WHERE HAVE ALL THE YOUNG GIRLS GONE? PRECONCEPTION GENDER SELECTION IN INDIA AND THE UNITED STATES

I. INTRODUCTION

In Punjab,¹ one of India's most prosperous agrarian states, the 2001 census reported 793 female children per 1,000 male children.² This statistic has decreased from a 1991 statistic that reported 882 female per 1,000 male children.³ The phenomenon is not localized solely in Punjab, but is representative of a disturbing trend occurring throughout all of India.⁴ The cause of

- 1. Punjab is located in northwestern India. See Map of India, at http://www.mapso findia.com/maps/india/h3i00.htm (last visited Oct. 31, 2002). The Northern and Northwestern parts of India, including Punjab, as well as the states of Haryana, Rajasthan, and Western UP, are the areas most unfavorable to female children. See S. Sudha & S. Irudaya Rajan, Intensifying Masculinity of Sex Ratio in India: New Evidence 1981-1991, Centre for Development Studies, Prasanth Nagar, Ulloor, Thiruvananthapuram (1998), at http://www.hsph.harvard.edu/grhf/SAsia/forums/foeticide/articles/sexratio.html (last visited Oct. 31, 2002). These regions are characterized by higher fertility, higher mortality, more masculine sex ratios, and lower status of women than other regions of India. See id. The North traditionally had a wheat-based agrarian economy, and social systems marked by dowry, hypergamous marriage and the seclusion of women. See id. Nevertheless, female infanticide has been recently observed more frequently in rural South India, a region where this practice was historically unknown. See id. Increasing landlessness and poverty, accompanied by an escalating custom of dowry, high gender differentials in wages, low education, and few economic opportunities for women are suggested reasons for the rise of female infanticide. See id.
- See 2001 India Census Statistics, at http://www.censusindia.net (last visited Oct. 31, 2002).
- See 1991 India Census Statistics, at http://www.censusindia.net (last visited Oct. 31, 2002).
- 4. See 2001 India Census Statistics, supra note 2. The 2001 census reported the population of India to be 1.027 billion people. See id.

State	Juvenile sex ratio (ages 0-6)				Juvenile sex ratio (ages 0-6)		
	1991	2001	Per cent change 1991-2001	State	1991	2001	Per cent change 1991-2001
South				Northwest			
Andhra Pradesh	1027	1037	0.97	Haryana	1138	1220	6.72
Karnataka	1042		1.05	Punjab	1143	1261	9.36
Kerala	1044	1038	-0.57	West			
Tamil Nadu	1055	1065	0.94	Gujarat	1078	1139	5.36
North-Centre			Maharashtra	1057	1091	3.12	

this decline is the widespread practice of postconceptual gender selection, typically consisting of ultrasound scanning followed by the abortion of fetuses of the undesired sex.⁵ Demand for gender selection is driven partly by the recognized advantage of male children in India's male-dominated culture and partly by the financial burden that a female child will bring in the form of a dowry.⁶ In May 2001, the Supreme Court of India responded to the growing problem by ordering governmental authorities to enforce a 1994 law banning sex determination.⁷

In the United States, the social implications of being a particular gender are much less severe than in the Indian culture.⁸ Therefore, it would seem that the demand for gender selection would be much lower. In particular, very few couples feel strongly enough about the gender of their child to consider abortion of an already conceived fetus, despite it being of the "undesired" sex.⁹ However, new reproductive technologies have emerged which allow the gender of a child to be determined prior to fertilization, thus eliminating the ethical issue of abortion from decision-making.¹⁰

Bihar	1043	1066	1.97	East			
Madhya Pradesh	1050	1076	2.42	Orissa	1034	1053	1.80
Rajasthan	1092	1100	0.72	West Bengal	1034	1038	0.39
Uttar Pradesh	1078	1091	1.19	India	1058	1079	1.95

See id.

- 5. See Vicki G. Norton, Unnatural Selection: Non Therapeutic Preimplantion Genetics Screening and Proposed Regulation, 41 UCLA L. REV. 1581, 1600 (1994). In India, a study of 8,000 abortions at clinics throughout the country showed that 7,997 involved female fetuses. Id. Apart from abortion, the skewed sex ratio can also be attributed to female infanticide, abandonment or out-adoption (placing unwanted children up for adoption) of girls, underreporting of female births, and selective neglect of female children. See generally id.
- 6. See R.P. Ravindra, Fighting Female Foeticide A Long Way to Go, 6 THE LAWYERS 4, 5 (1991).
- 7. See Centre for Enquiry into Health and Allied Themes (CEHAT) v. Union of India, 2001 SOL Case No. 340, May 4, 2001 (Supreme Court of India ordering the Central Government and state authorities "to implement with all vigor and zeal" the Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994) [hereinafter CEHAT].
- 8. See generally Norton, supra note 5. In the United States, where women share equality with men, there is less social and cultural pressure to produce male children. See id. at 1601. In the United States, as in other countries with good vital registration, the sex ratio is approximately 104 to 106 boys per 100 girls. See Sudha, supra note 1. Mortality rates at every age are slightly greater for boys than for girls due to a combination of biological and behavioral factors. See id. Thus, with increasing age, the population sex ratio balances out to a slight female dominance overall. See id. Most Western societies, irrespective of level of income or development, exhibit this pattern. See id.
 - 9. See Rosamond Rhodes, Acceptable Sex Selection, 1(1) Am. J. BIOETH. 31, 31 (2001).
- 10. See The Ethics Committee of the American Society of Reproductive Medicine, Sex Selection and Preimplantation Genetic Diagnosis, 72 FERTIL. STERIL. 595 (1999) [hereinafter ASRM 1999]. Many methods of sex selection are now available, allowing both preconceptual and postconceptual selection. See id. The most reliable preconceptual method of sex selection

Some demand does exist for gender selection in the United States.¹¹ Two identified target groups that may utilize the new technology are parents who seek a child of a gender different from that of a previous child or children, and parents who have strong preferences for the gender of a first child.¹² The second group consists of Americans of international descent.¹³ There has been a sizable migration to the United States of immigrant groups who may retain the same gender preferences that they would have held in their homelands.¹⁴ Thus, acknowledging the existence of these two groups, there does appear to be some existing demand for gender selection in the United States.

This Note is a comparative study of the social, ethical, and legal reasons why India has banned all forms of gender selection, and how those reasons apply in the context of a constitutional analysis of gender selection in the United States. India presents a unique example of the problems that can arise given unrestricted usage of gender selection. After decades of permitting gender selection, India has experienced drastic social ramifications in the form of a markedly skewed sex ratio, thus drawing international attention to their practices of selective abortion and female infanticide, the purposeful killing of "unwanted" female newborns.¹⁵ Primarily, the Note focuses on the

is flow cytometric separation of X and Y sperm (MicroSort), followed by artificial insemination or in-vitro fertilization. See Microsort Gender Selection, available at http://www.microsort.net/ (last visited Oct. 31, 2002). MicroSort designed to conceive a girl currently results in an average of 88% X-bearing (female) sperm in the enriched specimen. See id. MicroSort designed to increase the probability of conceiving a boy currently results in an average of 73% Y-bearing (male) sperm in the enriched specimen. See id. As of June 2002, a total of 460 pregnancies have been achieved using MicroSort; 295 babies have been born so far. See id. For a discussion of MicroSort results, see also, E.F. Fugger et al., Births of Normal Daughters after Microsort Sperm Separation and Intrauterine Insemination, In-vitro Fertilization, or Intracytoplasmic Sperm Injection, 13 Hum. REPROD. 2367, 2367-70 (1998); J.H. Batzofin, XY Sperm Separation for Sex Selection, 14 UROLOGICAL CLINICS N. AM. 609, 609-18 (1987). The most reliable postconceptual method remains chorionic villus sampling of the fetus, followed by a sex-selective abortion. See Julian Savulescu, Sex Selection: The Case For, 171 MED. J. Aus. 373, 374 (1999). Preimplantation genetic diagnosis provides an alternative more reliable than flow cytometric separation and which does not require abortion. See id. Rather, it involves in-vitro fertilization, an embryo biopsy to determine gender, and insertion of the embryo into the mother. See id.

- 11. See The Ethics Committee of the American Society of Reproductive Medicine, Preconception Gender Selection for Nonmedical Reasons, 75(5) FERTIL. STERIL. 861, 862 (2001) [hereinafter ASRM 2001].
 - 12. See id.
 - 13. See Norton, supra note 5.
- 14. See Immigration, Fiscal Year 1996, at http://www.ins.usdoj.gov/graphics/aboutins/statistics/299.htm (last visited Oct. 31, 2002). In 1996, the Immigration and Naturalization Service reported 44,859 immigrants to the United States from India. Id.
- 15. See India's Female Freefall, at http://europe.cnn.com/2001/WORLD/asiapcf/south/06/19/india.ultrasound/index.html (last visited Oct. 31, 2002) [hereinafter India's Female Freefall].

potential effect of new technologies that allow gender selection to be performed prior to fertilization.

Part II will begin by discussing gender selection in India. It will examine the cultural aspects of gender selection in India, namely the underlying reason for the strong preference for male offspring. Then, it will discuss the relevant history of sex determination and India's unsuccessful attempts at prohibiting the practice. Part III will consider the history of gender selection in the United States. Part IV will discuss the many policy arguments that can be made both for and against the use of gender selection. It will also weigh each of these policy arguments in the contexts of India and the United States. Finally, Part V will consist of a United States constitutional analysis of preconception gender selection, examining how the United States Supreme Court might rule on a challenge to a state's regulation of preconception gender selection.

