

India's missing daughters: Caught between individual rationality and public good*

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Introduction

Highly skewed sex ratios in India, especially for young children between 0-6 years of age are now well known in academic as well as other circles. Amartya Sen (1990) had raised the alarm a while ago. Hatti et al. (2004) have analysed the risk faced by the girl child in India. Overall, at 865 girls in 0-6 age group per 1,000 boys, Delhi in fact, has the dubious distinction of ranking 3rd among the States with low sex ratio. Punjab tops this list, followed by Haryana. National Sample Survey data (1999-2000) shows that the child sex ratio among the poorest 5 percent of the households in rural areas is 946, while among the richest 5 percent it is 804. The corresponding figures for urban areas are 903 and 819 respectively. Clearly, there is a stronger bias against girl-children among the rich and the urban Indians. For example, Delhi with a child sex ratio of 865 in 2001, and below 900 for each of its nine districts, the lowest (845) is in South West Delhi which is one of the most prosperous districts. Since urban health indicators are known to be better than rural health indicators across sexes, this fall in CSR in the more affluent areas cannot be taken to mean a higher mortality in the rich. Sudha and Rajan (1999) found an increasing masculinisation in sex ratio using reverse survival methods to estimate sex ratio at birth for several parts of India (see Table 1). Delhi had an accelerated fall in child sex ratio which has declined from 915 in 1991 to 865 in 2001 (see Table 2).

Table 1. here

Table 2. here

The distortion in the sex ratio was brought out starkly also by an analysis of the data from the second National Family Health survey (NFHS) conducted in 1998-99, undertaken by Arnold *et al.* (2002). They showed that at all India level, the male to female sex ratio of the last births was 697 girls for every 1000 boys, among currently married women who did not want any more children, which was much lower than the sex ratio of 935 girls for every 1000 boys for all the other births. However, there were significant inter-state sex ratio variations for last births and in the states of Haryana, Punjab and Gujarat the, which ranged between 570 girls for every 1000 boys to 460 girls for every 1000 boys. Under reporting of girls in the censuses, migration effect and natural propensity among Indians to produce more boys were laid to rest Visaria's (1971) sound work on sex ratio. Infant mortality differences by sex and consistently low sex ratios at birth by birth order of babies are clearly contributing towards the skewing of sex ratios to the extent of 0.5 million missing female births every year in India calculated by Jha *et al* (2006) based on a large scale sample of 1.1 million households' Special survey of fertility and mortality in 1998-99. Tables 3 and 4 show sex differences by infant and child mortality and by birth order respectively.

Table 3. here

Table 4. here

The Delhi and Chandigarh Study

The question this paper raises is how does one understand the logic that individual rational action leads to public good. It explores if and how does the individual/couple rationality at the micro-level of the household reconcile with that at the macro, i.e., regional/national levels. It tries to explore the considerations, constraints, reasons and rationalisations behind the rising risk to a girl's life, rather than that of the female foetus in India.

It is important to mention that not every female foetus is considered undesirable and subsequently aborted in India. The paper acknowledges that with modernisation and development, Indians are using ultrasound technology to find the sex of the foetus and aborting female foetuses. Technology has given couples a handle to streamline the composition of their children. The desire for more sons and at the most one daughter is well known for India in the KAP surveys conducted through the 1970s and 1980s. One daughter is not considered as causing a crisis in the family, but a second is seen to be so. If we take for a probability calculation, a sanitised example of 100 pregnant women, the probability is for 53 to have sons and 47 to have daughters. For those who have had sons, it makes little difference what the sex of the second baby is as they have fulfilled the basic requirement. But for the 47 women who have had daughters, life is not easy unless they produce a son. Lived predicaments arise for them in the application of the concept of ideal composition of one's children in this specific context. The declining sex ratio at birth by parity is affected by the mothers of daughters who are not likely to want another daughter, while the 57 who had sons are likely to produce not more than 24 daughters assuming that they do not care what the sex of their second baby is or at least its sex does not pose a serious predicament for them. The 47 women with a first born daughter are likely to get ultrasound tests and also abort if the foetus happens to be a female. Most middle class Indian couples today consider two children as an ideal number for them. The depleting sex ratio is a consequence more of this calculus derived from the general desire for a certain kind of composition of one's children, which is the social optimum, i.e. to have only two children- one son and one daughter.

