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The United States' Undisturbed Silence and the United Kingdom's Strong Voice: Comparative Approaches to Regulation of Sex Selection

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I. INTRODUCTION

Throughout a pregnancy, among all the excitement and concern, one question lingers until the first ultrasound: Is it a boy or a girl? Some parents choose not to concern themselves with that question, hoping only for a healthy child. Others express a clear preference for one sex over the other. For the parents with a preference, new bio-technological procedures will allow parents to choose the sex of their unborn child.

Many see this ability to "pre-order" a child of a certain sex as harmless. Others see this expanding control of parents over their children as a slippery slope. As of now, a couple can only choose the sex of the child; not the hair color, eye color, height, IQ or other characteristics. However, as technology advances, parents will have the ability to design their babies before in vitro fertilization. For instance, a mother and father will be able to request a "made to order" 5' 10" blonde, blue eyed female with an IQ of one hundred sixty.

Aside from the personal opinions some may have about sex selection and the future of "designer babies," some governments have developed their own opinions and drafted regulations to match. One such country is the United Kingdom, whose Human Fertilisation and Embryology

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Authority requested heavy regulation of sex selection in 2003.¹ The United States, however, has not voiced a unified opinion on sex selection or a determination to regulate it.

The use of sex selection procedures in the United States is on the rise.² The increasing number of users, however, has not generated any public debate on the ethical issues surrounding sex selection, issues that are very similar to those surrounding the hot debates over abortion and cloning.³ This lack of debate is somewhat surprising, but it also seems to explain the lack of regulation, as an undebated subject is likely not on the top of the government's "to do" list.

President George W. Bush recognized the need to explore sex selection and the possibility of regulation and created a council to investigate the issue and make recommendations. Soon, the federal government is going to have to decide whether sex selection in the United States needs to be regulated. After introducing some background material regarding sex selection myths and procedures in Parts II-IV of this note, Part V will focus on the United Kingdom's approach, Part VI on the United States approach, Part VII on possible changes in the United States approach, and Part VIII on the constitutional implications of a decision to regulate sex selection in the United States. The lingering question is: after all the fuss over whether the United States should regulate sex selection, would such regulation violate current Constitutional law? This note will conclude that it will.

II. WHY DO COUPLES WANT TO CHOOSE THE SEX OF THEIR CHILD?

¹ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, SEX SELECTION: OPTIONS FOR REGULATION (2003), at 37, available at http://www.hfea.gov.uk/AboutHFEA/Consultations (last visited October 18, 2005).

² LEON R. KASS, ET AL., PRESIDENT'S COUNCIL ON BIOETHICS, REPRODUCTION AND RESPONSIBILITY: THE REGULATION OF NEW BIOTECHNOLOGIES (Mar. 2004), *available at* http://www.bioethics.gov/reports/reproductionandresponsibility (last visited October 18, 2005).

³ LEON R. KASS, ET AL., PRESIDENT'S COUNCIL ON BIOETHICS, BEYOND THERAPY: BIOTECHNOLOGY AND THE PURSUIT OF HAPPINESS (Oct. 2003), *available at* http://www.bioethics.gov/reports/beyondtherapy (last visited October 18, 2005).

⁴ Exec. Order No. 13,237, 66 Fed. Reg. 59,851 (Nov. 30, 2001).

There are a variety of reasons for couples to wish to choose their child's sex. The most common reason is to avoid the transfer of a genetic sex-linked disorder.⁵ For example, Duchenne's Muscular Dystrophy is a sex-linked disorder that affects only males.⁶ A couple with a family history of Duchenne's may wish to have a girl to avoid the transfer of the sex-linked disorder.

Some couples want to use sex selection procedures for family balancing purposes.⁷ For example, if a couple has two sons and wants to conceive a girl, but only wants one more child, that couple may want to use sex selection to assure that they have a girl. A final reason to choose the sex of a child is cultural.⁸ Some cultures prefer one sex over the other, usually favoring a male child over a female child.⁹

III. THE MYTHICAL PRACTICE PREDATES THE MEDICAL PRACTICE

Sex selection procedures have been practiced for many years, guided by myth, rather than medicine. One Chinese myth involves a conception chart. The chart is supposed to determine the sex of the baby by the date on which it was conceived. The moon cycle was also

⁵ Baby gender selection ruled out, BBC NEWS, Nov. 12, 2003, at http://news.bbc.co.uk/1/hi/health/3257893.stm (last visited Oct. 18, 2005).

⁶ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, *supra* note 1, at 4.

⁷ Many parents 'would choose baby's sex', BBC NEWS, Dec. 17, 2002 at http://news.bbc.co.uk (last visited Oct. 29, 2004).

⁸ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, *supra* note 1, at 4.

⁹ *Id*.

¹⁰ Virginia Gilbert, *Low Tech Ways to Chose Your Baby's Gender*, Parenting, L.L.C., *at* http://preconception.com/resources/articles/choosep1.htm (last visited Oct. 18, 2005).

¹¹ *Id*

¹² *Id*.

a popular 'predictor' of the sex of a baby. 13 It was rumored that boys were conceived when there was a quarter moon and girls when there was a full moon. 14

Another myth involves the woman's eating habits.¹⁵ Many believe that a woman's eating habits before and after conception will determine whether she has a boy or girl.¹⁶ The most popular idea is that a woman will increase her chances of having a baby boy if she eats a lot of meat and salty foods.¹⁷ To increase her chances of having a baby girl, the woman should eat sweets and desserts.¹⁸

The mythical techniques are not limited to "Old Wives' Tales." Many professionals claim that they have developed conception techniques that will increase a couple's chances of having a baby of the desired sex. One such professional is Dr. Landrum B. Shettles. Dr. Shettles claims that couples should expect a seventy-five percent chance of success when they use his sex selection procedure called the "Shettles Method." According to the Shettles Method, couples who are hoping for a boy should attempt to conceive during ovulation. ²²

¹³ Gilbert, *supra* note 10.

¹⁴ *Id*.

¹⁵ *Id*.

¹⁶ *Id*.

¹⁷ *Id*.

¹⁸ *Id*.

¹⁹ *Id*.

²⁰ *Id*.

²¹ *Id*

²² *Id*.