Ultimately, this Note will address the issue of whether there exists in the United States a fundamental, constitutional right to preconception gender selection.

II. GENDER SELECTION IN INDIA

A. The Cultural Aspect of Gender Selection in India

For centuries, India has preferred male children.¹⁶ Historically, one of the main reasons for this preference was the system of hypergamy, in which women can only marry into a social group above their own.¹⁷ Among the uppermost castes, this was often impossible.¹⁸ Furthermore, strict adherence to custom saw that the rules of hypergamy were rarely transgressed, and girls who remained unmarried were frowned upon heavily.¹⁹ Thus, to avoid these

^{16.} See M. Kishwar, When Daughters are Unwanted: Sex Determination Tests in India, 86 MANUSHI 15, 15 (1995).

^{17.} See Judith Heyer, The Role of Dowries and Daughter's Marriages in the Accumulation and Distribution of Capital in a South Indian Community, 4(4) J. INT'L DEV. 419, 422-23 (1992). In fact, there existed separate "north Indian" and "south Indian" marriage systems. See id. The key elements of the "north Indian" system were: marriage was hypergam-ous; marriage was virilocal at a distance (brides go to live in villages far from the villages in which they grow up, surrounded by their husbands', not their own, kin; brides married very young (and hence were easily subordinated, controlled, dominated). See id. The "south Indian" system saw an absence of hypergamy, marriage was virilocal but nearby, and brides did not marry very young. See id. This difference explains why sex ratios are much lower in the northern parts of India. See id. However, the "south Indian" marriage system has recently seen an increase of dowries, and demographic statistics now show increasing discrimination in the sex ratio. See id.

^{18.} See Sudha, supra note 1.

^{19.} See id.

foreseeable problems, newborn girls in upper castes were killed,²⁰ and young men married females from sub-castes slightly lower than their own.²¹

In India today, families continue to desire sons primarily for economic reasons.²² As most aging individuals have no social security or retirement pensions, the sons of a family become increasingly responsible for caring for the parents in old age.²³ On the contrary, daughters usually leave the parental family to live with their husbands, and will help care for their parents-in-law.²⁴ Even if a daughter were to stay in the parental home, she seldom has sufficient earning power to support her parents.²⁵

Not only is a daughter unable to provide as well as a son economically, but she potentially represents a considerable economic burden, because her family must typically pay a dowry to her husband's family as a part of marriage custom.²⁶ A dowry is a payment, either in money or goods, to be

- 20. See id. Typically, infanticide was carried out by 'dais' (traditional birth attendants), who were coerced by the senior male kin of the woman giving birth, often over the protests of women in the family. See id. There was no difficulty in committing infanticide, because the birth and death followed quickly upon each other, with no certificate recorded for either event. See id. Nineteenth century records indicate large groups of villages, comprising several hundred upper caste households, where no female child had been allowed to survive for many generations. See id.
- 21. See id. It was also common for female infanticide to be used in a strategic manner, as it could aid upper-caste families in improving and consolidating their household socioeconomic status. See id. Ownership of land was the hallmark of higher status and there was a constant drive toward acquiring more and more land. See id. This was achieved through manipulating the marriage of sons and acquiring dowry from daughters-in-law. See id.
- 22. See D.C. Wertz & J.C. Fletcher, Ethical and Social Issues In Prenatal Sex Selection: A Survey of Geneticists in 37 Nations, 46(2) Soc. Sci. & MED. 255, 256 (1997).
- 23. See id. Both sexes have internalized the chauvinistic social values that pervade India. See M. Sivaraman, Female Infanticide-Who Bears the Cross?, PEOPLE'S DEMOCRACY, Vol. XXV, No. 25, June 24, 2001. At an awareness camp for school children conducted in an infanticide-prone area, the children were asked whom they preferred for a sibling boy or girl. See id. Ninety-nine percent favored boys. See id. Girls, they said, cost more for their parents. See id. A fourteen year old boy even ran away from home when his parents refused to kill the twin girls born to them rather late in their life he did not want to carry the responsibility of marrying the girls off later in life. See id.
- 24. See Gail Weiss, Sex-Selective Abortion: A Relational Approach, 12 HYPATIA 3 (1995). Her children, and their labor, will also belong to her husband's family, not that of her father or mother. See id.
- 25. See Sudha, supra note 1. In 1981-82, the approximate average daily wage of a skilled male agricultural worker in Punjab was Rs.25, that of a female worker ranged from Rs.10-13. See id.
- 26. See D.C. Wertz & J.C. Fletcher, Fatal Knowledge? Prenatal Diagnosis and Sex Selection, Hastings Center Report, May/June 21, 25 (1989). Although the practice of dowry is now illegal in many states, the practice still continues. See id. To prohibit the demanding, giving and taking of dowry, the Dowry Prohibition Act, 1961 was put in force in July 1961. See Dowry Prohibition Act, 1961, INDIA CODE No. 28 of 1961. The Act maintained that in the case of suicide by a married woman, within seven years from the date of her marriage, a court may presume that such suicide has been abetted or encouraged by her husband or his relatives. See id. Also, as a result of the Dowry Prohibition Act, a person who gives or takes, or helps in the giving or taking of dowry can be sentenced to jail for five years and fined Rs.15,000, or the

supplied by the family of the bride as the bride's contribution to the marriage.²⁷ Moreover, a dowry often requires continuing payments to the groom's family after marriage.²⁸ Dowry payment has often been identified as the main reason today for female infanticide.²⁹ Rich or poor, the bride's parents must pay the groom and his family in money, property, or goods.³⁰

An ultrasound followed by the abortion of a female fetus avoids the cost of a dowry.³¹ With the size of the dowry escalating with a family's social standing, the price tag can be substantial, from a minimal one hundred dollars to a new car, jewelry, gold, an apartment, or a combination of all this and more.³² To make matters worse, when a dowry payment falls short, it is not unusual for the groom's family to harass the bride.³³ Each year, dowry payment problems lead to the deaths of more than 13,000 young brides.³⁴

As a result of the above customs and additional factors, there is a particularly strong social pressure on women to produce a son.³⁵ As a result of this pressure, pregnant women often dread the possibility of having a daughter.³⁶ What women have seen of their own experience and of their

amount of the value of dowry, whichever is more. See id. To give or to agree to give, directly or indirectly, any property or valuable security, in connection with a marriage is prohibited. See id. The giving of or agreeing to the giving of any amount either in cash of kind, jewelry, articles, properties, etc. in respect of a marriage is absolutely prohibited by the Act. See id.

- 27. See Wertz, supra note 26, at 25.
- 28. See id.
- 29. See India's Female Freefall, supra note 15.
- See id.
- 31. See Ravindra, supra note 6, at 5. The message of sex selection as a means of avoiding future dowries has traveled all the way to far-flung villages in the form of roadside advertisements that read, "Spend Rs.500 now, save Rs.50,000 later." Id. The cost of a sex determination test is viewed as far outweighing the potential burden of a female child. See id. As of January 2001, the currency exchange rate was 46.540 Indian rupees per U.S. dollar. See CIA World Factbook 2001, India, Economy, at http://www.cia.gov/cia/publications/factbook/geos/in.html (last visited Oct. 31, 2002).
 - 32. See Wertz, supra note 26, at 25.
 - 33. See India's Female Freefall, supra note 15.
 - 34. See id.
 - 35. See Kishwar, supra note 16, at 18.
- 36. See id. at 19. It is not uncommon to hear horror stories arising as a result of the pressure to bear a son. See Sivaraman, supra note 23. All too common are stories such as the following:

Pandiamma, [sic] in her twenties, was devastated when her husband's family did not come to see her for ten days after her first baby girl was born. Pregnant a second time she lived in terror of conceiving a girl again. Her fears came true and her husband who visited her in the hospital remained sullen and silent. At her mother's home for a month and with no signs of her husband wanting her back, she was caught with the dead baby . . . Asked why she did it, she had said, bewildered: 'I do not know.'

Id. Also common are instances in which women are battered and abused by their husbands for failure to produce a male heir. See id. A common theme in most of these instances is women being taunted and abused for not producing an heir to the family. See id. Often, the only way women feel they can satisfy family and social norms is to destroy the 'non-heir' female children

mothers' lives gives them an aversion to producing another potential sufferer.³⁷ Many women are not able to envision their daughters having a better life than they themselves have experienced.³⁸ In addition, a woman often knows that her own status will be downgraded, and she will be subject to abuse if an unwanted daughter is born to her or she fails to produce a son.³⁹

Social customs, such as dowries and hypergamy, are not only the product of a male-oriented society, but also serve to reinforce the cultural preference for male children.⁴⁰ Modern reproductive technologies have simply added a new means by which to reinforce the already existing discrimination against females.⁴¹ As such, India's officials realize that the problem they face is not merely with the technologies themselves, but with the underlying cultural biases that fuel their demand.⁴²

B. History of Sex Determination and Regulation

As a result of the cultural preference for male children, India has a long history of sex selection.⁴³ As mentioned above, until recently this preference manifested itself in the horrible guise of infanticide.⁴⁴ Over time, medical technologies have emerged which allow gender determination during

and attempt to produce a new male child. See id.

Id.

^{37.} See id. Women are often subject to seclusion, disinheritance from property, low literacy rates, poor health, and low employment rates. See id.

^{38.} See Sivaraman, supra note 23.

