward. Compared to the adult sex ratio, the predicted marriage squeeze turns out to be a process (1) occurring later, (2) at least twice as strong in its intensity and (3) lasting longer. If we consider the gravity of a phenomenon to be the conjunction of intensity and duration, the measurement of the marriage squeeze offers the picture of a far more serious disruption of the marriage system than the current sex imbalances at birth by 10–15% would suggest.

We may also illustrate the extent of the squeeze in absolute numbers, by computing the number of men "failing to get married," or those unable to marry according to the postulated marriage schedule. By applying the marriage squeeze ratio to the number of expected marriages, we compute on average 2.7 million fewer marriages in China and 2.3 million fewer marriages in India per year in 2040–2060. Results are almost similar for China and India as the squeeze is stronger in China but the number of expected marriages higher in India because of its population size and younger age structures. Since this reduction in marriages may simply correspond to delayed marriages, it is difficult to figure out what these numbers mean. A more meaningful measurement could involve the predicted percentage of men who may never marry at all.

The research shows a delay in marriage and a marriage squeeze in the proportion of men never married at age 50. In China, this indicator will rise only after 2030—that is, for cohorts born after 1980 when the sex ratio at birth started rising (see Fig. 8.3). The increase from a previous level of 3% is rapid, passing 5% in 2036 and 10% in 2048. It stabilizes at 12% thereafter. In India, where marriage has long been almost universal among both men and women, the rise is also visible only for those born after 1980. It is slower, reaching 5% after 2050. Compared with other indicators such as birth masculinity and the marriage squeeze, the increase in male singlehood appears moderate. This is due to the alleviating effect of late male age at marriage postulated in our model.[7]

[7] Without such a rise in spousal age gap, the proportion of never marrying among Chinese men would reach 15% in 2060 and 10% in India (Guilmoto 2012a).

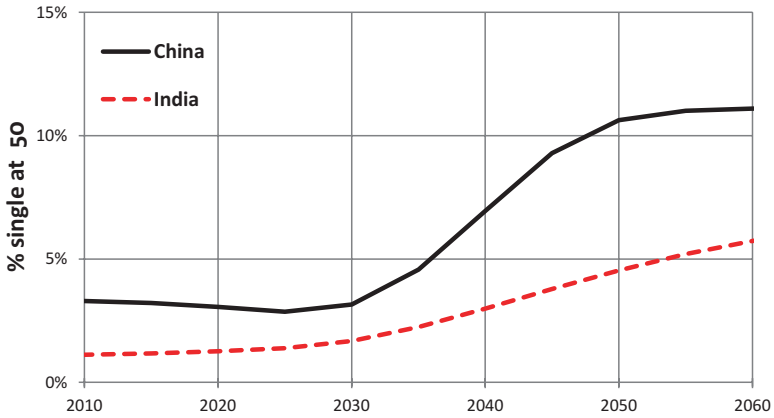

Fig. 8.3 Proportion of men single at age 50 in China and India, 2010–2060 (Source: see text for detail)

8.6 What Do Simulations Tell Us That We Did Not Know?

Let us try to summarize the three main lessons of these findings. The first one is the cumulative role of time. Sex ratio imbalances at birth are often assumed to have instant consequences on society, but results show it takes at least 25 years for significant imbalances at birth to be noticeable. During this first period, the flexibility in marriage patterns takes care of some of the imbalances. The rise in the adult sex ratio comes first, but the cumulative impact on the marriage market will peak only later—that is, after 2030 or 2040. Moreover, the squeeze will remain pronounced for decades even after the sex ratio at birth is assumed to return to normalcy. What we are witnessing today is therefore only the tip of the iceberg. The second lesson relates to the aggravating effect of long-term imbalances. The cumulative impact of high birth masculinity is more severe than foreseen, and male surplus in the marriage market proves two or three times larger than the original excess of male births. In China, the excess of males appears to get closer to 50% by 2030 in our relatively optimistic scenario. The third lesson is that delayed age at marriage is a simple but effective way to ease the crisis (see the various scenarios in Guilmoto 2012a for a fuller demonstration). It is already happening, and the proportion of single men at 30 is rapidly increasing. Historically, this mechanism worked for centuries in Europe, but it was somewhat constrained in Asia by less flexible marriage patterns that insisted on early marriage. This explains in part why the rise in the proportion of never-married men at age 50 increases only slowly and at a level lower than what the original sex ratio at birth would suggest.

These three lessons have important implications for social scientists. We know that today's observations correspond only to the first signs of a situation bound to

deteriorate more severely in the next 20 years, independent of what happens to birth masculinity today. After all, the future participants in the marriage markets of the 2030s are already born, and the sex imbalances may be easily estimated. The future intensification of sex imbalances will exacerbate the situation for affected vulnerable populations, with ultimately higher rates of bachelorhood. The marriage market in new regions and higher-status groups will be affected in turn by demographic imbalances. The role of age at marriage should not be downplayed. In fact, the institution of marriage possesses built-in mechanisms that are likely to reduce the intensity of the crisis by allowing men to delay marriage. However, nothing is guaranteed, and the notion of risk pervades the process of marriage (see Eklund in this volume).