The paper draws on ethnographic data collected from women who are housewives, gynaecologists, ayurvedic doctors, and through focus group discussions (FGDs) in Delhi with mothers and college teachers from many Indian universities in 2003, 2004 and 2005. Punjab was the first to start the commercial use of this test as early as in 1979. The advertisement in the newspaper regarding the New Bhandari Ante-Natal SD Clinics in Amritsar wooed customers to come for sex determination test. It put forward a very simple calculation in terms of cost and benefit in the short run and the long run. The advertisement was culturally imbued soliciting customers to spend Rs 500/- and save Rs 50,000/- twenty years later (implying the latter amount was the cost for a daughter's wedding). Like most educated and professional Indians, the doctors at this clinic were proud to contribute towards efforts at population reduction through abortions following the sex determination test (see Jeffery et al. 1984).

College teachers in Chandigarh saw rural and small town women at clinics in Chandigarh. Private medical care is more commonly accessed in Punjab than is government medical care. Anuradha described what she often sees at clinics in Chandigarh. There is something odd about the scene to suspect that clinics engage in sex determination tests, an illegal practice in India since 1994 when the PNDT, i.e. Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act was passed. Anuradha pointed to one of the women who would confidently went in the doctor's cabin jumping the queue, but she did not look like a staff of the clinic. She had been conversing casually with some of the women waiting outside. She seemed like the mediator for sex determination tests to Anuradha. This kind of site is not uncommon at clinics.

A college teacher from a women's college in Delhi meaningfully asked me, "Do you know that usually miscarriages are of female foetuses? Women don't seem to miscarry boys, it is only girls." Miscarriage and induced abortion in India entitles a woman working in the formal sector to three to six weeks of leave (this facility is part of the population control attempt of the Indian state). Those in the informal, especially the unorganised sector are not able avail much or any paid leave benefit from miscarriages. None of my informants in 2003-2005 claimed to have indulged in the sex determination and female foeticide act themselves or knew someone personally for having done so. Nevertheless, ultrasonography is so popular that a family of doctors near Delhi said, "It is like going to a pharmacy or a beauty parlour. It is treated as very casual. You don't think twice to visit a clinic for the purpose. Everyone in the family expects you to get the test done. When they learn of the pregnancy they inquire if the test has been done." "It is like going for a blood test for malaria."¹ The doctors interviewed went only as far as stating that they get suspicious, from the body language of the pregnant woman, and feel that something was wrong somewhere when approached for an ultrasound test or just for abortion.

In one case in Delhi, the woman related, on promise of anonymity and refused to divulge the doctor's name or her clinic's address/location, the following story. She is an educated employed woman in a public undertaking in Delhi. She has most of her relative living in Delhi. Most of the family's child deliveries have been conducted by their family doctor, a gynecologist and obstetrician. "The doctor knows the family well and also understands what people need (in terms of sons and daughters)". She had confided that their family doctor, and would never let out the family members secrets to one another or to any outsider. This case came to my notice by chance and not for the explicit purpose of the study. "I had gone for routine check up during my second pregnancy and wanted to know the sex of the baby as I already had a daughter. She knew very well what I wanted to know. She had conducted my first child delivery earlier. though she knows us for long I had to pay something extra for knowing the baby's sex. She hinted to me in a way that I got the hint to abort. I went in for abortion at her clinic and rested for a few weeks as I could get leave from my office for miscarriage." Such cases are chance cases and not easy to find. Doctors have their own norms about not divulging their patients' details to others, and if these happen to be related to matters that are not overboard, all the more reason to be secretive about them. A relative undervaluing of girls in the family has been observed historically in some caste groups through the practice of female infanticide.

Discrimination and the Ultrasound

Gender discrimination, especially in terms of access to the right to live, has been analysed through persistent excess female child mortality (Kishore 1993). Earlier studies on discrimination of young girls were done by Basu (1989), Chen, Huq and D'souza (1981), Dasgupta (1987) and Miller (1981). With NRTs (new reproductive technologies, especially amniocentesis and ultrasonography) that made inroads into the Indian medical scene since the late 1970s and early 1980s, the elimination of the girl child has been advanced from that after the birth to before the birth. There is mounting evidence from across the country that with increasing affluence, female infanticide is being transformed into female foeticide! (Swaminathan *et al.* 1998).

Evidence for this is available both through child sex ratio and sex ratio at birth figures. As mentioned above, female foeticide was first advertised in Amritsar in 1979 soliciting customers through the temptation of saving rupees fifty thousand later by spending five hundred now. The spread of ultrasonography and depletion of sex ratio was spotted first in North India. There has been no looking back in this regard since then notwithstanding the protests from women's groups and the eventual promulgation of PNDT Act 1994. The tussle between private interest and the public objection against it goes on in this regard. The girl child is at most risk in this matter, caught between the household's economic calculus and the persistently adverse sex-ratio statistic.