Couples wishing for a baby girl, on the other hand, should attempt to conceive before or after ovulation.²³

Elizabeth Whelan also claims to have the secret to conceiving a baby of the desired sex.²⁴ The "Whelan Method," however, has a lower success rate than Dr. Shettles' method.²⁵ The success rate with the Whelan Method is only sixty-eight percent for those couples attempting to conceive boys and fifty-seven percent for those couples hoping for a girl.²⁶ The Whelan Method is the exact opposite of the Shettles Method.²⁷ Ms. Whelan predicts that boys will be conceived before or after ovulation, while girls will be conceived during ovulation.²⁸

IV. THE MEDICAL PRACTICE: RECENT TECHNOLOGICAL BREAKTHROUGHS

Before the emergence of complicated new sex-selection medical procedures, if the mythical techniques did not work, the only option for couples who conceived a baby of the unwanted sex was selective abortion or infanticide.²⁹ The development of new medical procedures increased the probability of conceiving a child of the desired sex, hopefully resulting in a decrease in selective abortions and infanticide.³⁰

²³ Gilbert, *supra* note 10.

²⁴ *Id*.

²⁵ *Id*.

²⁶ *Id*.

²⁷ *Id*.

²⁸ *Id*.

²⁹ BBC NEWS, *supra* note 5.

³⁰ Claudia Kalb, *Brave New Babies*, NEWSWEEK, Jan, 26, 2004, http://www.msnbc.msn.com/id/3990134/site/newsweek.

One high-tech method of sex selection is pre-implantation genetic diagnosis. With this method, an embryo is created outside of the body in a laboratory.³¹ After fertilization, cells are removed from the embryo through an embryo biopsy.³² The cells are removed either with a sharp pipette, an acidic solution or a laser.³³ Once the cells are removed, they are examined to determine whether the created embryo is male or female.³⁴ If the embryo is determined to be of the desired sex, it is transferred into the woman's body through *in vitro* fertilization.³⁵

In many cases, more than one embryo is created to increase the chances of creating an embryo of the desired sex.³⁶ If any of the embryos created are determined to be of the undesired sex, they may be discarded.³⁷ This creation and destruction of embryos is one of the major criticisms of pre-implantation genetic diagnosis. The guarantee that the child will be of the chosen sex with pre-implantation genetic diagnosis is almost one hundred percent, but the procedure is very expensive (around \$18,500).³⁸

Another new method of sex selection is called "Flow Cytometry," a type of sperm sorting.³⁹ With this method, no embryos are created outside the body. The sperm are simply sorted outside the body before implantation and only the sperm that will produce a baby of the

³¹ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, *supra* note 1, at 14, n. 14.

³² KASS ET AL., *supra* note 2, at 91.

³³ *Id*.

³⁴ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, *supra* note 1, at 14, n. 14.

³⁵ *Id*.

³⁶ *Id*.

³⁷ *Id*.

³⁸ Kalb, *supra* note 31.

³⁹ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, *supra* note 1, at 26.

desired sex are implanted.⁴⁰ To distinguish between X and Y sperm a physician adds fluorescent dye to a sperm sample.⁴¹ The two types of sperm are distinguishable because X sperm have more DNA, so they attract more dye.⁴²

The most popular method of sperm sorting is called MicroSort.⁴³ MicroSort was originally created by the Department of Agriculture to sort livestock sperm.⁴⁴ With this procedure, sperm are mixed with dye to identify the X and Y, and sperm of the desired sex are separated and implanted.⁴⁵ This method is mostly used by couples who have no fertility problems.⁴⁶ The success rate with MicroSort is seventy percent for couples attempting to conceive a male and ninety-one percent for couples attempting to conceive a female.⁴⁷

A less popular method of sex selection is the gradient method. With this method, a centerfuge is used to separate sperm based on its X or Y composition.⁴⁸ There is not much information available on the safety or use of gradient methods, and the success rate with these methods is debatable.⁴⁹

V. IS REGULATION OF SEX SELECTION NECESSARY? THE UNITED KINGDOM SAYS "YES."

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<sup>40</sup> KASS ET AL., supra note 2, at 93.
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⁴¹ *Id*.

⁴² *Id*.

⁴³ Kalb, *supra* note 31.

⁴⁴ *Id*.

⁴⁵ *Id*.

⁴⁶ *Id*.

⁴⁷ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, *supra* note 1, at 8 n.12.

⁴⁸ *Id.* at 28.

⁴⁹ *Id*.

The United Kingdom's government, concerned about the new sex selection procedures being developed, asked the Human Fertilisation and Embryology Authority (HFEA) to conduct a review of sex selection techniques and to survey public opinion on the subject.⁵⁰ The HFEA is a statutorily created licensing authority that regulates any procedure involving the creation or use of human embryos outside the body.⁵¹

The HFEA conducted qualitative research through discussion groups with members of the public to get an idea of how U.K. citizens felt about sex selection, both for medical and other reasons.⁵² The HFEA also sent out voluntary questionnaires asking people to share their views about sex selection both for medical reasons and social reasons.⁵³ Quantitative research was also performed through face-to-face discussions with U.K. citizens, focusing on public perception and opinion.⁵⁴ Finally, there was a review of scientific literature focusing on sex selection procedures.⁵⁵

The HFEA's study revealed that sixty-eight percent of the population in the United Kingdom thinks that sex selection should be regulated.⁵⁶ Seventeen percent of the population believes that sex selection should be unregulated.⁵⁷ While this percentage remained steady, there were slight variations when survey respondents considered the following factors: whether the

⁵⁰ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY. *supra* note 1, at 8.

⁵¹ *Id.* at 5.

⁵² *Id.* at 9.

⁵³ *Id.* at 15.

⁵⁴ *Id.* at 13.

⁵⁵ *Id.* at 10.

⁵⁶ *Id.* at 14.