8.7 Conclusion: From Demography Back to Anthropology

Asia has long harboured rumours about the impact of numerical imbalances on marriage practices. For instance, an excess of young women is supposed to have fuelled the spread of the dowry system in India. Even if the formal proof of this hypothesis remains complex, the diffusion of dowry and its subsequent hyperinflation may be seen as a response to an anticipated marriage squeeze affecting young women in independent India (Bhat and Halli 1999). Similarly, an excess of women in post-war Vietnam resulted from the preponderance of men among war victims (Goodkind 1997). The surplus of women at marriageable age skewed the marriage market for some years. After looking at the estimate of the marriage squeeze, can we say numbers have come again to haunt the marriage markets in China and India?

With their forecasts and simulations, demographers have turned the tables on anthropologists and forced them to reconsider the changing circumstances of marriage practices. The demographic perspective outpaced those of other social scientists by imagining the future of marriage systems, offering figures for the impact of skewed birth masculinity on marriage rates and on involuntary singlehood. With such figures, it is easy to advance a few hypotheses on marriage in these countries, predicting as we did a rise in late marriage and singlehood among men. It may be tempting to go further and imagine patrilineal families becoming extinct because of male singlehood and absence of progeny, a rise in bride price in China or a collapse of the dowry system in India, the emergence of non-standard family arrangements, the gradual collapse of traditional patriarchy and a more global crisis in the sex market based on raw numbers (Hakim 2015; Jeffery 2014; Kaur 2013; Eklund 2013; Jiang and Sánchez-Barricarte 2012).

To most social scientists, pure exogeneity may be a source of theoretical frustration. Marriage practices appear to be firmly rooted in social arrangements and their historical (read “endogenous”) dynamics. On the contrary, sex ratio imbalances among adults appear as purely exogenous phenomena evolving from demographic trends and their unintended consequences. In most cases, minor demographic disturbances are automatically absorbed by the flexibility of the marriage system itself.

Yet the scenario for the first half of the twenty-first century is different because of the magnitude of the female deficit predicted over the next decades, and there seems to be little alternative but an inevitable delay in male marriage and an ultimate rise in the proportion of men remaining unmarried. While higher male singlehood rates are common in Western marriage systems, the emergence of millions of "involuntary" bachelors will spell a revolution for the patriarchal marriage tradition in both China and India, where traditionally less than a few percent of men remained unmarried. Demography plays the role of an unexpected, exogenous shock, one bound to influence the marriage market for decades and to trigger radical transformations in the institution of marriage.

Moreover, no obvious link connects the initial factors of son preference and sex selection to their future consequences—namely, rapid changes in the institution of marriage. Individual men who find no bride today are not those who manipulated the gender of their offspring years earlier. Most of them were in fact not even born in a family that had resorted to sex selection in the past. A similar sociological mismatch exists between the higher-status groups that inaugurated prenatal gender discrimination and the lower-status groups finding themselves at the receiving end after 30 years. The latter are social categories that displayed little interest in sex selection in the past, but whose daughters may withdraw from their communities' marriage pool through hypergamous processes. As in many cases of tragedies of the commons, the ultimate result of earlier opportunistic decisions may come as an unforeseen development to actors who thought they could beat the biological odds.

Ignorant of the complexity of marriage patterns, demographers may still be in a position to advance original prognostics on the changing ecology of choice (Illouz 2012). In doing so, they force anthropologists to confront the possibility of an institution as central as marriage overdetermined by mere supply and demand constraints. Yet we may wonder whether numbers tell the whole story, and whether the marriage market is as simple as demographers think. It is time to examine candidly some of the loopholes in the demographic scenarios of marriage change in China and India as they point to the need to bring back anthropology into the picture.

Demographic forecasts are commonly based on large administrative units and pay no attention to local heterogeneity or social entities. The projections presented earlier refer to the two largest countries in the world, and they ignore regional, social or ethnic configurations. However, there could be demographic variations across provinces within China and India. This explains why the chapters in this book focused on the states of northwestern India or a tiny sub-region of Tamil Nadu. They would have nothing to say about West Bengal or Karnataka. Regional forecasting of the future marriage squeeze has proved too complicated so far for China and India. Such forecasting would require in particular assessing the contribution of local migration parameters to imbalances among adults, and China's case clearly shows that the departure of female labour worsens the marriage prospects of sedentary male workers. Even more difficult would be the modelling of the migratory responses to sex ratio imbalances. Many women have long "married with their feet," using transregional marriage as a tool for social mobility (Srinivasan 2017; Liu et al. 2014; Davin 2007; Kaur 2004). It is not clear whether unmarried men should remain

indefinitely trapped in "bachelor villages," as a move to the city may open up new opportunities. Significant migrations of unmarried men could therefore happen as a response to local shortages of potential brides, but this would be a challenge to marriage modelling.