The sex ratio measured by the ratio of female population to male population in India and vice-versa in rest of the world, is the most common and oldest measure of gender inequality. There are various other measures of inequality in the literature on gender and development issues. Other gender sensitive indicators proposed in the UNDP Human Development Report 1995 are concerned with gender equity: the gender development index (GDI) and the gender empowerment index (GEM). In India, the desirable is the baby boy and the unwanted is the baby girl, especially after the first one. The result is obvious. The Census results of 2001 have revealed that with sex ratio of 927 girls for 1000 men, India had deficit of 60 lakh girls in age-group of 0-6 years, when it entered the new millennium. Sex ratio as a space signifies much more than mere numbers and remains the focus of this paper. It makes intelligible various considerations that go into not only the making of adverse child sex ratios that have become a glaring feature of the Indian society, but also has thrown itself open to a variety of overlapping and complex arguments and considerations around the practice of female foeticide.

The threat of not being allowed to take birth often as a replacement of being killed or allowed to fade away if born, is increasingly becoming common with inroads made by NRTs (new reproductive technologies; in this paper NRTs mean amniocentesis and ultrasound tests/sonography). This paper explores the savvy couple's reasoning in their exercise of reproductive choice and in making informed and careful reproductive decisions, a call made louder since the ICPD in Cairo, 1994. The freedom of the individual in democracy is at issue. Having a sense of being in control of their lives, couples act in accordance with what they think is in their best interest. The notion of risk is linked with the model of a rational investigating individual. How do people trade off their liabilities against their costs? What are the feelings of what is acceptable and/or tolerable? What are the reward expectations for taking risks or, more aptly for the case at hand, for averting risks?

Risk and Uncertainty

For Giddens(1991), risk is essentially a feature of modern society. It is a society ‘taking leave of the past, of traditional ways of doing things, and modernity is seen as opening itself up to a problematic future’. Giddens talks about the universalizing of risk and putting of science claims at risk most forcefully in the most intimate arenas of life. The calculation of risk opens up the possibility of insurance, and a ‘colonization’ of the future towards which society is now oriented. Risk taking is pathological and risk aversion is rational in modernity. The work of Giddens, and Beck (1992) is a grand theory, a meta narrative of late modernity, it is universalistic. My work on female foeticide is about reproductive couples in households who are positioned within the broadly modern processes of the globalising Indian society but deals with the micro processes of managing risk, of raising and marrying off daughters. Their risk averting strategies are tied with forging marital alliances with other families and with the macro processes of society that seem to operate at the level of the family. Unlike Giddens’ and Beck’s assumptions that risk is precisely not managed in a society in late modernity, my study tries to show how it is attempted at the micro-level of the family-household, through modulating reproduction.

The work of Mary Douglas (1992) situates risks in their social and moral environment. The risks each society singles out for particular attention are indicative of its values and must be understood in the context of the wider social structure. Perhaps the most useful aspect of Douglas’ work is, however, the fundamental point that people do not treat risk as a matter of calculable probabilities. Rather risk is a social matter. Human’s experience of their environment is mediated by conceptual categories formed in their social intercourse. The perception of risk is held by issues and ideas of equity and fairness. Distribution of risks is related to power and status and in turn to the issue of justice. Risks are normally not taken in isolation, but after consultation with friends and relatives. Moral obligations, values, and relationships are taken into account in decisions about risk taking. In a recent volume, *Risk Revisited* (Caplan 2002), contributors draw attention to the cultural and the social settings in which risks are evaluated and negotiated. This kind of work is different in orientation from the universalising theories of a global ‘risk society’. However, here individual and collective choice in decision making has to be introduced to take leave of methodological individualism. This paper takes on the task of recontextualising risk in the cultural understandings and micro-level interactions between individuals situated in family-households in communities. Here some of the health-related research on risk is also pertinent. Luker (1975), for example, describes the process of contraceptive risk taking, where earlier approaches had attributed unintended pregnancy to lack of information or psychological resistance. Luker shows how an understanding of the local meanings of contraception, sex and motherhood, people’s relationships, and the influences most prominent at that particular time for that individual are important considerations which reveal the decision to take risks with contraception. Such a decision is to be rational on its own terms (see also Bujra 2000 on HIV prevention).

Is raising children a rational choice?