⁵⁷ *Id*.

decision to use sex selection procedures was for a "good medical reason, the invasiveness of the technique, the reliability of the method used and the consequences of misdiagnosis." ⁵⁸

After reviewing the findings of its study, the HFEA made the recommendation that all sex selection be regulated.⁵⁹ The HFEA recommended a complete prohibition of sex selection for non-medical reasons.⁶⁰ Sex selection procedures for medical reasons will be permitted (including pre-implantation diagnosis and flow cytometry/sperm sorting).⁶¹ However, each procedure used for medical reasons needs to be licensed by the HFEA.⁶² "Medical reasons" only exist if the patient is "at a significant risk of passing on a serious sex-linked genetic condition to their offspring."⁶³ The HFEA made its decision by balancing the adverse consequences of using sex selection against the consequences of not using it when a serious medical disorder may result.⁶⁴ For situations in which sufficient medical reasons exist, a less intrusive procedure of equal or lower risk to the health of the mother and offspring should be used if possible.⁶⁵

The HFEA also set out some general rules that need to be followed when a sex selection procedure is used. First, detailed data needs to be collected regarding treatment with sex-selection procedures and the outcome of such procedures. Second, before receiving treatment, those seeking sex selection for medical reasons need to be offered counseling and to be informed

 $^{^{58}}$ Human Fertilisation and Embryology Authority, supra note 1, at 12.

⁵⁹ *Id.* at 37.

⁶⁰ *Id.* at 32.

⁶¹ *Id.* at 37.

 $^{^{62}}$ Id

⁶³ *Id.* at 31.

⁶⁴ *Id.* at 30.

⁶⁵ *Id.* at 30-31.

⁶⁶ *Id.* at 30.

of all the aspects and possible effects of the procedure.⁶⁷ Third, a thorough "welfare of the child" study must be conducted before any sex selection procedure is offered.⁶⁸ The welfare of both the embryo and any existing siblings needs to be considered.⁶⁹ The HFEA determined that such a study is necessary because of the risk that a child born of the undesired sex (in a case in which the procedure fails), will be treated prejudicially.⁷⁰ There is also the risk that previous children in the family will be neglected once a child of the desired sex is born.⁷¹ If it is determined that the child of the undesired sex will suffer as a result of the parents frustrated expectations, or that preexisting children will suffer because the sex-selected child will be favored, sex selection should not be allowed.⁷²

While the HFEA gave a general statement recommending allowance of sex selection through licensed procedures for significant medical reasons, it made a more restrictive prohibition for a specific sex-selection procedure: gradient methods.⁷³ The HFEA recommended that gradient methods should not be allowed for any purpose, including medical purposes.⁷⁴ The HFEA made this decision based on the limited evidence available on the safety and success of gradient methods.⁷⁵

⁶⁷ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, *supra* note 1, at 29.

⁶⁸ *Id.* at 37.

⁶⁹ *Id*.

⁷⁰ *Id*.

⁷¹ *Id*.

⁷² *Id*.

⁷³ *Id.* at 32, 36.

⁷⁴ *Id.* at 32, 36-37.

⁷⁵ *Id.* at 32.

In conclusion, the United Kingdom only allows pre-implantation genetic diagnosis and flow cytometry/sperm sorting to be performed in licensed facilities when there is a significant medical reason for the procedure.⁷⁶ The United Kingdom does not allow sex-selection by gradient methods for any reason.⁷⁷ In the United Kingdom, all sex-selection procedures are heavily regulated.⁷⁸

VI. IS REGULATION OF SEX-SELECTION NECESSARY? THE UNITED STATES IS SILENT.

Currently, the United States is not regulating sex-selection, nor are the states.⁷⁹ The closest this country has come to sex selection regulation is regulation through litigation and regulation through professional guidelines, most of which are hortatory.⁸⁰

Society has not initiated litigation involving sex selection itself, but has initiated malpractice suits involving procedures that can be used for sex selection.⁸¹ One such malpractice suit involved pre-implantation genetic diagnosis, a procedure sometimes used for sex selection, which was performed before implantation of an embryo.⁸² The suit was based on the physician's failure to test the embryo for cystic fibrosis, a disease known to run in the egg donor's family.⁸³ The *Paretta* court ruled that a child born of an embryo that underwent pre-

 $^{^{76}}$ Human Fertilisation and Embryology Authority, *supra* note 1, at 26, 31-32, 35.

⁷⁷ *Id.* at 32-33.

⁷⁸ *Id.* at 37.

⁷⁹ KASS ET AL., *supra* note 2, at 99.

⁸⁰ *Id.* at 100-01.

⁸¹ *Id.* at 100.

⁸² Paretta v. Medical Offices for Human Reproduction, 760 N.Y.S.2d 639 (Sup. Ct. 2003).

⁸³ *Id.* at 642.

implantation genetic diagnosis does not have a right of recovery for the transfer of a disease that could have been screened and prevented before *in vitro* fertilization, and the parents do not have a right of recovery for emotional distress.⁸⁴ To allow such recovery would give children born of an embryo treated with pre-implantation genetic diagnosis (and parents of that child) more rights than a child (and parents of that child) born of an untreated embryo.⁸⁵ The court also recognized that such issues are best left to the legislature.⁸⁶ Although this case did not address pre-implantation genetic diagnosis as a sex selection procedure, the ruling will likely apply if a child or parent attempts to sue for failure of pre-implantation diagnosis to result in a child of the desired sex. As this case illustrates, litigation has not yet resulted in court initiated regulation of sex selection.

Other than litigation, the only other source of quasi-regulation comes from professional guidelines or codes of ethics.⁸⁷ However, most of these guidelines and codes are suggestive, not mandatory.⁸⁸ According to the American Medical Association's Code of Ethics (the Code), it is "unethical to engage in selection on the basis of non-disease related characteristics or traits."⁸⁹ Under the Code, sex-selection for non-medical reasons would likely be considered for "non-disease related characteristics" and would therefore be deemed unethical.⁹⁰

⁸⁴ Paretta, 760 N.Y.S.2d at 644-46 (citing Becker v. Schwartz, 413 N.Y.S.2d 895).

⁸⁵ *Id.* at 646.

⁸⁶ *Id.* at 645.

⁸⁷ KASS ET AL., *supra* note 2, at 101-02.

⁸⁸ *Id.* at 101-02.

⁸⁹ *Id.* at 102.

⁹⁰ *Id.* at 101-02.