The same comments apply to social units since field investigations have already told us about the rise in nuptiality differentials across social groups. Even the family situation may be a cause for marriage vulnerability, as shown in the chapter by Li et al. in this volume. The consequences of the squeeze are likely to be extremely uneven across social categories, putting most particularly lower-status males at special risk. A recent demographic study of India has attempted to disaggregate the impact of the squeeze on social categories (Kashyap et al. 2015). Unsurprisingly, many uneducated men and well-educated women are unable to find a spouse according to these simulations. This corresponds to what is illustrated by this volume's chapters on rural India by Mishra and Chaudury and on urban China by Eklund. Among the poorest, male singlehood could in fact reach levels two or three times higher than average, unless specific social mechanisms—such as strict endogamous rules—prevent the bride drain toward better-off groups.

This brings us to the specific role of hypergamy, which is a distinct determinant of marriage squeeze. Hypergamy, expressed through inter-regional, interethnic or inter-caste marriage, is a long-standing strategy for social mobility for women and status uplift for their families in patrilineal China and India. It also leads to depletion of available brides to low-status men and of available grooms for high-status women (Edlund 1999). For a long time, this structural imbalance was resolved by the large gap in socioeconomic standing between men and women. As long as women were in a majority among the least educated and in a minority among the better educated, educational hypergamy was, for instance, perfectly possible from a pure supply and demand standpoint. This gender gap has now reduced, most particularly in China with high female participation rates and a rapidly declining gap in educational attainment. The arithmetic of hypergamous practices and a narrower gender gap in social achievements leads automatically to a potential rise of so-called "leftover women" unable to marry because of their high social status and reluctance to "marry down." Even if their number is in no way comparable to the millions of poor unmarried men, the case of China's leftover women has already gained a lot of attention, thanks to the social visibility of this group and their privileged position in the power hierarchy of urban China (Hong Fincher 2014). It also delineates the contours of a potential flight from marriage among educated women similar to the experience of richer East Asian countries. As indicated earlier, any rise in female singlehood would represent another blow to the patriarchal structure of marriage exchanges by further shrinking the pool of marriageable women.

Another question relates to the formation of marriage markets themselves. The demographic approach is based on the pre-existence of a closed population constituting the pool of potential brides and grooms, but this is a gross simplification. In the past, marriage exchanges were firstly constrained by marriage rules governing family interactions in which local rank and status considerations prevailed over individual characteristics. In India, exchanges are typically segmented along caste

lines, but formal criteria for mate selection based on ethnicity, regional identity or religious orientation have also been common in China. The marriage market is in fact an ongoing process of unification of local marriage networks in which individual characteristics—typically, age, size, income, education and assets—are expected to gain ascendency over collective attributes of patrilineage and community. The transformation is still incomplete, especially in India, and there is hardly a unified, competitive marriage market at the national or even regional level. This is a domain where only sociologists and anthropologists can dispel the demographers' simplification. They need to describe in particular how the marriage squeeze may force communities to expand gradually their endogamous boundaries—that is, to open up marriage markets in order to lessen the crisis.

The law of numbers loses much of its steam when applied mechanically to large population aggregates since it fails to capture the complexity and inner dynamics of marriage markets. Changes in individual and collective norms governing the age at marriage, the age gap between spouses, elasticity in endogamy and hypergamy, and the obligation to marry, are expected to accelerate. So far, the emphasis has been on extreme practices such as kidnapping, trafficking and polyandry through levirate, but these have always been fringe or criminal adjustment mechanisms to "market failure" and they are unlikely to become part of a new normative system governing union in China and India. We should rather expect endogenous innovations to emerge as a response to the forthcoming squeeze. A list of potential changes is long and includes a gradual dismantling of a heteronormative system built on forced marriage, individual hypergamy and collective endogamy, patrilineality and patrilocality, and heterosexual unions.

While the marriage squeeze may be portrayed as an exogenous shock—the type of events expected to cause instant and abrupt institutional transformations—its impact on individuals and communities has been in fact extremely gradual and will continue to be felt over the decades to come. Changes in the institution of marriage will therefore be similarly incremental rather than sudden, and the case of Gounder women examined in this volume by Heyer suggests how both norms and practices can adjust. With marriage markets locally reshaped by social innovations, marriage rules are changing fast, and this may disrupt some of the assumptions of demographers describing the squeeze. The old arsenal of kinship solutions has rapidly exhausted its resources, and we will need continuous anthropological research to chart the future evolution of marriage practices and norms.

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