Briefly moving away from Douglas and company mentioned above, we take a look at the micro-economic view of rational action. For several decades now, economists have brought the grubby material view of human nature on the institution of the family, especially to work out how people choose to allocate their scarce resources to achieve their ends whether material or spiritual. Economists (Winch, R.F. 1964) have attempted to solve the puzzle of having children. Winch (1964) noted that a child is a net financial liability but that people continue to have children and to accord children, especially child bearing a high status. He finds this a puzzle because much of his analysis revolves around the material resources produced in and introduced into the family. If the cost of something rises people will be less likely to do it. To some extent, in this logic, the economist is evading the question by saying that what exactly are considered as benefits is a matter of tastes. He is only concerned with the 'reaction of a consumer with given tastes' to changes in prices and incomes. Economic theory accepts the underlying tastes and preferences for children as given—as it does for all other goods which are the subject of choice, and analyses the effects of changes in costs and benefits.

Talking of family's rationality appears as an oxymoron. The household is a benefit producing unit, an insurance against sickness and unemployment. Ideally, the family as an institution is the site of emotion, love, affection, attachment but even violence. As feminist studies have revealed, the family is a site of micro politics and conflicts and not purely an emotional aggregate of equal members (See Patel 2005 for elaboration). Many seemingly irrational decisions are taken in the family. For example until the end of the twentieth century, beginning from the II world war onwards, those in the population establishment in the developed world who advocated for smaller families criticized parents having high fertility in the developing world as irrational. Surprisingly, the advocates themselves may seem less than rational given that the estimated cost incurred by a middle class urban family in raising a child to the age of 18 years was nearly a quarter of a million US dollars. The cost of raising a child to the age of 18 in urban middle class family in India today is at least 25 lakh rupees. After parental time and energy is spent in raising children, children are increasingly leaving the parents when they are grown up. Is this parental success, an economic decision, a rational choice? Children clearly are an economic liability. In Malthusian terms, economic ideas are applied to the family. Becker (1981) was awarded the Nobel prize in economics in large part because of his extension of the traditional economic thinking based on rational economic theory into the emotional and irrational area of the family, fertility relative with consumption.

The research inspired by Becker's 'new home economics' approach, treats the family as a homogenous block with all its members having identical interests and choices, therefore identical decisions. When applied to Becker's famous example of parental choice between 'a baby or a car', it is the couple who is assumed as an individual unit making a common and rational decision. But if we were to bring forward the earlier estimate of a very high cost of raising a child, it seems that the parents' decision is not rational even if one assumes that they have decided on the case as a single husband-wife couple-unit. Here we also need to bear in mind unlike Becker that a couple spending time and energy to raise a child to fly out of the nest is considered not only reasonable but also successful. How does parental success get defined and who defines it? Of course the larger society

consists of many more couples and families that consider success as reward in raising children to leave their parents after a certain age. They share the meaning of being successful parents among themselves even if doing so is economically speaking, irrational. The typical difficulty in this case is the reconciliation of the contrast between economic rationality and social norms and their shared meanings.

Is Public good also individual profit?

If each couple acts to maximize profit by making the choice between fertility and consumption, i.e., between a baby and a car, how is it that couples would still choose to have babies thereby following social norms? Doesn't having a baby limit individual choice and the ability to maximize profit? One must hasten to add the relevance of diminishing marginal utility that the new home economics approach of Becker (1981) relies on. In order to get to the depth of the choice making exercise we need to extend the logic to the social sphere. Rational choice implies some ordering of alternatives in terms of relative desirability. What is it at the societal level that inspires and motivates the individual couple to do something which may not be profit maximizing? Conversely, we may ask, how is public good seen as individual profit? Let us take the example of marriage in dealing with this case. Incest taboo is intrinsically tied with marriage. It is apparently seen as a proscription in simple terms as it clearly means denial of sexual ties between the kin of opposite sex, such as a mother-son, father-daughter, brother-sister, and often also extends to a set of cousins, and often parents' siblings, etc. Is this denial of sexual access to women who are close at hand a rational choice? Though it is a denial, is it simply to be seen as denial of sexual access alone? Or is it to be seen as a denial at all? Levi-Strauss (1969) in *The Elementary Structures of Kinship*, sees this denial as a means of organizing one's marriage and sexual relations. By restraining oneself from sexual intercourse with one's female kin and sacrificing them by giving others sexual access to them, one gains other women for sexual intercourse. Thus, one's sexual life is organized through avoiding sex with mother, sister and daughter. Exchanging these women for other women is a sort of kinship rationality, where kinship encompasses political, economic, and jural domains. It is in this sense a cultural rationality. Through acquiring brothers-in-law, men enlarge the scope of their political and economic influence in society, and also their symbolic capital. A range of sanctions is imposed for violations of the incest taboo. How is social organisation constituted in the interdependence between actors in the everyday life, contracts, rights, authority and norms? Personal benefit, through the incest taboo logic, is defined in terms of providing for others' benefit in matters of marriage towards social, economic and political organisation of the society. In a similar vein parental success is defined through spending time, energy and money in raising children to leave later. This logic does not find accommodation in instrumental rationality.