The American Society for Reproductive Medicine (ASRM) also publishes reports providing ethical guidance for physicians practicing reproductive medicine. ⁹¹ In a recent report, the ASRM declared that sex selection through pre-implantation genetic diagnosis is "ethically acceptable" when performed for medical reasons. ⁹² The report discouraged sex selection using pre-implantation diagnosis for any other reason because of the risk that it may promote gender discrimination. ⁹³ A separate ASRM report addressed sperm sorting for sex selection and reasoned that such a procedure is ethically acceptable for medical reasons or for gender balancing within a family. ⁹⁴ Similar to the American Medical Association's Code, these ASRM reports are statements of principle and not enforced standards. ⁹⁵ Neither the Code nor the ASRM reports prohibit a physician from performing sex selection procedures for non-medical reasons.

Due to the lack of sex selection regulation, President George W. Bush created a Council on Bioethics (the Council). The Council was created through Executive Order 13237 and continued through Executive Order 13316. The purpose of the Council was and is as follows: "The Council shall advise the President on bioethical issues that may emerge as a consequence of advances in biomedical science and technology." The Council prepares in-house reports about bioethical issues, such as the development and spread of sex selection techniques, and has

⁹¹ KASS ET AL., *supra* note 2, at 101.

⁹² *Id.* at 101.

⁹³ *Id*.

⁹⁴ *Id*.

⁹⁵ *Id*.

⁹⁶ Exec. Order No. 13,237, 66 Fed. Reg. 59,851 (Nov. 30, 2001).

⁹⁷ Exec. Order No. 13,316, 68 Fed. Reg. 55,255 (Sept. 23, 2003).

⁹⁸ Exec. Order No. 13,237, 66 Fed. Reg. at 59,851.

council meetings to discuss the reports.⁹⁹ After discussing the reports, the Council publishes recommendations and advises the President whether regulation is necessary.¹⁰⁰

In its most recent report, the Council discussed sex selection at length.¹⁰¹ After researching the availability and popularity of sex selection procedures in the United States, hearing from various experts in the field and reviewing available policy options, the Council concluded that it was not prepared to offer a comprehensive plan for regulation until further investigation takes place.¹⁰² The Council recognized that, while regulation may be necessary, it is hesitant to recommend heavy regulation in this sensitive area, an area involving private matters such as procreation, family life and infertility.¹⁰³ The Council decided that these highly private matters should not be disturbed before a complete investigation and discussion of issues surrounding sex selection has been made.¹⁰⁴

The Council also noted the desirability of avoiding the costs of new regulations before a complete investigation has determinatively shown that regulation of sex selection is necessary. With future investigation, the Council hopes to discover whether and how the health of mothers and children are effected by sex selection procedures and how often sex selection is practiced. We have the costs of new regulations before a complete investigation has determinatively shown that regulation of sex selection is necessary.

⁹⁹ Exec. Order No. 13,237, 66 Fed. Reg. at 59,851.

¹⁰⁰ *Id*.

¹⁰¹ KASS ET AL., *supra* note 2.

¹⁰² *Id.* at 205.

¹⁰³ *Id*.

¹⁰⁴ *Id*.

¹⁰⁵ *Id.* at 183.

¹⁰⁶ *Id.* at 205-06.

Until these questions have been answered, the Council will not risk recommending drastic legal change. 107

While the Council was careful to point out that it was not yet prepared to affirmatively recommend regulation of sex selection, it hinted that it would likely make such a recommendation in the near future, after further investigation and discussion. To give the President an idea of what recommendations to expect, the Council described "five categories of potential institutional change: (1) a new regulatory agency; (2) new authority granted to existing regulatory agencies; (3) specific legislative action; (4) the use of government funding as a regulatory lever; and (5) increased oversight and self-regulation by the relevant professional societies."

The first potential recommendation, creation of a new regulatory agency, is similar to the steps the United Kingdom took with the creation of the Human Fertilisation and Embryology Authority (HFEA).¹¹⁰ The administrative agency would be part of the Executive Branch and would be charged with specific duties by Congress. The benefit of an executive agency devoted exclusively to the regulation of biomedical technologies is obvious- there would be complete oversight and governmental presence over a field that the government currently has no voice in.¹¹¹ The major problem with the creation of a new executive agency, however, is the cost of creation and maintenance.¹¹²

¹⁰⁷ KASS ET AL., *supra* note 2, at 206.

¹⁰⁸ *Id.* at 184.

¹⁰⁹ *Id.* at 186.

¹¹⁰ *Id.* at 186-87.

¹¹¹ *Id.* at 187.

¹¹² *Id*.

To reduce the cost factor of executive presence in the field of sex selection while maintaining the presence, the Council suggests its second potential recommendation: granting the authority to regulate biomedical technologies to an existing agency. The obvious candidate for such an expansion of regulatory authority would be the Food and Drug Administration (FDA). Currently, the only way the FDA is involved in regulation of sex selection is through its regulation of genetic testing kits. However, sex selection techniques generally do not require use of such FDA approved test kits. The benefit of expanding a preexisting executive agency's authority to include regulation of sex selection is the low cost and the speed with which the change can be implemented. The problem with granting a preexisting agency the authority to regulate sex selection is the lack of attention that sex selection will receive from an agency already devoted to the oversight of so many other important issues.

The third potential recommendation that the Council mentions is legislative action. The Council considers the possibility that sex selection regulation may require specific legislative attention and reaction. The Council may decide that Congress needs to deal with

¹¹³ KASS ET AL., *supra* note 2, at 188.

¹¹⁴ *Id*.

¹¹⁵ *Id.* at 99.

¹¹⁶ *Id*.

¹¹⁷ *Id.* at 188.

¹¹⁸ *Id.* at 189.

¹¹⁹ *Id*.

¹²⁰ *Id*.

this regulation itself, rather than granting such powers to an executive agency.¹²¹ Instead of drafting an entirely new act, Congress may wish to amend a current act, such as the Clinical Laboratory Improvement Amendments (CLIA).¹²² CLIA currently regulates human "diagnostic tests," but it "does not apply to tests preformed" before *in vitro* fertilization.¹²³ Whether Congress chooses to draft a new act or amend an existing act, any legislative act may better serve our democratic country by allowing more direct involvement by the people.¹²⁴ However, a Congressional act will be a slow and complicated process.¹²⁵ It will also put limits on the flexibility of regulation and will not allow for continued oversight of sex selection.¹²⁶ Congress cannot be expected to continue to monitor sex selection and the need for its regulation amongst its other duties and responsibilities.