^{39.} See id. In Indian culture, men and women are expected to subordinate their individual interests to that of the family. See id. Women often see their own interests as indistinguishable from the family's interests, and thus become involved in favoring male children at the cost of daughters. See id.

^{40.} See Dr. Sabu George, The Need for Action Against Female Feticide in India, at http://www.aidindia.org/aipsn/health/feticide.html (last visited Oct. 31, 2002).

^{41.} See id.

^{42.} See CEHAT v. Union of India (2001). The Supreme Court of India commented, It is unfortunate that for one reason or the other, the practice of female infanticide still prevails despite the fact that the gentle touch of a daughter and her voice has [a] soothing effect on the parents. One of the reasons may be the marriage problems faced by the parents coupled with the dowry demand by the so-called educated and/or rich persons who are well placed in the society. The traditional system of female infanticide...continues in a different form by taking advantage of advance[d] medical techniques.

^{43.} See S. Khanna, Prenatal Sex Determination: A New Family Building Strategy, MANUSHI, No. 86, 23, 27 (1995). Historically, methods of sex selection have ranged from special modes and timing of coitus to the practice of infanticide. See id. Certain "indicators," which were really nothing more than old wives' tales, were often thought to reveal gender (preference for spicy food indicated a female fetus; mother sleeping on her right side indicated male fetus; etc.). See ASRM 1999, supra note 10, at 595. Only recently have medical technologies allowed individuals to know the gender of their fetus prior to birth. See id.

^{44.} See India's Female Freefall, supra note 15.

gestation.⁴⁵ This allows for the immediate abortion of unwanted fetuses, rather than requiring a mother to wait until birth to learn the sex of the newborn.⁴⁶ This approach of sex-selective abortion is also considered morally preferable to infanticide.⁴⁷ Unfortunately, this has meant that families, previously unwilling to kill a newborn, now may choose the "more ethical" approach of sex-selective abortion.⁴⁸

The first private sex determination clinic was established in Amritsar⁴⁹ in 1979.⁵⁰ Soon thereafter, clinics emerged throughout the country.⁵¹ Even small rural towns were made aware of the emerging technology of ultrasound testing.⁵² Elaborate referral networks sprang up, connecting small villages to their nearest urban ultrasound clinics, with each link receiving a commission from the clinics.⁵³

Then, in 1982, an error in sex determination diagnosis at the New Bhandari Hospital of Amritsar resulted in the abortion of a much-wanted son of an influential family.⁵⁴ The ensuing controversy erupted into a major national issue.⁵⁵ In response, the Central Government, while ruling out a legal ban, promised "appropriate action" against the hospital.⁵⁶ In actuality, no real

^{45.} See ASRM 1999, supra note 10, at 595. The cheapest, most reliable techniques are ultrasound and amniocentesis. See Kishwar, supra note 16, at 15-16.

^{46.} See id.

^{47.} See Sudha, supra note 1. Sex-selective abortion of females is apparently preferable to female infanticide or abandonment of baby girls. See id. Pre-natal sex selection techniques appear to be a substitute for post-natal methods, as shown by increasing masculinity of sex ratios at birth, coupled with more equitable sex ratios of infant and child mortality. See id. It appears that the majority of sex selection is now occurring prior to birth. See id. Dr Divya Kulkarni, a gynecologist in Belgaum, argues that sex-selective abortion is "more humane than the practice of female infanticide." Sudha Ramachandran, New Technologies, Old Prejudices Blamed For India's Vanishing Girls, at http://www.developments.org.uk/data/16/id_technology.htm (last visited Oct. 31, 2002). She believes that parents have the right to know the sex of the fetus and make their choices. See id. In doing so, she says she helps women avoid going through many pregnancies. See id.

^{48.} See id.

^{49.} Amritsar is an industrial city located in northwestern India in the state of Punjab. See generally Amritsar Net, at http://www.amritsarnet.net (last visited Oct. 31, 2002). Amritsar is about five thousand square kilometers and has a population of one million individuals. See History of Amritsar, at http://www.amritsarnet.net/history_of_amritsar.htm (last visited Oct. 31, 2002). The city is the spiritual center of the Sikhs faith. See id. In April 2001, the Akal Takht, the highest religious authority among the Sikhs, issued an edict that any Sikh who indulged in sex-selective abortion would be ex-communicated. Vijaya Pushkarna, Noble Edict, at http://www.the-week.com/21may06/events5.htm (last visited Oct. 31, 2002).

^{50.} See George, supra note 40.

^{51.} See id.

^{52.} See id.

^{53.} See id.

^{54.} See Ravindra, supra note 6, at 5.

^{55.} See id.

^{56.} See id.

action was taken, and the controversy improved the hospital's public visibility and expanded its business.⁵⁷

The first state law prohibiting the use of prenatal diagnosis for sex selection was the Maharashtra Regulation of Use of Prenatal Diagnostic Techniques Act, 1988.⁵⁸ Three other states followed suit in enacting similar legislation.⁵⁹ As a result of these regulations, the number of sex determination clinics initially decreased, and it appeared that the practice of sex determination was in decline.⁶⁰ This achievement was due largely to sustained campaigning and active monitoring of the Act by the Forum Against Sex Determination and Sex Pre-selection (FASDSP).⁶¹ The campaign against sex determination faltered when the FASDSP became nonfunctional.⁶² The collapse of the FASDSP signaled to many clinics that the 1988 Act would not be enforced and many clinics quickly resumed operation.⁶³

Sex determination once again became a widespread practice.⁶⁴ Only when the 1991 census revealed that the problem of sex determination was more severe than ever before was the Central Government of India finally moved to enact legislation aimed at prohibiting sex determination.⁶⁵ In 1994,

- 57. See id. The hospital's geneticist even shifted to Delhi to start his own laboratory to cater to the needs of his overgrowing clientele, which included top government officials and ministers, the people who enact laws and are responsible for their implementation. See id.
- 58. Maharashtra Legislature Secretariat, L.C. Bill No. VIII of 1988. Maharashtra is a state located in western India. See Government of Maharashtra, at http://www.maharashtra.gov.in (last visited Oct. 31, 2002). It has a population of seventy-nine million individuals and an area of 308,000 square kilometers. See id. The state, while home to less than ten percent of the total population of the country, accounts for nearly one-fourth of the gross value of India's industrial sector. See id. Maharashtra also holds Bombay, India's Hollywood, which produces more films each year than any other country in the world. See id. For more information on Maharashtra, see id.
- 59. See Kishwar, supra note 16, at 16. The states of Punjab, Gujarat, and Haryana each passed similar legislation in response to the Maharashtra Act. See id.
- 60. See id. Before the prohibition, an amniocentesis cost from Rs.70 to Rs.600. See id. After the Maharashtra Act, amniocentesis could still be had for Rs.1,500 to Rs.2000 at average quality clinics. See id. The safer method of ultrasound could be performed for Rs.800 to Rs.1,500. See id.
- 61. See George, supra note 40. The FASDSP was a broad coalition, headquartered in Bombay, that monitored all aspects of sex determination, documented the spread of the technique, and orchestrated the legal and policy steps taken against it. See Ravindra, supra note 6, at 5.
- 62. See George, supra note 40. The FASDSP faltered partly due to insufficient lobbying with the state to set up the mechanisms to register sex determination clinics and partly due to failure to confront the medical profession's insensitivity to the gross violation of medical ethics. See id.
- 63. See Kishwar, supra note 16, at 16. "The Government of India has not been seriously committed to achieving the intent of this Act." Id. All that it took to get around the law was a minor change in the way gender selection was presented. See id. Advertisements which earlier had read "Find out if it's a boy or a girl" were replaced by barely veiled messages such as "Healthy boy or girl?," or "Everything you want to know about the child in your womb." Id.
 - 64. See Sudha, supra note 1.
 - 65. See id.

the Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act was passed, becoming the first national prohibition of sex determination.⁶⁶

The Act stated that determining and communicating the sex of a fetus was illegal,⁶⁷ that genetic tests could be carried out only in registered facilities,⁶⁸ and that a test could only be offered to women who met certain medical criteria.⁶⁹

However, due to effective lobbying by doctors in the early 1990's, the 1994 National Act was a watered-down version of the 1988 Maharashtra Act and the other state regulations.⁷⁰ As a result, the 1994 Act was filled with

- 66. See Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994.
 - 67. See id. Part III states:

III - REGULATION OF PRE-NATAL DIAGNOSTIC TECHNIQUES

On and from the commencement of this Act.-

- 5. Written consent of pregnant woman and prohibition of communicating the sex of foetus
- (2) No person conducting pre-natal diagnostic Procedures shall communicate to the pregnant woman concerned or her relatives the sex of the foetus [sic] by words, signs, or in any other manner.
- 6. Determination of sex prohibited
- (a) no Genetic Counselling [sic] Centre or Genetic Laboratory or Genetic Clinic shall conduct or cause to be conducted in its Centre, Laboratory or Clinic, prenatal diagnostic techniques including ultrasonography, for the purpose of determining the sex of a foetus [sic];
- (b) no person shall conduct or cause to be conducted any pre-natal diagnostic techniques including ultrasonography for the purpose of determining the sex of a foetus [sic].

Id.

68. See id. Part II states:

II - REGULATION OF GENETIC COUNSELLING CENTRES, GENETIC LABORATORIES AND GENETIC CLINICS

On and from the commencement of this Act.