Going back to our first example of the highly expensive venture of raising a child and the second one of incest taboo, the contrast between economic rationality and cultural rationality arises. Does economic rationality exist in its own right in matters of childbirth and raising children. Social organisation is constituted in the interdependence between actors, contracts, rights, authority and norms. This interdependence between actors and norms is played out in the reproduction of structure. Informed by cultural and everyday practice, predispositions direct actors to reproduce the structure and enhance

simultaneously their symbolic, cultural, social and economic capital. Large scale structural forces may appear external but they get their energy from people who are continually generating and regenerating the social system from within their own experiential realms. The major experiential mediator between the individual and the society is the family-household—the primary context through which both are reproduced. The household has its partial autonomy, while it is a manifestation of general principles, be they religious, political or economic. All are sequiturs of the same principle. It is easier to study the individual than social groups and institutions, especially when studying problems regarding aggregates of individuals and normative behaviour. But we are dealing with individuals belonging to households, families, castes, communities etc. So the effort is to see structures being deployed by individuals in their routine activities of living which in turn recreates social structures.

As members of individual households in a community, parents are clearly not selfish inasmuch as they choose to have a baby, an exorbitantly expensive venture. Parents make choices that are at once economic as well as social in preferring to have a baby. It is into the social meaning of having children that their economic calculus is woven, unlike theoretical economic rational calculus. How does this logic work when the sex composition of a couple's children is introduced is the crucial question? Parents do not see offspring as a blanket category but see sons and daughters as belonging to separate categories. It is the size, sex composition and birth order of offspring that together appears as a family size category that is already sub-divided in the parents' mind (Patel 1994).

The Principle of Gender: Uncertainty and Logic of Risk Aversion

Danger is certain but risk is uncertain. It is in this light that risk has been traced to gambling before it was writ large onto modernity. How has the idea of risk got associated with a daughter? The promulgation of the PNDT Act 1994 has led to two outcomes: under-grounding of the actors and their actions, and increased cost of each operation. Poorer slum dwellers and wage workers in Delhi often go through an ordeal to collect the requisite amount of fees for the sex determination test rather than let go. The widespread trend in the country engulfing the poor and what is called the 'northernisation of southern India' in adverse sex ratio for females, I see also as attributable to half a century of the family planning programme in India (see Patel 2005b for more). The anti-natalist population policy's small family norm fed through the economic rationality argument for fifty years seems to have impacted couples to arrest their fertility. It is indeed a successful social engineering exercise. Kishore (1993) quotes what in population studies is the commonly prevalent family size norm, i.e., people stating two sons and a daughter and/or one son and one daughter as the ideal family size. Both Chinese and Indian couples have become what is called, economically savvy (rational), with regard to raising children. But the parents' economic rationality is certainly not gender neutral. Neither do they see any link between micro-household decisions and macro-national level sex ratio figures (see Patel 2005b for details). The macro-level implication of curtailing fertility is an economically rational outcome both for the parents and the nation. There should be no mismatch between the familial and the social calculus or that is at least what has been the central message of the family planning programme for half a century. The growth rate of

the population has fallen below two per cent during 1991-2001 after being over that figure for a few decades. The unintended consequences of reproductive choices made at the micro-level however are not happy when disaggregated by sex of the children at the macro-level. Is it possible to claim couples' behaviour as economically irrational? The logic used for eliminating female foetuses frequently evokes economic rationality of exorbitant dowries parents of daughters are obliged to arrange at their weddings. Such a reasoning makes it essential to combine the economic with the sociocultural logic into a single frame as marriage and dowry are not merely economic costs for parents. They enable parents to establish affinal ties and gain social and symbolic capital through them. They have very deep and emotive meanings with social assessments and bonds. Nevertheless, matters of marriage are also monetary matters.