Another potential recommendation that the Council prepares the President for is the need for Congressional use of its appropriations power. Congress can withhold appropriate federal funds (such as funds for state medical facilities) from states that refuse to regulate undesired sexselection procedures, while distributing federal funds to states that do regulate the practices. While simplicity and immediacy make this a desirable form of regulation, it is weak, and the

¹²¹ KASS ET AL.. supra note 2, at 189.

¹²² *Id.* at 99.

¹²³ *Id*.

¹²⁴ Id. at 190, 246.

¹²⁵ *Id.* at 190.

¹²⁶ See id.

¹²⁷ *Id*

¹²⁸ *Id.* at 190-91.

Council may instruct the President to come forward with a stronger voice when it comes to sex selection. 129

A final potential Council recommendation is increased oversight and regulation of sex selection by professional societies. The Council suggests making substantive changes to professional regulations, such as making guidelines and codes mandatory instead of suggestive. The Council also suggests increasing penalties for noncompliance with professional regulations. The benefit of increased oversight by professional organizations is that professionals generally appreciate government allowance of self-regulation instead of government intervention. The problem with relying on professional societies to regulate is the risk of non-enforcement.

After warning the President of future institutional changes the Council may endorse, the Council suggests several intermediate substantive changes. The Council first suggests federally mandated data collection of sex selection procedures' performance and outcomes. If the government continues on its current path, with the National Children's Study (NCS) conducted by the National Institute of Child Health and Human Development and scheduled to

¹²⁹ KASS ET AL., *supra* note 2, at 190-91.

¹³⁰ *Id.* at 192.

¹³¹ *Id*.

¹³² *Id*.

¹³³ *Id*.

¹³⁴ *Id*.

¹³⁵ *Id.* at 193.

¹³⁶ *Id.* at 194.

begin in 2005, federally mandated data collection should not be a problem.¹³⁷ The study will track the health of 100,000 children in the United States who were conceived with assisted reproductive technologies, some of whom have or will be born of an embryo treated with PGD or from sperm sorted before *in vitro* fertilization.¹³⁸

While the NCS will provide a strong vehicle for data collection regarding sex selection in the United States, the Council reminds the President that the federal government can do more to mandate such collection by amending the Fertility Clinic Success Rate and Certification Act (FCSRA). The FCSRA currently documents success rates of assisted reproduction technologies, including pre-implantation sex selection, and such rates are documented for consumers considering assisted reproduction technology. The Council suggests amending the FCSRA by requiring the publication of all adverse health effects associated with the births and of the experimentation that occurred before the procedure was offered on the market.

In addition to federally mandated data collection, the Council also mentions the desirability of improved informed consent procedures for potential sex selection patients to undergo before sex selection takes place.¹⁴² The Council also warns the President of the risk of allowing sex selection to be performed on humans after only minimal lab research and experimentation on animals.¹⁴³ Due to the risk this lack of research may pose for sex selection

¹³⁷ KASS ET AL., *supra* note 2, at 208.

¹³⁸ *Id.* at 208.

¹³⁹ *Id.* at 210.

¹⁴⁰ *Id*.

¹⁴¹ *Id.* at 210-11.

¹⁴² *Id.* at 195.

¹⁴³ *Id*.

patients, the Council suggests that a governmental body develop and enforce more rigorous experimentation standards.¹⁴⁴ The Council also suggests an increase in governmental funding distributed to attempt improvements in sex selection and other assisted reproduction techniques.¹⁴⁵ Finally, the Council suggests that professional agencies increase oversight of sex selection and enforcement of ethical guidelines.¹⁴⁶

While the Council further investigates the safety and use of sex selection in the United States, this array of intermediate changes (including federally mandated data collection, improved informed consent procedures, increased federal oversight over experimentation, increased governmental funding devoted to improvement of sex selection procedures, and increased professional oversight) will have to suffice. When the Council receives answers to the questions that have not yet been answered, it will endorse all or some of the institutional changes it warned the President of in its most recent publication. Until then, regulation of sex selection in the United States is weak, if not non-existent.

VII: SHOULD THE UNITED STATES END ITS SILENCE AND BEGIN TO REGULATE SEX SELECTION?

As noted earlier, the United States government is careful not to regulate in an area so sensitive as procreative liberty without having all the facts in order. However, the need for some sort of regulation is clear when all of the problems identified with freely allowing sex selection are examined. The first problem is the lack of definitive research indicating that these

¹⁴⁴ KASS ET AL., *supra* note 2, at 195.

¹⁴⁵ *Id.* at 196.

¹⁴⁶ *Id.* at 215-17.

¹⁴⁷ *Id.* at 204.

¹⁴⁸ *Id.* at 183.

new technologies are safe for the mother and the embryo. The few studies that have taken place indicate potential health problems for mother and baby when sex selection precedes *in vitro* fertilization. Some of these early studies have shown risks to the mother's health, such as ovarian hyperstimulation syndrome, which results from the stimulation of a woman's ovaries to produce more mature eggs than her body is used to. There are also risks to the mother's health associated with multiple pregnancies, which are more common with *in vitro* fertilization than with natural conception. The state of the mother of the state of th

As far as the baby's health, studies have shown that the risk of minor birth abnormalities is five percent higher with some insemination methods (specifically sperm injection) than it is for natural birth. There is also the issue of a woman's body's ability to carry a child of a specific sex. Doctors suggest that some women are not built to carry both sexes; some bodies make it difficult to carry girls, others have difficulty carrying boys. To inseminate a woman with separated sperm or embryo in an attempt to produce a child of a specific sex, a sex the woman may not be capable of carrying, may increase the chances of a miscarriage or fetal abnormality. The second specific sex is a sex the woman and the second sec

In addition to miscarriages and birth defects, there may be further adverse health effects that are not expressed until later in life or in future generations. Since sex selection is a new

¹⁴⁹ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, *supra* note 1, at 27.

¹⁵⁰ *Id.* at 5.

¹⁵¹ KASS ET AL., supra note 2, at 43.

¹⁵² HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, *supra* note 1, at 21.

¹⁵³ *Id.* at 22.

¹⁵⁴ *Id*.

¹⁵⁵ *Id*.

phenomenon, there is no way researchers can determine the full scope of its effects on offspring and future generations until years of observation have been conducted. This risk of unknown adverse effects was enough to convince the HFEA in the United Kingdom to regulate sex selection.