- (1) no Genetic Counselling [sic] Centre [sic], Genetic Laboratory or Genetic Clinic unless registered under this Act. shall conduct or associate with, or help in, conducting activities relating to pre-natal diagnostic techniques;
- (3) no medical geneticist, gynaecologist [sic], pediatrician, registered medical practitioner or any other person shall conduct or cause to be conducted or aid in conducting by himself or through any other person, any pre-natal diagnostic techniques at a Place other than a place registered under this Act.

Id.

69. See id. Part III contains the following requirements:

(3) no pre-natal diagnostic techniques shall be used or conducted unless the person qualified to do so is satisfied that any of the following conditions are fulfilled, namely:-(i) age of the pregnant woman is above thirty-five years; (ii) the pregnant woman has undergone of two or more spontaneous abortions or foetal [sic] loss; (iii) the pregnant woman had been exposed to potentially teratogenic agents such as drugs, radiation, infection or chemicals; (iv) the pregnant woman has a family history of mental retardation or Physical deformities such as spasticity or any other genetic disease;

Id.

70. See George, supra note 40.

loopholes.⁷¹ Perhaps most importantly, a majority of the Act's restrictions pertained only to Government facilities.⁷² Private laboratories and clinics were not banned from carrying-out sex determination tests so long as they were registered.⁷³ The requirement that clinics be registered helped little, because clinics could be allowed to remain in operation simply by registering as test sites for genetic abnormalities, which was legal.⁷⁴ Without keeping a written record, the additional information concerning gender could be easily obtained and provided to potential parents.⁷⁵

The Act was also ineffective because it was made to apply only to pregnant women.⁷⁶ This left open the possibility that newer technologies could be developed to determine the sex of a fetus prior to fertilization, as is now possible with new preconceptual selection techniques.⁷⁷

As a result of these loopholes, the Act could not be effectively enforced against the activities it set out to prohibit.⁷⁸ Until the Indian Supreme Court's 2001 ruling requiring the 1994 Act to be enforced, not a single conviction had taken place.⁷⁹ The result of this partial regulation is that sex determination and selection facilities became privatized, commercialized, and multiplied to cover India.⁸⁰

C. Modern Attempts at Prohibition

Due to the repeated failure of the 1994 Act, and in response to the 2001 census information showing increasingly skewed sex ratios, the Supreme Court of India has recently ordered state authorities to enforce the former prohibition.⁸¹ It is unclear whether this decision will succeed where past regulations have failed, but positive signals have emerged.⁸² For instance, signs advertising "ultrasound facility available" which once flourished are now rarely seen.⁸³ In response to protests by women's groups and the media, even tiny advertisements on trees and utility poles in the smallest towns were

^{71.} See Sudha, supra note 1.

^{72.} See id.

^{73.} See Amit Sengupta, Prenatal Diagnostic Techniques Bill: Loopholes Galore, WOMEN'S EQUALITY, April-June 1994, at 10.

^{74.} See id.

^{75.} See id.

^{76.} See Kishwar, supra note 16, at 17.

^{77.} See ASRM 1999, supra note 10, at 595.

^{78.} See Sengupta, supra note 73, at 10.

^{79.} See Ramachandran, supra note 47.

^{80.} See Sudha, supra note 1.

^{81.} See CEHAT v. Union of India (2001).

^{82.} See India's Female Freefall, supra note 15.

^{83.} See id.

removed.⁸⁴ While this may seem insignificant, early speculation suggests that it may help to sever the elaborate referral networks that currently exist.⁸⁵

Nevertheless, despite these optimistic hopes, it may be sometime yet before the Indian government is finally able to seriously deter the use of sex determination. Hundreds of Indian towns that lack any modern medical facilities still have an abundance of ultrasound centers. Even without advertisements, the poorest illiterate women remain very much aware of the technology. The problem remains that there is a strong cultural bias for male children, keeping demand high for sex determination. Dr. Sabu George, a leading Indian physician and bioethicist, stated that,

To stem the increasing epidemic of female feticide . . . [o]rganizations and individuals with different priorities and ideological beliefs have to rally together to battle the powerful patriarchal forces operating within the institutions of the family, government and civil society. A transformation of our gendered society, (sic) is necessary for the elimination of female feticide. 90

Without measures aimed at directly confronting the existing discrimination, prohibiting new technologies may provide only a temporary curative effect, and could drive some families back to the proven practice of infanticide.⁹¹

III. GENDER SELECTION IN THE UNITED STATES

In the United States, there does not exist a widespread recognized desire to select the gender of children.⁹² With stringent criminal sanctions existing in the case of infanticide, the possibility that a parent will desire a particular

^{84.} See id.

^{85.} See id.

^{86.} See George, supra note 40.

^{87.} See India's Female Freefall, supra note 15. "Villages might not have clean drinking water but they have an ultrasound machine," notes Dr. C.M. Francis of the non-governmental organization Community Health Cell. Ramachandran, supra note 47.

^{88.} See id. Costs are low for prenatal diagnoses, sometimes less than one hundred dollars. Id. However, because of the laws prohibiting such tests, no paper records are conducted. Id.

^{89.} See id.

^{90.} George, supra note 40. Dr. Sabu George was one of the three named petitioners in CEHAT v. Union of India, along with the Centre for Enquiry into Health and Allied Themes and Mahila Sarvangeen Utkarsh Mandal (Masum), a research center based in Pune and Maharashtra. See CEHAT v. Union of India (2001).

^{91.} See George, supra note 40.

^{92.} See Stratham, et al., Choice of Baby's Sex, 341 LANCET 564, 564-65 (1993).

gender greatly enough that they would expose themselves to either murder or child neglect prosecution seems slight.⁹³

Also, the importance of being a particular gender has typically not been powerful enough to convince parents to abort a child of an "undesired" sex. ⁹⁴ Even parents who are strongly committed to having a child of a particular gender have not typically aborted after finding out the fetus was of the opposite sex. ⁹⁵

However, new reproductive technologies have emerged which allow the gender of a child to be determined prior to fertilization, thus eliminating any ethical issues of abortion or infanticide from decision-making. The most promising preconception technology is flow cytometric separation of X- and Y-bearing sperm. As this technique is improved, it could significantly increase the use of gender selection by couples contemplating reproduction. Without the burden of sex-selective abortion, many couples previously unwilling to participate in gender selection may now come forward to utilize the procedure. 99

In particular, medical authorities anticipate two groups who will seek the use of preconception gender selection. First, there are individuals who desire to have a child of a gender different than that of a previous child or children. As noted previously, the cultural preference for a particular gender is not considered a driving force for sex selection. Thus, parents in this group may be selecting a particular gender without considering that a child of that gender would be inherently better. Rather, other social

^{93.} See American Law Institute, Model Penal Code and Commentaries § 210.2 (1985).

^{94.} See Julian Savulescu & Edgar Dahl, Sex Selection and Preimplantation Diagnosis, 15 HUM. REPROD. 1879, 1879 (2000).

^{95.} See id.

^{96.} ASRM 1999, supra note 10, at 595.

^{97.} See WILLIAM S. KLUG & MICHAEL R. CUMMINGS, CONCEPTS OF GENETICS 23-24 (5th ed. 1997). Females produce only X-chromosome bearing oocytes. See id. Males produce both X and Y-bearing sperm. See id. When combined with the X-chromosomes of oocytes, X-bearing sperm can produce only XX or female offspring. See id. Similarly, Y-bearing sperm combined with the X-chromosome of oocytes can produce only XY or male offspring. See id.

^{98.} See Microsort Gender Selection, supra note 10. The procedure consists of passing laser beams across a flowing array of specially dyed sperm. See id. The lasers separate most of the nearly three percent heavier X- from the Y-bearing sperm, thus producing an X-enriched sperm sample for artificial insemination. See id. The United States Department of Agriculture (USDA) has licensed the Genetics and IVF Institute in Fairfax, Virginia, to study the safety and efficacy of the technique for medical and "family balancing" reasons. See ASRM 1999, supra note 10, at 596. In 1998, researchers at the Institute reported a ninety-three percent success rate for selection of females in twenty-seven patients. See id. A lower success rate, seventy-two percent, was reported for male selection. See id. In addition, flow cytometry has been successful in over 400 sex selections in rabbit, swine, ovine, and bovine species, including successive generations in swine and rabbit. See Fugger, supra note 10, at 2367-70.

^{99.} See ASRM 2001, supra note 11, at 862.

^{100.} Id. at 863.

^{101.} See id.

^{102.} See Stratham, supra note 92, at 565.

preferences may drive their decision. ¹⁰³ Currently in America, there is a social preference for two-child families. ¹⁰⁴ If this social preference for two-child families remains strong, some families could resort to preconception gender selection to choose the gender of their second child, so as to ensure a child of each sex. ¹⁰⁵ Presumably, in such a scenario, girls would be chosen as often as boys, since the decision would rest solely on the gender of previous children, rather than an assumption that one gender is inherently superior.

The second identified group consists of individuals with strong preferences for the gender of their first child. This group may contain individuals with strong religious beliefs, but the primary constituents would be immigrant groups who retain the same gender preferences that existed in their native country. This group could contain many of the large number of immigrants who arrive in the United States from India each year. 108

Also, the second group would contain people who place a special value on having their firstborn be male or female because of personal experiences or beliefs. ¹⁰⁹ For instance, a father may desire a son who will follow in his footsteps and play football. ¹¹⁰ In addition, some parents may feel they would relate better to a particular gender or that they would not be as good a parent to the other gender. ¹¹¹

Response in America has been mixed with regard to gender selection. It is widely agreed that sex-selective abortion should be allowed for medical reasons, in order to avoid passing sex-linked genes, enabling parents to avoid passing heritable gender-linked diseases or other abnormalities to their offspring. However, there is more rigorous debate regarding the usefulness of gender selection in the non-medical context. 113

Recently, the American Society for Reproductive Medicine (ASRM) Ethics Committee published a report concerning the use of preconception gender selection for non-medical reasons.¹¹⁴ The Ethics Committee recognized, in support of gender selection, that:

^{103.} See id.