Patel (2003) highlighted the enormously higher social and cultural costs of raising a daughter in comparison with a son, notwithstanding increasingly higher educational expenses on daughters in middle and upper class families. Expensive weddings and prohibitively large dowries make daughters an avoidable choice—perfect economic rationality. And further, increasing expenditures on marriage and dowry are socially approved outlets for flaunting and enjoying them, no matter even if dowry is illegal in India. Marriage exists to regulate sexuality. Control of daughters' sexuality prior to marriage rests with the parents and is rather demanding on the family. The reciprocal act of woman exchange, a definitive cultural bond holding societies together is critically linked with virginity. A daughter's/sister's virginity, among other things is closely guarded to make her a desirable bride and keep the honour of the household and the men she is related with untarnished. Affinal bonds through children's marriages do provide desirable social links, but being bride givers rarely accords the same status as that of the honourable bride-receivers. Besides, there is always the risk of not being able to get the best suitor for one's daughter(s). For women and their parents, marriage is a time of particular risk. Brides traditionally move to their husband's home, and so are conceptualised as vulnerable. The parents are oppressed by the burden of ensuring their daughter's safety and happiness in the choice of a responsible, trustworthy, reliable and protective husband and a caring family into which she moves upon marriage. The attempt is at the same time to marry off a daughter up the social scale. Hypergamy has been historically known to be associated with high dowries and female infanticides (Vishwanath 2000). Hypogamy is proscribed even among the lower castesⁱⁱ. The question then arises, is a daughter as expensive as a son or more expensive or is she more risky to raise? The physical safety of a daughter is only one dimension among a number of others.

Is it just dowry that makes girls more expensive to marry off or is raising them and finding a desirable husband more risky? Clearly the fear and uncertainty about a daughter's future is felt to be far higher both while raising a daughter, which in India usually means not only food, nutrition, medication, caring and educating but also marrying her off and investing material and social resources into her conjugal family to ensure her marital stability and her acceptance into her conjugal family for several years after her marriage. In fact, intermittent obligatory gifts and visits by bride givers to bride receiver families strengthens and keeps the ties warm between the families. These long drawn gift giving customary practices enhance the social standing of all those concerned in the kin circle and the community. In this sense, having a brother who will fulfil the

obligatory gift giving for his sister and her children after the parents' death is highly desirable. 'Raising a daughter' is said only in the manner of speaking. It communicates a whole complex of emotional, economic and socio-political considerations and calculations when one says: 'it is not easy to raise a daughter' or 'it is not easy to marry off a daughter'. Parents harbour fears and uncertainty associated with raising children, especially daughters and finding grooms for them. This is becoming more risky with increasing migration and gradual erosion of the geographical proximity of kin and relatives who exerted moral pressure on one another in family and marriage matters by their sheer presence in the vicinity and frequent interaction amongst them.

NRTs and the Social Organisation of Prestige Economy

The introduction of NRTs has not transformed people's circumstances or the Indian social organisation. The prestige economy, includes among other things, good education, potential to earn a very high income, and acquire all gizmos in the world modern technology produces. The aspiration of an ideal family is to emulate the model of 'consumer is the king'. A great more is now spent on travel for education, employment, marriage, and affinal purposes, expensive newer consumer items that hit the market with rapid speed and in turn make the earlier ones seem old or obsolete. A competition to possess the latest consumer goods engulfs people commonly. Marriageable children, sons with high earnings in particular, command desirability as prospective grooms. The marriage and family structures in India remain intact, as cultural goals. Weddings, if anything have been becoming prohibitively expensive as signifiers of high status. Wedding rituals and feasts are conspicuously displayed and exhibited, and set off a competition to outdo the other. Each wedding is talked about and compared with some other one for some time after it is over for many of the extravaganzas, arrangements, invitees, and expenses. Eligible girls have to come with pots of money and grand wedding festivity and party to get into a family with money, influence and power. Also, the series of rituals and number of parties around wedding rituals has increased. I am told that Bollywood films like *Ham Aapke Hain Kaun* are models for weddings not only among Indians, but also among the Indian diaspora in Western countriesⁱⁱⁱ. Even among the most poverty stricken, the bride givers are expected and known to acknowledge their own obligations and fulfil them.

The social ideal of one son and one daughter to a family is acceptable to socially concerned social analysts, but if the second foetus happens to be a male to parents who already have a son, it only signifies that lady luck is smiling over the family. It feels like winning a lottery in the prestige economy. But if the second foetus happens to be a female after the first daughter, abortion is a wise step. It is fear and uncertainty in having more than one daughter that micro-level economic rationality sees no adverse unintended consequences at the macro-level. The fall out is only making life more fearsome and murkier for the girls and not raising the value of girls as would any other scarce good in the world of economics. Thus the question about risk here is turning more into that of meaning, of honour rather than of choice based on economic calculus. Each couple clearly benefits in striving towards the family's goal of prestige maximization, i.e. enhancing economic, social, cultural and symbolic capital by avoiding the odds of having

more than one daughter and securing potentially greater benefits by having a son if not two.