While the health issues may seem reason enough to regulate sex selection, there are many other social issues that are advanced in favor of regulation. One of the most persuasive social arguments in favor of sex selection is the possibility that sex selection will allow a skewing of the sex ratio, especially in cultures that prefer one sex over the other.¹⁵⁸ There is evidence that this has already occurred among some cultures in the United States.¹⁵⁹ For example, in 1984, 104.6 Chinese-American boys were born for every 100 Chinese-American girls and 102.6 Japanese American boys were born for every 100 Japanese American girls.¹⁶⁰ In 2000, the ratio of Chinese-American boys to girls had risen to 107.7 boys to 100 girls and the ratio of Japanese-American boys to girls had risen to 106.4 boys to 100 girls.¹⁶¹ This rise of male births and decline of female births among two major cultures in the United States is striking and a very persuasive argument for regulation of sex selection. Along the same lines as the skewing of the sex ratio argument is the suggestion that allowing sex selection will result in sex discrimination in countries that prefer one sex over the other.

 $^{^{156}}$ Human Fertilisation and Embryology Authority, supra note 1, at 27.

¹⁵⁷ *Id*.

¹⁵⁸ KASS ET. AL., *supra* note 3, at 60-61.

¹⁵⁹ *Id*.

¹⁶⁰ *Id*.

¹⁶¹ *Id.* at 61.

Another argument in favor of regulation of sex-selection is more specific to family problems. Critics of sex selection argue that the relationships of parents and children will turn from unconditional love to critical scrutiny. Parents will try to mold their children into something the parents want instead of focusing on what the child wants. For example, if Dad wants a son to go fishing with him, he will be less likely to accept the fact that his son does not like fishing. If Mom wants a daughter to go shopping with her, she will be less likely to accept the fact that her daughter would rather play sports than shop. Allowing parents to select the sex of their child will give parents the false impression that they can turn their children into something the parent desires, instead of reinforcing the idea that parents need to accept their children for who they are.

Another problem families may face with sex selection will occur if the sex selection fails, and a child of the undesired sex is born. Parents who conceive naturally will generally accept the child no matter what the sex is, but parents who pay for sex selection may have difficulty accepting a child born of the undesired sex. ¹⁶⁴ Existing children may also suffer if parents are allowed to choose the sex of their child. ¹⁶⁵ If a couple has three naturally conceived girls, but uses sex selection for the fourth pregnancy in order to have the boy they've always wanted, the girls may suffer when the boy is born because the parents will treat the selected child as more desirable than the naturally conceived girls. ¹⁶⁶

¹⁶² KASS ET. AL., *supra* note 3, at 70-71.

¹⁶³ *Id.* at 70.

¹⁶⁴ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, *supra* note 1, at 18.

¹⁶⁵ *Id*

¹⁶⁶ *Id.* at 18-19.

An important argument in favor of regulation of sex selection is the "slippery slope" argument. Critics argue that allowing sex selection is the beginning of allowing selection of "better children." If we allow sex selection today, will we allow selection for other characteristics such as height, eye color, hair color or IQ? Under our present law, or lack thereof, a parent would be allowed to choose each of these characteristics of their child. This creation of designer babies would be commercially attractive, but many argue it would be ethically questionable. 169

All of the preceding arguments in favor of regulation of sex selection have been centered around the ends: the effects of sex selection on parents, offspring and society. There is also a persuasive argument centered around the means by which sex selection occurs, specifically with regard to pre-implantation genetic diagnosis. With this method of sex selection, all embryos created that are determined to be of the undesired sex are not implanted through *in vitro* fertilization. So what happens to these embryos? They are destroyed. The destruction of embryos has been a hot issue surrounding the debate over stem cell research and will likely emerge as the major argument in favor of regulation of sex selection techniques that involve the creation and possible destruction of embryos.

¹⁶⁷ HUMAN FERTILISATION AND EMBRYOLOGY AUTHORITY, *supra* note 1, at 11.

¹⁶⁸ *Id.* at 22.

¹⁶⁹ *Id.* at 18.

¹⁷⁰ *Id.* at 14.

¹⁷¹ *Id*.

¹⁷² *Id*

¹⁷³ *Id*.

While there are many persuasive arguments in favor of regulation of sex selection, there are equally persuasive arguments in favor of non-regulation. One such argument is that allowing sex selection discourages parents from practicing selective abortion. Also, couples who have the option of sex selection from the beginning may choose to have fewer children, resulting in less of a burden on the state in the form of welfare resources.

A popular argument in favor of allowing sex selection is that it will slow population growth, which has been a concern in recent decades as vacant land is decreasing by the minute. A more familial related argument in favor of sex selection is that it will increase the happiness of parents by allowing them to fulfill religious or cultural expectations. On a similar note, it may also increase the happiness of children because they are actually chosen by their parents.

While these arguments are all persuasive in their own right, the most often asserted prosex selection argument is centered around personal liberties and rights. In the United States, and in other countries, contraception, consensual sexual activity, procreation and familial relations are valued personal rights. To regulate the ability of parents to choose the sex of their own child will intrude upon this sensitive area normally left unscathed by the government.

VIII: BEFORE WE BREAK THE SILENCE, CAN THE UNITED STATES CONSTITUTIONALLY REGULATE SEX SELECTION?

¹⁷⁴ BBC NEWS, *supra* note 5.

 $^{^{175}}$ Human Fertilisation and Embryology Authority, supra note 1, at 18.

¹⁷⁶ KASS ET AL., *supra* note 3, at 64.

¹⁷⁷ *Id*.

According to the Council on Bioethics, the United States government is not constitutionally prohibited from regulating sex selection. The Council has repeatedly recognized this country's respect for procreative and familial liberty, but has concluded that this respect does not prohibit the federal government from regulating sex selection. The Council's opinion is contrary to the conclusion of this note. While the reasons for regulating sex selection are extremely persuasive, the Supreme Court has interpreted our Constitution in a way that will require that the Court declare unconstitutional almost any regulation of sex selection. When a case involving regulation of sex selection comes before the Supreme Court, the Court will lose credibility if it chooses to take a detour from the expansive procreative and parental liberty path it has been following since 1925.