^{104.} See U.S. Census Bureau, Households and Families Data, at http://www.census.gov/population/www/cen2000/briefs.html (last visited Sept. 8, 2002).

^{105.} See ASRM 2001, supra note 11, at 862.

^{106.} See id.

^{107.} See id.

^{108.} See Immigration, Fiscal Year 1996, supra note 14.

^{109.} See ASRM 2001, supra note 11, at 862.

^{110.} See id.

^{111.} See id.

^{112.} Judith Daar, Sliding the Slope Toward Human Cloning, 1(1) Am. J. BIOETH. 23, 23 (2001)

^{113.} See ASRM 1999, supra note 10, at 595.

^{114.} See ASRM 2001, supra note 11.

parents have traditionally had great discretion in their procreative decisions and that sex selection might provide perceived individual and social goods such as gender balance or distribution in a family with more than one child, parental companionship with a child of one's own gender, and a preferred gender order among one's children.¹¹⁵

The International Federation of Gynecologists and Obstetricians (FIGO) Committee for the Ethical Aspects of Human Reproduction and Women's Health stated, "[p]reconceptional sex selection can be justified on social grounds in certain cases for the objective of allowing children of the two sexes to enjoy the love and care of parents." 116

The sentiment of the medical community is even more amiable to gender selection than the ASRM Ethics Committee or FIGO.¹¹⁷ Most medical authorities today support a couple's ability to select gender regardless of their motivation.¹¹⁸ A 1990 survey found that eighty-five percent of Master's-level genetic counselors in the United States would either arrange for prenatal diagnosis or offer a referral.¹¹⁹ Most regarded sex selection as a private matter between doctor and patient.¹²⁰

Nevertheless, preconception gender selection has also encountered resistance. After consideration of the many conflicting arguments (which are to be elaborated upon in Part IV of this Note), the ASRM Committee concluded that whereas preconception gender selection is appropriate to avoid the birth of child with genetic disorders, it is not acceptable at present when used solely for non-medical reasons. ¹²¹ The ASRM Committee's recommendations included, "the most prudent approach at present for the nonmedical use of these techniques would be to use [gender selection techniques] only for gender variety in a family, i.e., only to have a child of the gender opposite of an existing child or children." However, the ASRM Committee left unanswered the question of the acceptability of preconception gender selection for non-medical purposes, stating that, "[i]f the social, psychological,

^{115.} Id. at 862.

^{116.} See The International Federation of Gynecology and Obstetrics, Sex Selection, at http://www.figo.org/default.asp?id=6094 (last visited Sept. 12, 2002).

^{117.} See Wertz, supra note 22.

^{118.} See id. The genetic counselors surveyed predominantly said that sex selection was a logical extension of parents' acknowledged rights to choose the number, timing, spacing, and genetic health of their children. Id. They regarded withholding any service, including sex selection, as medical paternalism and an infringement on patient autonomy. Id. In cases involving couples with four children of the same sex, women, who comprised thirty-five percent of doctoral-level geneticists in the U.S., were twice as likely as men to say that they would actually perform prenatal diagnosis. See id.

^{119.} See Wertz, supra note 22.

^{120.} Id.

^{121.} See ASRM 2001, supra note 11, at 861.

^{122.} Id. at 863.

and demographic effects of those uses of preconception gender selection have been found acceptable, then other nonmedical uses of preconception selection might be considered."¹²³

There are many relevant policy arguments suggested as to whether preconception gender selection ought to be utilized for non-medical reasons. The following section will discuss the many policy arguments raised both in India and the United States.

IV. GENDER SELECTION FOR NON-MEDICAL PURPOSES POLICY ARGUMENTS

Medical scholars and ethics committees have put forth numerous policy arguments, weighing the pros and cons of preconception gender selection. This Note will first address the policy arguments raised by the situation in India, discussing how they apply to the United States. Subsequently, the Note will discuss the policy arguments particularly relevant in the United States.

A. Policy Arguments - India

1. Imbalance in sex ratio

A major policy concern is that widespread practice of sex selection can lead to imbalanced sex ratios. In India, the technique is widely practiced, and it has led to large sex-ratio imbalances.¹²⁴ In fact, sex-ratio imbalance was the only concern mentioned explicitly in the Indian Supreme Court's decision requiring enforcement of the 1994 Act.¹²⁵ However, there is no easy application of this data to society within the United States.¹²⁶ The most obvious disparity between the two countries is that America has no substantial preference for any particular gender.¹²⁷

There is little threat that allowing preconception gender selection in America would imbalance the sex ratio.¹²⁸ Apart from there being little emphasis on gender, studies show that most couples simply prefer to leave the

^{123.} Id.

^{124.} See discussion, supra Part II(b).

^{125.} See CEHAT v. Union of India (2001). "Unfortunately, developed medical science is misused to get rid of a girl child before birth... This has affected overall sex ratio in various States where female infanticide is prevailing without any hindrance." *Id.*

^{126.} See ASRM 1999, supra note 10, at 597.

^{127.} See generally Stratham, supra note 92, at 564-65. A study shows empirical evidence suggesting that individuals in the United States do not have a preference for a particular sex. See id.

^{128.} See David B. Resnik, Difficulties with Regulating Sex Selection, 1(1) AM. J. BIOETH. 21, 22 (2001). It is theorized that a sex-ratio imbalance does not pose a threat to America because cultural rather than biological traits now play the most decisive role in our evolution and survival. Id. For an interesting discussion of this topic, see generally id.

gender of their children up to fate.¹²⁹ Preconception gender selection (in particular, flow cytometric separation) requires artificial insemination or invitro fertilization.¹³⁰ Thus, this procedure involves not only financial costs, but also additional inconvenience and discomfort that is not associated with coitus.¹³¹ Also, the fact remains that the natural act of making children is generally considered a pleasurable activity. Only those for whom gender is highly important are likely to utilize technology.¹³² It is hard to imagine that the number of births employing the technology could rise to the level sufficient to have a demographic effect.¹³³

Even among those individuals who do have a strong preference of gender and utilize sex selection, studies show that the tendency is a desire to balance their family's gender ratio, by having an equal number of sons and daughters. The resulting effect would be a balancing, rather than an imbalancing, of the sex ratio.

Even if, for the sake of argument, sex selection in America was allowed and produced drastic changes in sex ratios, a number of self-correcting or regulatory mechanisms might come into play. One option is an approach similar to that which India has taken; upon experiencing a shift in the sex ratio, regulatory measures could be taken to correct that imbalance. In constitutional law, a demonstration of actual overriding harm is a legitimate justification for constraining liberty. Thus, even if the procedure qualified as a procreative liberty, it could still be regulated if a substantial harm could be shown. Results showing an actual threat of sex-ratio imbalance would likely constitute the harm necessary to justify limits on gender selection. This harm has been shown in India, thus triggering its Supreme Court to require enforcement of the 1994 Act. Is In similar fashion, if such a problem arose in

^{129.} See id.

^{130.} ASRM 1999, supra note 10, at 595.

^{131.} See id. at 597.

^{132.} See Resnik, supra note 128, at 22.

^{133.} See Liu, P., and Rose, A., Social Aspects of >800 Couples Coming Forward for Gender Selection of their Children, 10 HUM. REPROD. 968, 968-71 (1995).

^{134.} See Savulescu, supra note 94, at 1879.

^{135.} See id. Numerous regulations can be hypothesized. See id. Regulation does not have to come in the form of an outright prohibition. See id. For instance, in response to sex-ratio concerns, a more subtle regulation could consist of laws or policies that require providers (hospitals or clinics) of preconception gender selection to select for males and females in equal numbers. See id. This regulation would serve to alleviate the sex-ratio concern, as well as provide a less intrusive alternative to an outright prohibition. See id. A related regulation could limit sex selection to balancing intra-family sex ratios, and allow selection only after the first child. See id.

^{136.} See Constitutional Analysis, infra Part V.

^{137.} See id. If preconception gender selection is not considered a procreative liberty, a rational basis review will be used and state regulations will likely prevail. See id.

^{138.} See CEHAT v. Union of India (2001).

America, regulatory measures could then be taken on the basis of actual, rather than speculative, harm.

2. Promote Gender Discrimination

In India, there exists a cultural discrimination towards women. ¹³⁹ Many opponents of preconception gender selection feel that the ability to select gender will add to this discrimination. ¹⁴⁰ In particular, there are two prongs to the argument that sex selection can lead to gender discrimination. The first prong highlights the practice of sex selection as being per se discriminatory, in that it promotes sexist ideals of preferring one gender to the other. ¹⁴¹ The second prong is a corollary of the imbalanced sex ratio argument. It maintains that the resulting imbalance in sex ratio will lead to a primarily male society, subject to the majority rule of men. ¹⁴²

Most would agree that the United States maintains a culture where both sexes are held to be equal. Also, since there is no overriding preference for male offspring, it is increasingly difficult to see how sex selection adds to gender discrimination. This is particularly true since couples seeking sex selection are generally motivated by the desire to balance their family. Thus, the decision-making process does not usually include sexist rationales, for no weighing of the sexes is taking place.