Couples Locked in the Prisoner's Dilemma: Looking Beyond

In averting births of female babies in the face of fear and uncertainty in raising and marrying off a daughter, the parents (who see themselves as bride givers) are locked into the prisoners' dilemma with other parents. The prisoner's dilemma is a Russian story of two persons accused of the same crime. Both were denying having committed that crime. The judge decided to offer an incentive for telling the truth and none for telling a lie. If one of the two confessed to have committed the crime his imprisonment would be for five years and the truthful person would be freed. If neither confessed, the imprisonment would be for seven years in each case. And if both confessed, each of them would be imprisoned for ten years. Both had no communication with each other. The judge's pay off set off a complex scenario in their minds. Assuming that X was guilty, and if he confessed, he would get the highest imprisonment, but a heavier one by maintaining the lie of innocence. The dilemma for the truthful Y is greater if X continued to lie (behave irrationally), Y's punishment would be for seven years. Y's imprisonment could be reduced if he lied (behave irrationally) but only if X continued to lie. For if X confessed while Y decided to confess too both would get the highest imprisonment, i.e., each would get a ten year term. The success of the silent movement of foeticide may be attributed more to the Xs and Ys continuing to contemplate about their confessions in the hope that each gets a better deal this way. The rules of the game, the trade offs and pay offs are clear to couples who play the game, whatever may the judges think. Are their strategies morally right or wrong is a another matter.

Each rational choice of a couple influences some other couple's rational choice decisions whereby they mutually benefit only by being truthful, hypothetically speaking in the prisoner's dilemma game, of which neither is certain. By being truthful in not averting female births they are both better off at a macro level, though unequally, and in their minds after sliding lower down the social and economic capital ladder at the micro-level. In case both stick to their stand both are bigger losers. One's action influences another. Such an interdependent state of affairs shifts the issue from individual couple's calculated risk taking to a social and moral question. Micro foundations of the inter-related family-household dynamics are constituted in the social calculus at the back of people's minds as social actors. People learn from past experiences. Their past is constantly present in their contemporary considerations about their future. The environment of the actors is knowable irrespective of the decisions they take. Further the environmental variables hold some values for the actors. Decisions are taken in the light of the parameters of the environment, and the rewards depend on one's choice in relation with others' rewards and choices. What kind of trade offs and pay offs are the couples expected to experience? When the choice of averting a birth or vice-versa is not only a matter of five, seven or ten years of investment but feared to be one for life with a potential to tilt the delicate balancing towards prosperity and honour, the complexity increases far more than that in a prisoner's dilemma; and excessive individual calculation leads to moral and social crises. While dealing with the prisoner's dilemma in the above example the two prisoners were brought up for analysis as sovereign individuals in their own right. But why does this logic not hold well when it comes to having female children in the present day Indian

society? Are all risks treated as equal to each other? What risks are acceptable and what are bad risks? The prisoners' inability to sort out the dilemma for mutual benefit is at variance with what parents in India are presumably resorting to for prestige maximisation through sex selective abortions. People do not wish to be prisoners of life and death situations as life comes to them. They seek to take charge of their lives through the use of NRTs. They have multiple compelling concerns and precious stakes to protect. They feel, think and act within the culturally significant values of raising and marrying of a daughter in the spirit of gifting a virgin to a suitable recipient. How does the utilitarian logic, by which a social order is produced automatically out of the self-interested actions of rational individuals bring the most good to most people? There is little answer from utilitarianism about what to do in a situation when breaking a rule is personally gainful for a person and others cannot punish this. It is a serious ethical theoretical problem. The wedding rupture in a woman's life is a signifier of another uncertainty period, owing largely to the principle of gender in her life. But one must hasten to return to the hypothetical example of 100 young mothers who are not trying to have no daughter at all. It is the larger considerations of having a better spread of risk-aversion and reward probabilities in relation with others in the community and society that takes priority. It is thus not that parents have a total disregard for establishing affinal links through their daughters and having a brother-in-law for their son. They strive to have a son and as a next priority have a brother-in-law for him through their daughter's marriage. It is not the woman's individual choice in all the above considerations. She is part and parcel of the household and the family. Family advancement is her responsibility as much as that of the other members. Also, she considers it her moral and social obligation to enhance the honour of the family. Political, moral, legal and economic decisions have essentially interrelated elements in terms of motives and purposes.