One of the earliest cases to address familial liberty was *Pierce v. Society of Sisters* in 1925.¹⁸¹ *Pierce* involved a challenge to an Oregon law that required parents to send their children to public schools instead of private parochial schools.¹⁸² The *Pierce* court ruled that such a law, mandating that a parent send his or her child to a certain type of school, interferes with the liberty of parents and guardians to direct the upbringing and education of their own children.¹⁸³ The Court emphasized that children are not mere "creatures of the state" and that parents and guardians have the right to nurture their child and to "direct [their child's]

¹⁷⁸ LEON R. KASS, ET AL., PRESIDENT'S COUNCIL ON BIOETHICS, STAFF WORKING PAPER: ETHICAL ASPECTS OF SEX CONTROL (Jan. 2003), available at http://www.bioethics.gov/background/sex_control.html (last visited Mar. 5, 2005).

¹⁷⁹ *Id*.

¹⁸⁰ Pierce v. Society of Sisters, 268 U.S. 510 (1925).

¹⁸¹ *Id.* at 510.

¹⁸² *Id.* at 529.

¹⁸³ *Id.* at 534-35.

destiny."¹⁸⁴ This case has been recognized as legitimate precedent in many substantive due process cases handed down by the Supreme Court, so there is no reason why the Court should abandon it when a sex selection case poses similar questions.

Considering the principles established in *Pierce*, if a future sex selection regulation is constitutionally challenged before the Supreme Court, the Court will need to recognize a parent's right to "direct [his/her child's] destiny" by choosing the way in which the child will be identified on this Earth. If the court chooses to uphold sex selection regulations, it will interfere with the parent's right to "direct [his child's] destiny" and will make children mere "creatures of the state," which is precisely what the *Pierce* court sought to prevent 80 years ago.

Pierce is not the only precedent the Supreme Court would be abandoning or severely limiting if it decided to uphold future sex selection regulations. A more recent case involving rights of a guardian is *Moore v. East Cleveland*. In *Moore*, a zoning ordinance forbade a grandmother to allow her two grandsons to live with her because the grandsons were cousins, instead of siblings. Is For present purposes, the important part of the ruling in *Moore* is the recognition of the right, rooted in substantive due process, to compose one's own family. Is The grandmother in this case had the right to compose her own familial household to include both of her grandsons, and it was unconstitutional for the City of Cleveland to interfere with that right. This case stands for the broad principle that the state cannot constitutionally interfere with the individual's right to form a family.

¹⁸⁴ Pierce, 268 U.S. at 535.

¹⁸⁵ Moore v. East Cleveland, 431 U.S. 494 (1977).

¹⁸⁶ *Id.* at 496.

¹⁸⁷ *Id.* at 499.

¹⁸⁸ *Id.* at 505-06.

If the Supreme Court does hear a case involving regulation of sex selection, *Moore* will direct the court to consider sex selection in light of the substantive due process right to compose one's own family. If the Court views the principle of *Moore* as a broad concept, it must conclude that the right to compose one's own family includes the right to choose the sex of unborn children. However, the court has been careful to recognize that substantive due process rights, if read to broadly, can go too far.¹⁸⁹ In light of the Court's cautious approach to expanding substantive due process rights, it may decide to limit the ruling in *Moore* to post-birth or post-implantation composition, not pre-implantation composition. While the Court will not be completely abandoning the principle of *Moore* if it eventually rules that sex selection may be constitutionally regulated, it will be severely limiting its application.

A final case regarding the rights of parents and guardians is *Troxel v. Granville*, decided by the Supreme Court five years ago. ¹⁹⁰ This case involved an earlier decision granting paternal grandparents visitation rights over their grandchildren, even though their mother had objected to such visitation. ¹⁹¹ The Court in *Troxel* ruled that the due process clause of the Fourteenth Amendment protected a parent's right "to make decisions concerning the care, custody and control of their children." ¹⁹² The only appropriate circumstance in which the state may intervene and deprive a parent of this right is when the parent does not adequately care for the child. ¹⁹³ According to *Troxel*, unless the Court believes that the act of choosing the sex of an unborn child

¹⁸⁹ *Moore*, 431 U.S. at 502.

¹⁹⁰ Troxel v. Granville, 530 U.S. 57 (2000).

¹⁹¹ *Id.* at 60.

¹⁹² *Id.* at 66.

¹⁹³ *Id.* at 68-69.

constitutes inadequate care, it should not intervene and deprive a parent or expecting parent of this right. 194

In light of the parental autonomy and family composition rights recognized in *Pierce*, *Casey* and *Troxel*, the Court must hold that the right to choose the sex of one's child cannot be limited by state regulation. In addition to parental autonomy and family composition rights, the court will need to consider procreative liberty rights as recognized in *Roe v. Wade*¹⁹⁵ and *Planned Parenthood v. Casey*. However, the argument that the state cannot interfere with procreative liberty rights is weak considering the medical issues surrounding newly developed sex selection techniques.

Consider, for example, the case of *Roe v. Wade* which involved a woman's constitutional challenge of state statutes prohibiting abortion.¹⁹⁷ The Court in *Roe* decided that the right of privacy is broad enough to include a woman's right to terminate her pregnancy.¹⁹⁸ At first glance it would seem plausible that the right to choose whether to have a child could extend to the right to choose what kind of child to have, male or female.

However, the Supreme Court was careful to recognize in *Roe* that the state has an interest in regulating a woman's right to choose after a certain point in the pregnancy, in order to protect the health of the mother and of the child. As discussed earlier, there are possible health risks involved with sex selection procedures, especially for a created fetus. These health risks have

¹⁹⁴ See Troxel, 530 U.S. at 68-69.

¹⁹⁵ Roe v. Wade, 410 U.S. 113, 152-53 (1973).

¹⁹⁶ Planned Parenthood v. Casey, 505 U.S. 833, 851 (1992).

¹⁹⁷ Roe, 410 U.S. at 120.

¹⁹⁸ *Id.* at 153.

¹⁹⁹ *Id.* at 162-63.

not been completely explored, because sex selection procedures are a relatively new phenomenon. If an argument is made before a federal court that the right to choose recognized in *Roe* should be extended to the right to choose the sex of one's child, the government will likely point to the possible health risks associated with sex selection procedures in order to convince the Court that it's interest in protecting the health of it's citizens outweighs any right of parents to choose. Considering the possible and unexplored risks associated with most sex selection procedures, the Court will likely find the government's interest here a compelling one.