In response to the second prong, it has never been conclusively shown that male dominance in a society is a result of the number of males present.¹⁴⁴ Rather, gender dominance has to be attributed to numerous factors, including (but not limited to) innate biological differences, both intergender and intragender attitudes, and historical patterns.¹⁴⁵ The opportunity to select gender through reproductive technologies will probably not change any discrimination that might already exist, either for better or worse.

^{139.} For a general discussion of discrimination in India, see Sivaraman, *supra* note 23. In many parts of India, women working outside the home are seen as a sign of a family's low social and economic status. *See also* Kishwar, *supra* note 16, at 19. Women are thus often confined to unpaid jobs at home, such as field labor, caring for family livestock, housework of all kinds, and care of children. *Id.*

^{140.} See ASRM 2001, supra note 11, at 862.

^{141.} See id.

^{142.} See id.

^{143.} See id.

^{144.} See Resident Population Estimates of the United States by Age and Sex, U.S. Census Bureau (2000). In fact, the United States population contradicts this presumption. See id. If numbers were predictive of gender dominance, females would be the dominant gender in our society, as they outnumber males by approximately six million. See id.

^{145.} See Daar, supra note 112, at 23.

3. Misallocation of Resources

With a population currently exceeding one billion people, one would presume that efficient allocation of medical sources is a constant concern in India. Whether hospital rooms, medical equipment, or simply a doctor's attention, every resource that is utilized for sex selection is consequently a resource not being used for other medical purposes.

Sex selection is largely considered a cosmetic procedure, as it provides no actual health benefit. Helping people to have children, as in treatment of infertility, is arguably different from helping fertile couples to have a particular gender of child. Since infertility interferes with the basic life activity of childbearing, it reasonably deserves the attention of health professionals. He inability to have a child of a particular gender presents no such interference. He is a misallocation of valuable medical resources to tie up doctors and equipment in sex selection procedures. The misallocation, should it prevent other individuals from receiving medical attention, would be in violation of the other's rights to basic care.

This policy argument becomes less relevant when one considers the medical system in the United States. The resource problem, for the most part, does not exist. Thus, if an individual is willing to pay for desired services, there is no direct, easy way to show how this choice takes away from the right of others to basic care. This is especially true since no one has seriously advocated that the state, i.e. the taxpayer, should subsidize sex selection. The natural analogy is cosmetic surgery: if people are permitted to spend their own money on cosmetic surgery without being accused of violating the right of others to basic care, it is hard to see why couples willing to spend their own money on sex selection should be treated differently.

4. Population Control

Not all policy arguments oppose gender selection for non-medical purposes. In support of the technique, it is argued that the ability to select

^{146.} See 2001 India Census Statistics, supra note 2.

^{147.} See Rebecca Dresser, Cosmetic Reproductive Services and Professional Integrity, 1(1) Am. J. BIOETH. 11, 11 (2001).

^{148.} See id.

^{149.} See id.

^{150.} See Wertz, supra note 26, at 23.

^{151.} See id.

^{152.} See Savulescu, supra note 94, at 1880.

^{153.} See id.

^{154.} See id.

gender could aid population control.¹⁵⁵ This policy argument assumes the idea that, with preconception gender selection available, parents will no longer be compelled to reproduce until they achieve a child of the preferred gender. Without preconception gender selection, "try again" has been the method to get a child of the desired sex.¹⁵⁶ Prior to preconception selection, families desiring a son found it necessary to continue having children until a son was born. If the family was opposed to infanticide, a number of females could be born before the first male. With India's population exceeding one billion individuals, each additional child contributes to the already existing burden on available resources. Thus, preconception selection has the social advantage of not adding to overpopulation problems.

The use of sex selection is not likely to be used as a method of population control in the United States. The severe need to limit the population does not exist in the United States as it does in India. By the year 2016, India is expected to have four times the population of the United States, while having only one-third the territory land size. 158

5. Problems with Criminalization of Gender Selection

Regulation of gender selection may also be unwise considering the state of the criminal justice system in India.¹⁵⁹ It has been hypothesized that a prohibition of gender selection would not work due to corruption within police ranks.¹⁶⁰ It is not uncommon for police to collect regular bribes from doctors in exchange for immunity from prosecution.¹⁶¹ Making the activity illegal simply gives the police a vested interest in encouraging doctors to continue the procedure, as it represents additional profit for the officers.¹⁶² The cost of bribes can be passed on to the patients who will also benefit from immunity.¹⁶³

^{155.} See Kishwar, supra note 16, at 15. Many physicians in India support gender selection as a method of population control. See Savulescu, supra note 10, at 374. Dr. Sunil Kothari, who runs a major ultrasound and abortion clinic in Delhi, admitted to having performed over 60,000 diagnoses during an interview on the BBC. See Kishwar, supra note 16, at 15. He stated, "This is the best way of population control for India." Id.

^{156.} See Rhodes, supra note 9, at 31.

^{157.} See U.S. Census Bureau, Population Estimates Program, Jan. 13 2000, available at http://www.census.gov (last visited Nov. 1, 2001). By 2016, the United States is expected to have a population of 314 million individuals. See id. By 2016, India is expected to have a population of 1.26 billion. See 2001 India Census Statistics, supra note 2. The United States has an area of 9.6 million square kilometers, whereas India is only 3.3 million square kilometers. See CIA World Factbook, available at http://www.cia.gov/cia/publications/factbook/index.html (last visited Nov. 1, 2001).

^{158.} See CIA World Factbook, available at http://www.cia.gov/cia/publications/factbook/index.html (last visited Nov. 1, 2001).

^{159.} See Kishwar, supra note 16, at 17.

^{160.} See id.

^{161.} See id.

^{162.} See id.

^{163.} See id.

Of course, police corruption is not a reason in itself to continue gender selection. To analogize, one might argue that narcotic drugs should be legalized as a result of corruption on behalf of narcotics officers. Certainly, it would be better to take proactive measures toward ending police corruption. However, it is a policy concern deserving consideration when discussing regulation of preconception gender selection.

It is unlikely that such a situation would arise in the United States. While it would be naïve to think that corruption does not exist in the criminal justice system in the United States, it is unlikely that this is an area that presents any real danger of police misconduct. Demand does not appear to be high enough for gender selection so as to create a profitable black market.

Another problem with criminalizing gender selection is that it may force clinics to go underground.¹⁶⁴ The high demand for the procedure would surely drive some doctors to continue the procedure in exchange for higher payment.¹⁶⁵ If this occurred, it would become impossible to monitor clinic activity and safety, thus exposing women to increased risk.¹⁶⁶ As with abortions performed without adequate medical support, complications could arise which endanger the life of the mother.¹⁶⁷ The technology needed for performing the required tests is easily available and relatively inexpensive, allowing nearly anyone to set up a lab. Since ultrasound is a valuable technique for a whole range of other diagnoses of internal organs, it is not possible to ban ultrasound devices altogether.¹⁶⁸

The smaller demand for the procedure in America may mean that doctors will not find it advantageous to continue illegally. A small black market may emerge, but it would likely be insignificant as compared to the situation in India.

B. Policy Arguments - United States

As discussed, many of the policy concerns which exist in India have little relevance in American society. However, there are some major policy concerns that are particularly relevant to American culture. 169

^{164.} See id.

^{165.} See Kishwar, supra note 16, at 17.

^{166.} See id.

^{167.} See id.

^{168.} See id. Many doctors have begun to use portable ultrasound machines that can be carried in their cars, thus allowing them to perform tests in people's homes. See id.

^{169.} See Wertz, supra note 22. In a 1997 survey, U.S. geneticists ranked their main reasons why they may not perform sex determination. See id. The following percentages are the number of geneticists ranking each as very important or extremely important to their decision: (1) Maintaining my own integrity (79%), (2) Ethical status of the profession (58%), (3) Preventing the abortion of a normal fetus (43%), (4) Preventing harm to a child of the unwanted sex, if born (35%), (5) Position of women in society (29%), (6) Maintain a balanced sex ratio (US 5%), (7) Lowering the birth rate (2%). See id.

1. "Slippery Slope" to Selection for Other Non-Medical Traits

It is often argued that the use of preconception gender selection for non-medical purposes could lead to the use of selection techniques for other non-medical traits. Although the cultural climate in the United States may not exert as much pressure to select for a particular gender, there exists cultural pressure to select for other highly valued traits, such as intelligence or thinness. It is often thought, not unreasonably, that the spread of preconception gender selection could be an incremental step in the growing technologization of reproduction and genetic control of offspring. The fear is that, if selection becomes common for many characteristics, parent-child relationships could be altered and children would become more like "products." When parents directly control the traits of their offspring, they might be less apt to accept their children's shortcomings. Acknowledging a right to preconception gender selection may make it more difficult to justify regulations on selection for other traits.

However, this "slippery slope" argument may be remedied by timely legislative intervention.¹⁷⁵ If gender selection were acceptable but selection for other traits was not, numerous legislative controls could be employed to allow for those "acceptable" traits and prohibit those "unacceptable" traits.¹⁷⁶ A court reviewing regulations of "non-gender" selection could determine that other traits are not similarly protected under the umbrella of procreative liberties.¹⁷⁷ Such an analysis would mirror the analysis undertaken for gender selection.¹⁷⁸ Other traits could be distinguished either by declaring that selection for alternative traits is not as closely related to procreation as the ability to select for gender, or by a greater showing of harm caused by selection for the other traits.¹⁷⁹

Furthermore, if a particular technique can be justified on its own terms, it should not be barred because of speculation of a slippery slope toward general selection of offspring traits.¹⁸⁰

^{170.} See ASRM 2001, supra note 11, at 862.