The utility theory deals with individuals' ranked preferences but not with objective rights and wrongs. The subject matter of economics is out of the political arena. The issue of acceptable risk lies with valuation itself. Gender and family values coexist with economic, moral and political circumstances from which sources of decisions are derived. The dialogue about risk and justice tends to be conducted in two languages: language based on freedom of individual choice and on regulation. Each individual may have a private risk budget. The household risk budget is a semi-individual risk budget. In interaction with others, couples reckon upon a common risk pool and assessment of social probabilities of risk aversion. In very familiar areas there is a tendency to minimize the probability of bad outcomes. Rational behaviour implies some ordering of alternatives in terms of relative desirability. It makes a lot of difference to a decision if the alternatives involve choosing between certainty and uncertainty. Douglas (1986) compares risk and uncertainty and states that risk is governed by known probabilities, but if not enough is known about probabilities, it is uncertainty that people are dealing with. While risk takers prefer a small probability of a large gain, the risk-averse prefer a certain small loss (insurance premium) to avert a small chance of a large loss. Clearly there is less certainty in the gamble, that is, more than one daughter's birth than the certainty in a son's. Couples may not be certain of outcomes of raising daughters but they try to assess some rough and ready probabilities of taking or averting the risk of having to raise one or more than one daughters.

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Table 1. Trends in FMR and 0-6 year sex ratios in some selected states of India

Zone	State	1971	1981	1991	2001	1971	1981	1991	2001
		FMR	FMR	FMR	FMR	0-6 yr	0-6 yr	0-6 yr	0-6 yr
North	Punjab			882	874	892	908	875	793
	Rajasthan	911	919	910	922	931	954	916	909
	Uttar Pradesh	876	862	876	898	899	935	928	916
South	Andhra Pradesh	977	975	972	978	986	992	974	964
	Karnataka	957	963	960	964	968	975	960	950
	Tamil Nadu	978	977	974	986	964	967	974	939
	Kerala	1016	1032	1036	1058	972	970	958	962
West	Gujarat	934	942	934	919	956	947	928	878
	Madhya Pradesh	920	921	912	920	944	978	952	931
East	Bihar	957	948	907	921	958	981	959	938
	Orissa	988	981	971	972	984	995	967	950
	West Bengal	891	911	917	934	1007	981	967	963
	India	931	935	927	933	954	962	945	927

Source: Census of India 2001, Banerji and Jain 2001.

Table 2. Declining child sex ratio in Delhi (0-6 years)

S. No.	Districts	1991	2001	Change in points
1	North west	913	854	-59
2	South west	904	845	-59
3	West	913	858	-55
4	North	920	870	-50
5	East	918	868	-50
6	North east	917	867	-50
7	New Delhi	919	882	-37
8	Central	937	902	-35
9	South	912	886	-26
	Entire state	915	865	-50

Source: Office of the Registrar General and Census Commissioner of India, 2003.

Table 3. Infant Mortality Rates and Death Rates in 0-4 Age Groups by Gender

Year	Infant Mortality Rate		0-4 years Death rate	
	Male	Female	Male	Female
1905	231	218	-	-
1936	170	153	-	-
1955	99	91	-	-
1964	76	72	-	-
1972	132	148	-	-
1984	104	104	39.6	43.1
1993	73	75	22.7	24.8
1999	71	73	22.2	25.6

Source: Premi 2001, Agnihotri 2000.

Table 4. Sex ratio (females per 1000 male) at different birth orders in Punjab and Haryana

Sex ratio	Haryana	Punjab
First order	890	698
Second order	787	830
Third order	743	664
Fourth order and above	577	96
Overall	787	458

Bose and Shiva 2003

ⁱ Reported by Bose 2003, workshop on Missing Girls in India: Political Economy of Emotions. Department of Sociology, Delhi University.

ⁱⁱ Dr Gabriele Alex (2003) reports the case of a low caste Mutturaja man marrying a yet lower caste Vagri woman in Thanjavur in 1998. He was not allowed to settle in his father's house and had to move to the Vagri street as an excommunicate would. Many reported to Alex that if a man marries a woman from a caste lower than his, he would be excommunicated. (unpublished Ph.D. thesis submitted at the University of Brunel, U.K)

ⁱⁱⁱ Several academic colleagues in Delhi and Punjab have mentioned this to in personal communication and so have some of the parents whose children are settled in Europe and N. America.