The right of procreative liberty recognized in *Roe* was limited in *Planned Parenthood v.*Casey. 200 In Casey, the court upheld the right to procreative liberty recognized in *Roe*, but made it much easier for the government to regulate. 201 The Casey court changed the strict scrutiny test of *Roe* to an undue burden test. 202 So long as the regulation of abortion does not place an undue burden on the mother, the regulation is constitutional. 203 The argument that regulations prohibiting a related procedure, sex selection, will cause an undue burden for the mother is a weak one. Considering the state's interest in regulating abortion when it is necessary to protect the health of the mother or the child, a court will likely find a similar state interest in regulating sex selection when it is necessary to protect the health of the mother or the child.

While procreative liberty has its limits when the health of the mother or baby may be at risk, the court has not recognized limits to parental autonomy or family composition. For the court to find sex selection regulation constitutional, it will have to overrule or severely limit substantive due process rights that have been consistently recognized for the past 80 years. The

²⁰⁰ See Casey, 505 U.S. at 846.

²⁰¹ See generally id.

²⁰² *Id*.

²⁰³ Id.

Council recognizes the value the Supreme Court and society have given to these rights. The Council already has an argument prepared for a possible constitutional challenge to its future recommended regulations.

The Council argues that personal liberty rights are most valued when they involve self-regarding actions.²⁰⁴ However, when the rights involve actions that will effect third parties, they lose some of their value.²⁰⁵ For example, sex selection procedures will effect not only the parents of the selected child, but the child himself.²⁰⁶ Even beyond the effect sex selection will have on the child, if the procedures continue to grow in popularity, society as a whole will be effected because the natural ratio of males to females will be interrupted. The Council will ask the Court to recognize a formal distinction between self-regarding rights and rights that will effect third parties if exercised. While this argument seems logical, it is not supported by any precedent.

In a possible constitutional challenge to future sex selection regulations, the government will likely argue that there needs to be at least temporary regulation in order to allow research to be conducted on a generation of children born from embryos treated with sex selection techniques. While this argument is logical, it is not supported by Supreme Court precedent. The Supreme Court has never agreed to place a temporary moratorium on personal liberties in order to allow investigation into the effects of the exercise of the right on individuals and on society as a whole.

If the federal and state governments begin regulating sex selection and if a challenge to such regulation reaches the courts, precedent will dictate the court's decision. The Council has a

²⁰⁴ KASS ET AL., *supra* note 3, at 66-67.

 $^{^{205}}$ *Id*

²⁰⁶ Id.

very logical argument regarding a distinction between rights that effect the exerciser and rights that effect third parties. However, the Court has never recognized such a distinction. The argument that a temporary regulation of parental autonomy and family composition rights should be imposed in order to allow further research to be conducted is logically, but not legally plausible. Precedent will lead the Court to recognize a parent's right to choose the sex of their own child as an extension of parental autonomy and family composition rights. While procreative liberty rights may be limited,²⁰⁷ the court has recognized only a minor limit to parental autonomy rights (when the parent is not providing adequate care)²⁰⁸ and no limit to family composition rights. In light of these rights, the court will have to recognize a parent's right to choose the sex of their child.

IX. CONCLUSION

From the mythical practices to the medical practices, there has always been an interest in predetermining the sex of one's child. With the newly emerging medical practices, sex selection has become increasingly popular. The United Kingdom has had a regulatory reaction to the increased use of sex selection, while the United States continues to have a passive attitude. While the increased use of sex selection has been unaccompanied by increased debate, there is some debate. BBC News interviewed several individuals, asking how each individual felt about the increased use of sex selection. A Spanish citizen called sex selection a senseless act of thinking by parents [that is] getting out of hand. A British woman argued that we need to stop

²⁰⁷ *Moore*, 431 U.S. at 499.

²⁰⁸ Troxel, 530 U.S. at 68-69.

²⁰⁹ BBC NEWS, *supra* note 5.

²¹⁰ Id.

thinking of children as "fashion accessories."²¹¹ A man from Belgium said that to choose the sex of one's child is to "reduce humanity itself to a commodity."²¹² On the other hand, many argue that one can choose when to get pregnant and whether to continue the pregnancy, so why should one not be allowed to choose what type of child to carry?²¹³

Aside from the social arguments in favor of regulation of sex selection, there is the issue of a lack of medical knowledge regarding the effect newly developed sex selection techniques will have on the created embryos and resultant children. Some medical problems may not be revealed for years, as many may not emerge until late in the lives of children born from embryos treated with sex selection techniques. The United Kingdom has chosen to deal with this period of uncertainty by heavily regulating the use of sex selection. The United States, on the other hand, has been slow to respond.

The slow response of the United States is likely linked to the Constitutional challenges that will be filed soon after the government begins to regulate sex selection. The United States is a rights-based society, and the government is hesitant to take away a right without fully exploring other options. Until the Council on Bioethics decides that this practice needs to be regulated, the US will continue to rely on society initiated litigation and professional guidelines and codes to regulate.

The moral issues surrounding sex selection procedures will continue to plague the US government. These moral issues may result in the implementation of formal regulations on the practice. However, when these regulations are challenged in the Supreme Court, precedent will require that such regulations be declared unconstitutional. The United States Supreme Court has

²¹¹ BBC NEWS, *supra* note 5.

²¹² *Id*.

²¹³ *Id*.

always addressed the moral issues surrounding controversial practices. However, the Court has also recognized that it is not endowed with the responsibility to "mandate [it's] own moral code." ²¹⁴ In a rights-based society, the rights will prevail over the moral argument. This country continues to be divided over the moral issues surrounding abortion. The Supreme Court, however, has refused to allow the morals of what may be the majority to influence its decisions based on Constitutional rights.

The opportunity and right to choose the sex of one's child may be appealing in a narrow sense. The opportunity may seem disastrous in the broader societal sense. Regardless of its commercial appeal or moral repulsiveness, in the United States, it is a right that the Supreme Court, in keeping with its historic respect for parental autonomy and family composition must uphold to maintain its legitimacy as a consistent and respectable interpreter of the Constitution.

²¹⁴ Casey, 505 U.S. at 850.