^{171.} See Geoffrey Cowley, Made to Order Babies, NEWSWEEK, Winter/Spring 1990 (Special Issue), at 94. A survey reported in Newsweek in 1990 showed that while only one percent of 200 New England couples surveyed would abort on the basis of sex, eleven percent would abort to avoid having a child carrying a gene for obesity. See id.

^{172.} See id.

^{173.} See Carson Strong, Can't You Control Your Children?, 1(1) Am. J. BIOETH. 12, 13 (2001).

^{174.} See id.

^{175.} See ASRM 2001, supra note 11, at 862.

^{176.} See id.

^{177.} See id.

^{178.} See id.

^{179.} See id.

^{180.} See id.

2. Parental Expectations

Preconception gender selection could also reinforce parental expectations that could be damaging to children of both the "right" and "wrong" genders. ¹⁸¹ Among those parents who feel strongly enough about gender to bear the burdens of cost and inconvenience that accompany preconception gender selection, it might be common to find that there exists some sort of parental expectations about how the child will turn out. ¹⁸² Thus, concern arises for the welfare of the children born as a result of gender selection whose parents may expect them to act in certain gender specific ways when the technique succeeds, but who may be disappointed if the technique fails. ¹⁸³

The ability to select gender could reinforce restrictive gender stereotypes or possibly convey the notion that one gender is superior in a particular family.¹⁸⁴ The psychological impact on children, while speculative, is not completely difficult to imagine. However, in response to this concern, it must be remembered that while parents who use gender selection may have specific gender role expectations of their children, so too will many parents who have a child through coitus.¹⁸⁵ It is not uncommon for parents, regardless of how conception occurs, to have expectations of their children and enforce these expectations through various child-rearing methods.¹⁸⁶

V. CONSTITUTIONAL ANALYSIS

The ability to predict how courts would rule on constitutional challenges to governmental regulation of preconception gender selection is limited by the absence of virtually any Supreme Court precedent in the area. The Fourteenth Amendment of the United States Constitution provides that no State shall "deprive any person of life, liberty, or property, without due process of

^{181.} See Dresser, supra note 147, at 12.

^{182.} *See id.*

^{183.} See Microsort Gender Selection, supra note 10. After all, preconception gender selection is not a perfect technique. See id. There is the possibility that even those parents who utilize the technique may bear a child of the "unwanted" sex. See id. Out of this possibility for failure arises concern that pregnancies of the wrong sex may lead to additional abortions. See ASRM 2001, supra note 11, at 862.

^{184.} See Dresser, supra note 147, at 12.

^{185.} See Gregory Stock, Chance or Choice – Why Not Pick Our Children's Gender?, 1(1) AM. J. BIOETH. 33, 33-34 (2001). "If bioethicists really fear that allowing parents to choose a child's gender will be detrimental to his or her future, then why aren't they more worried about adoption practices?" Id. "The preferences of adoptive parents include gender, health, age, ethnicity, the presence or absence of disabilities, and various other factors that parents balance against the availability of children." Id.

^{186.} See id.

law." 187 Certain state statutes are found to be such an unreasonable interference with fundamental rights and liberty interests that they are tantamount to an unconstitutional denial of "liberty" guaranteed in the Fourteenth Amendment. 188

To determine if a statute is constitutional, the court must first determine whether the matter involves a liberty interest. ¹⁸⁹ If the court determines that there is a liberty interest at stake, the court must then decide if the interest involved is a fundamental or non-fundamental right. ¹⁹⁰ Fundamental rights are described as those liberties that are "implicit in the concept of ordered liberty," in that "neither liberty nor justice would exist if they were sacrificed." ¹⁹¹ This allows the Court to recognize certain rights, like a right to contraception or abortion, which do not seem to be deeply rooted in tradition. The Supreme Court has held that there is a fundamental right to parental choice of the upbringing of one's children, ¹⁹² to marital privacy, ¹⁹³ to contraception, ¹⁹⁴ to marry, ¹⁹⁵ and a limited right to have an abortion. ¹⁹⁶

It is also widely agreed that the Court would recognize a right to engage in coital reproduction.¹⁹⁷ Case law has established that an individual's right

^{187.} U.S. CONST. amend. XIV, § 1.

^{188.} See Washington v. Glucksberg, 521 U.S. 702 (1997).

^{189.} See Glucksberg, 521 U.S. at 720 (noting that the Due Process Clause "provides heightened protection [for]...liberty interests").

^{190.} See id.

^{191.} Palko v. Connecticut, 302 U.S. 319, 325-26 (1937).

^{192.} See Pierce v. Society of Sisters, 268 U.S. 510, 518-19 (1925) (commenting that the right of parents to send their children to parochial and private schools is the essence of personal liberty and freedom).

^{193.} See Griswold v. Connecticut, 381 U.S. 479, 485 (1965) (holding that a State may not prohibit a married couple's use of contraceptives).

^{194.} See Eisenstadt v. Baird, 405 U.S. 438, 453 (1972) (extending the right to use contraceptives to unmarried couples by striking down a statute that permitted contraceptives to be distributed only to married couples).

^{195.} See Loving v. Virginia, 388 U.S. 1, 11-12 (1967) (invalidating a law prohibiting marriages between whites and "colored persons", stating that "marriage is one of the 'basic civil rights of man,' fundamental to our very existence and survival").

^{196.} See Planned Parenthood v. Casey, 505 U.S. 833, 846 (1992) (holding that a state may regulate a woman's right to have an abortion as long as the state does not place "undue burdens" on the woman's right to decide).

^{197.} Several Supreme Court cases have held that the fundamental right to privacy includes the right to procreate. For instance, in *Skinner v. Oklahoma* the court stated, "We are dealing here with legislation which involves one of the basic civil rights of man. Marriage and procreation are fundamental to the very existence and survival of the race." 316 U.S. 535, 541 (1942) (invalidating an Oklahoma statute that provided for the sterilization of some three-time felons). The court has also held in subsequent decisions that a person's liberty interests extend to activities like marriage, procreation, contraception, family relationships, child rearing, and education. *See* Planned Parenthood v. Casey, 505 U.S. at 851 (1992) (reaffirming the right to abortion first recognized in *Roe v. Wade*, 410 U.S. 113 (1973)). Support for a right to procreate can also be found in *Eisenstadt v. Baird*, where the court wrote, "If the right of privacy means anything, it is the right of the individual, married or single, to be free from unwarranted governmental intrusion into matters so affecting a person as the decision whether to bear or

to procreate is constitutionally protected "from unjustified intrusion by the State." However, it is unclear whether this fundamental right to procreation is broad enough to include preconception gender selection.

The inability to select gender via preconception gender selection does not directly prevent anyone from reproducing, nor does it penalize individuals for the exercise of their procreative rights. The way in which regulations would implicate the right to procreate derives from the argument that preconception gender selection serves the needs of couples that have strong preferences about the gender of their offspring and would not reproduce unless they could realize those preferences. ¹⁹⁹ If the ability to select offspring gender is truly essential to a couple's decision to reproduce, attempts to limit the use of preconception gender selection may not stand up to a constitutional challenge.

Acknowledging the fundamental right to procreate does not automatically imply that preconception gender selection is a fundamental right. Rather, this leads to the more interesting constitutional question concerning preconception gender selection: While the right to marry includes the right to decide whom to marry,²⁰⁰ and the right to abortion includes the right to decide which method of abortion to employ,²⁰¹ does it follow that the right to procreate would include the right to decide the gender of your children?²⁰² The ability to have a child free from governmental intrusion is considered intertwined with the right to privacy.²⁰³ However, the ability to select the gender of a child through preconception gender selection probably does not share similar status.

The Court has been hesitant to set forth overly sweeping due process jurisprudence.²⁰⁴ In deciding whether a general right to procreate would en-

beget a child." 405 U.S. at 438, 453 (1972) (invalidating a law that prohibited the dispensing of contraceptives to unmarried persons). As the court stated in *Cleveland Board of Education v. LaFleur*, "this Court has long recognized that freedom of personal choice in matters of marriage and family life is one of the liberties protected by the Due Process Clause of the Fourteenth Amendment." 414 U.S. 632, 639-40 (1974). See David Orentlicher, Cloning and the Preservation of Family Integrity, 59 LA. L. REV. 1019, 1033-37 (1999).

- 198. Carey v. Population Services Intern., 431 U.S. 678, at 687 (1977).
- 199. See ASRM 2001, supra note 11, at 862.
- 200. See generally Loving, 388 U.S. at 11-12.
- 201. See Thornburgh v. American College of Obstetricians and Gynecologists, 476 U.S. 747, 768-69 (1986) (striking down a portion of a Pennsylvania statute that required physicians to use the abortion procedure most likely to result in a viable child).
- 202. See Strong, supra note 173, at 12. Note that a right to preconception gender selection would entail a negative, rather than a positive, right. See id. The right claimed would be a right against government restriction or prohibition of preconception gender selection. See id. It is not a claim that society or insurers are obligated to fund preconception gender selection or that particular physicians must provide it. See id.
 - 203. See Eisenstadt, 405 U.S. at 453.
- 204. See Glucksberg, 521 U.S. at 720 (observing that "we ha[ve] always been reluctant to expand the concept of substantive due process...lest the liberty protected by the Due Process Clause be subtly transformed into the policy preferences of the Members of this Court.").

compass the specific right to preconception gender selection, the Supreme Court would very likely resort to a tradition-based analysis. As the Court has stated, "[t]he Due Process Clause specially protects those fundamental rights and liberties which are, objectively, 'deeply rooted in this Nation's history and tradition." As a result, the Court almost certainly would "begin, as we do in all due-process cases, by examining our Nation's history, legal traditions, and practices." ²⁰⁶

Preconception gender selection does not seem to fall squarely into a tradition-based analysis. As discussed, until the twentieth century, gender selection consisted solely of the killing of a newborn of the unwanted sex.²⁰⁷ Even with the procedures developed in the twentieth century, amniocentesis followed by abortion remained the primary method of gender selection.²⁰⁸ Only in the last few decades has it become realistically possible to select gender prior to fertilization.²⁰⁹ Thus, it will be difficult to support preconception gender selection under a tradition-based analysis.

However, preconception gender selection's lack of tradition can cut both ways. While there is seemingly no tradition in favor of the technique, there is also very little tradition of state or federal laws prohibiting preconception gender selection. ²¹⁰ In the past, the Supreme Court has typically rejected a

^{205.} Id. at 720-21.

^{206.} Id. at 710.

^{207.} See Khanna, supra note 43, at 27.

^{208.} See id.

^{209.} See ASRM 1999, supra note 10, at 595.

^{210.} See Norton, supra note 5, at 1600. There is some history of attempted regulation of sex-selective abortion. See id. However, such regulations have not yet faced a direct, constitutional challenge. See id. Pennsylvania is one of the states which currently bans sexselective abortions. 18 PA. CONS. STAT. § 3204 (A)(1), (C) (1993). The Pennsylvania abortion statute was a provision in the statute challenged in Planned Parenthood v. Casey, 505 U.S. 833 (1992); however, Planned Parenthood did not litigate the section of the statute prohibiting abortion based on gender. In the Petitioner's Reply Brief for Petitioners and Cross-respondents, Planned Parenthood denied the Solicitor General's contention that Planned Parenthood did not challenge that provision because the group believed the law to be constitutional. See Norton, supra note 5, at 1600. Instead, Planned Parenthood explained that although Planned Parenthood believed that the sex-selective abortion provision violated the limits on abortion prohibition set forth in Roe v. Wade, 410 U.S. 113 (1973), the abortion provider believed that the provision could only be challenged by a plaintiff who could satisfy the standing requirement of Article III. See id. Reply Brief for Petitioners and Cross-respondents at note 20, Planned Parenthood v. Casev, 505 U.S. 833 (1992) (Nos. 91-744 and 91-902). An Illinois statute also regulates sex-selective abortion. ILL. REV. STAT., ch. 38, para. 81-26 § 6(8) (1991). Although the constitutionality of this statute was also the subject of litigation, the injunction obtained against its enforcement does not appear to include the provision against sex-selective abortion. See Keith v. Daley, 764 F.2d 1265 (7th Cir. 1985), cert. denied, 474 U.S. 980 (1985); and Charles v. Carey, 579 F. Supp. 464 (N.D. Ill. 1983). In addition, Utah has recently passed abortion regulations aimed at regulating sex-selective abortion. UTAH CODE ANN. § 76-7-301.1 (1992). Furthermore, two states have introduced bills that would ban sex-selective abortion. See Norton, supra note 5, at 1600. These include Massachusetts' proposed state constitutional amendment, and Wisconsin's proposed legislation. S. 1525, 177th General Court, 1991 Regular

constitutional right of personal autonomy only when there has been an important tradition of common and/or statutory law rejecting the right.²¹¹ Nevertheless, tradition probably does not serve as an adequate method by which to analyze the constitutionality of preconception gender selection.

Whether the right to preconception gender selection is found to be fundamental is important, for it determines the standard by which regulations of the technique will be measured. If the Court decides that the right to preconception gender selection is fundamental, subsequent court decisions will need to apply a strict scrutiny standard. The purpose of strict scrutiny is to ensure that the state is "pursuing a goal important enough to warrant use of a highly suspect tool. The test also ensures that the means chosen 'fit' this compelling goal so closely that there is little or no possibility that the motive for the classification was illegitimate...."

If the court finds that the right to preconception selection is a non-fundamental right, the court will apply the less stringent "rational basis" test.²¹⁴ Rational basis requires that the regulation be rationally related to legitimate governmental interests.²¹⁵

Preconception gender selection, being closely related to procreation and yet not directly affecting a couple's ability to procreate, might be labeled as a quasi-fundamental right. This would mean that courts, in determining whether a statute regulating preconception gender selection is constitutional, would apply the test of "intermediate or heightened scrutiny." Under "heightened" or "intermediate" scrutiny, the state must pursue an "important" objective, and the means chosen by the state must be "substantially related" to achieving that "important" objective. Unlike the test of "rational basis," the Court will not hypothesize the state's purpose; rather the state must show the actual objective that motivated the legislature. Under this approach, a state attempting to regulate preconception gender selection will need to point to policy arguments such as those mentioned above and show how the regulation is substantially related to achieving their objective.

Sess. Art. XXXII (Mass. 1991); A.B. 622, 90th Legis. Sess., 1991-92 Regular Sess. (Wis. 1991). See id.

^{211.} See Glucksberg, 521 U.S. at 711-19. For example, when the Supreme Court found no constitutional right to physician-assisted suicide, it observed that states have traditionally prohibited physician-assisted suicide. See id. Similarly, when the Court rejected a constitutional right to engage in homosexual sodomy, it cited a tradition of state laws outlawing the practice. See Bowers v. Hardwick, 478 U.S. 186, 191-94 (1986).

^{212.} See Griswold, 381 U.S. 479 (1965).

^{213.} City of Richmond v. J.A.Croson Co., 488 U.S. 469, 493 (1989)

^{214.} See Glucksberg, 521 U.S. at 726.

^{215.} See id.

^{216.} See Turner Broad. Sys. v. FCC, 520 U.S. 180, 189 (1997).

^{217.} See id.

^{218.} See id.

VI. CONCLUSION

Preconception gender selection should not be considered a fundamental right; rather, the technique should be considered a quasi-fundamental right. This would require any regulation of preconception gender selection to undergo "heightened" or "intermediate" scrutiny, forcing the state to show both an "important" objective and that the means chosen by the state are "substantially related" to achieving that "important" objective.

A number of the policy concerns raised against preconception gender selection are largely speculative and based upon data collected from other countries where the technique has been used. While situations like that occurring in India do raise some serious concerns about the technique, legislatures should not be quick to regulate gender selection on these grounds. It is difficult to interpret the data from India given the large differences between their culture and ours. As such, it is important that proper consideration be taken by legislatures to give the correct weight to findings from other countries.

The Supreme Court of the United States must always be vigilant when asked to put limits on matters of personal autonomy. In the absence of empirical evidence that preconception gender selection will have a negative effect in America, most of the opposition thus rests on ethical grounds. However, judging something as unethical should not be sufficient to justify legislation that would limit the liberty of everyone. Allowing people to live their lives in their own fashion and even to make some bad or even unethical decisions is inherent in our tradition of valuing liberty. A demonstration of actual, overriding harms is the only legitimate justification for constraining liberty. While this harm has been shown in India in the form of a skewed sex ratio, the United States has shown no actual harm and there is also little evidence that actual harm will occur.

Quite simply, there is and will probably always be a preference for natural reproduction over any form of technological intervention. Preconception gender selection, once perfected, will take its place among other available reproductive technologies and will likely be utilized by a very small segment of the population whose needs cannot be fulfilled by other less expensive, invasive, or artificial means. While the demand for such technology has been shown in the United States, it is nowhere near as intense as in India.

Furthermore, looking ahead, it would be nearly impossible to outlaw this technology, given the widespread acceptance of other reproductive technologies and prenatal screening as ways to use genetic knowledge to have healthy, wanted offspring. As witnessed in India, it can be difficult to regulate by way of requiring clinics to register before performing sex determination procedures. A clinic can easily determine gender as a part of numerous other lawful tests. As such, assuming that only clinics approved by such authorizing bodies will have access to preconception selection is shortsighted, especially

given the explosion of private sperm banks and gamete brokers, who may or may not adhere to government laboratory guidelines.

The American Society of Reproductive Medicine has adopted the best approach: proceed slowly at first, requiring studies into safety and efficacy.²¹⁹ Techniques for preconception sex selection, although not yet perfected, will probably be developed in the near future. Research should be allowed to proceed because of its potential benefits. We should allow potential parents and physicians to use the technology as they wish, and monitor the consequences. If we carefully follow the technique while it is in its infancy, by the time it matures enough to be widely used we will have a real basis for formulating sound policy and heading off any serious consequences that might arise. Moreover, the information about how people use preconception gender selection will be very useful for developing policies concerning other types of genetic screening that will soon be possible.

In final consideration, this cautious approach may merely lead us ten years down the road with still no definite rule as to the acceptability of preconception gender selection. As such, some might say the time to decide is now, and that there is little reason to wait. However, even the most careful analysis of policy arguments is still largely speculative. The cautionary approach will allow for a period of time where evidence can be collected, and the final decision, when made, can truly be in response to the effect of preconception gender selection in the United States.

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^{219.} See ASRM 2001, supra note 11, at 863-64.

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