

Summer 1988

The Intentional Creation of Fetal Tissue for Transplants: The Womb as a Fetus Farm, 21 J. Marshall L. Rev. 853 (1988)

James David Roberts

Follow this and additional works at: <https://repository.law.uic.edu/lawreview>

 Part of the [Constitutional Law Commons](#), [Family Law Commons](#), [Food and Drug Law Commons](#), [Health Law and Policy Commons](#), [Juvenile Law Commons](#), [Law and Gender Commons](#), [Legislation Commons](#), [Medical Jurisprudence Commons](#), [Privacy Law Commons](#), [Property Law and Real Estate Commons](#), and the [State and Local Government Law Commons](#)

Recommended Citation

James David Roberts, The Intentional Creation of Fetal Tissue for Transplants: The Womb as a Fetus Farm, 21 J. Marshall L. Rev. 853 (1988)

<https://repository.law.uic.edu/lawreview/vol21/iss4/6>

This Comments is brought to you for free and open access by UIC Law Open Access Repository. It has been accepted for inclusion in UIC Law Review by an authorized administrator of UIC Law Open Access Repository. For more information, please contact repository@jmls.edu.

THE INTENTIONAL CREATION OF FETAL TISSUE FOR TRANSPLANTS: THE WOMB AS A FETUS FARM?

December 3, 1987 marked the twentieth anniversary of the first successful human heart transplant.¹ January 22, 1988 marked the fifteenth anniversary of the United States Supreme Court decision in *Roe v. Wade*.² Although these two events may once have seemed unrelated, modern medical technology has advanced to a point where an aborted fetus can now be used in transplant operations.³ Currently, however, the demand for organs to transplant into newborn infants far exceeds those available from suitable donors.⁴ In addition, fetal tissues may be useful in the treatment of some adult diseases.⁵ This demand has led some women to consider using their rights to conceive and abort in order to produce these much needed organs and tissues.⁶ Along with the medical advances that make the intentional creation of human organs a reality come legal and moral issues not yet squarely addressed. This comment will, therefore, apply existing legal theory to this evolving question in an effort to avoid the morally unpleasant result of women intentionally conceiv-

1. Dr. Christian Barnard performed the first successful human heart transplant at Groote Schuur Hospital in Cape Town, South Africa. Stadtman, *The First Transplant*, NEWSWEEK, Aug. 29, 1983, at 43. In the operation, Dr. Barnard transplanted the heart of a 25 year old woman who died in an auto accident into the body of a 55 year old man. The recipient lived for eighteen days before he died from pneumonia. *Id.*

2. 410 U.S. 113 (1973). See *infra* notes 31-99 and accompanying text for a discussion of *Roe v. Wade*.

3. See Capron, *Anencephalic Donors: Separate the Dead from the Dying*, 17 HASTING CENTER REP. 5 (1987) (discussing the uses of fetal organs for transplantation into infants); Mahowald, Silver & Ratcheson, *The Ethical Options in Transplanting Fetal Tissue*, 17 HASTING CENTER REP. 9 (1987) [hereinafter Mahowald] (discussing the uses of fetal organs for the treatment of diseases in adults). See also Chicago Tribune, Dec. 9, 1987, at 11, col. 1 (parents' decision to donate organs of their anencephalic fetus).

4. An estimated 400 to 500 infant hearts and kidneys and 500 to 1,000 infant livers are needed each year in the United States. Capron, *supra* note 3, at 5. The number of newborns who die under circumstances suitable to allow their organs to be donated, however, is very few. *Id.*

5. Research suggests that fetal tissue may replace or repair damaged adult tissue. Mahowald, *supra* note 3, at 10. Researchers find fetal tissue especially beneficial in transplant procedures because it is less immunologically reactive and, therefore, the chance of tissue rejection is reduced. *Id.* Additionally, because fetal tissue is capable of rapid growth, it has a better chance of development than adult tissue. *Id.*

6. Although some women have already approached physicians with such requests, physicians have generally refused stating that the idea is medically and ethically unsound. Chicago Sun-Times, Nov. 20, 1987, at 48, col. 1.

ing human life for the sole purpose of harvesting the fetus for spare parts.

First, this comment reviews the current uses of the fetus, both in transplants and in the treatment of diseases.⁷ Second, this comment analyzes the definition of "abortion" according to the medical terminology used by the Court in *Roe v. Wade*⁸ and concludes that, as a voluntary termination of her pregnancy⁹ rather than feticide,¹⁰ abortion also terminates a woman's maternal interest in the fetus.¹¹ Third, this comment argues that after disassociating herself from the fetus by her decision to abort, a woman no longer has either common law possessory interests in the aborted fetus or the statutory interests created by the Uniform Anatomical Gift Act.¹² Instead, the state has both the right to protect the fetus and the right to control the disposition of the fetal remains. Recognizing the state's right to regulate the disposition of the fetus will permit society to retain the medical benefits of using fetal tissues, while avoiding the ethical dilemma posed by creating a fetus for the sole purpose of harvesting its tissue and organs. This comment therefore concludes that while a woman's constitutional right to privacy includes the fundamental right to secure an abortion, it does not include the right to control the disposition of the fetus that she has rejected by her decision to abort.

I. USES OF FETAL TISSUE

In recent years, science has made rapid advances in medical technology.¹³ One result of these advances is that the aborted fetus has become increasingly valuable.¹⁴ There is a great demand for fe-

7. See *infra* notes 13-30 and accompanying text for a discussion of diseases which are currently treated with fetal tissue.

8. 410 U.S. at 163-65. See *infra* notes 41-47 and accompanying text discussing the medical definitions of abortion used by the Supreme Court in *Roe v. Wade*.

9. 410 U.S. at 153.

10. Feticide is legally defined as the "[d]estruction of the fetus; the act by which criminal abortion is produced." BLACK'S LAW DICTIONARY 559 (5th ed. 1979). The medical definition of feticide is "[i]nduced abortion; embryectomy; the destruction of the embryo or fetus in the uterus." STEDMAN'S MEDICAL DICTIONARY 516 (4th ed. 1976).

11. See *infra* notes 32-56 and accompanying text discussing a woman's right to procure an abortion.

12. UNIF. ANATOMICAL GIFT ACT 8A U.L.A. 15 (1983) [hereinafter U.A.G.A.]. See *infra* notes 100-134 and accompanying text.

13. See *infra* notes 54-56 for a discussion of recent advances in medical technology.

14. There is a rapidly growing market for human fetuses, JAMES RIDGEWAY, WHO OWNS THE EARTH? 148 (1980), and the United States is the largest purchaser of fetal tissue. *Id.* The National Cancer Institute and the United States military use these fetuses for research. *Id.* Research facilities use as many as 100,000 fetuses a year. *Id.* In 1976, a human fetus was worth \$75. *Id.*

tuses not only because fetal tissues and organs have many uses in experimentation, but also because the developing fetus has potential value in the adoption market.¹⁵ The fact that demand for fetal organs and tissues greatly exceeds the available supply makes the fetus even more valuable.¹⁶ This section of the comment discusses the controversial donation of intentionally aborted fetuses for organ and tissue transplants.

Recently doctors have begun using fetal tissue in transplant operations. Two specific uses have already caused considerable controversy. The first is the use of fetal tissue in the treatment of adult diseases such as Parkinson's disease, Alzheimer's disease and diabetes.¹⁷ This involves the transplantation of cells from an aborted fe-

15. A healthy fetus is increasingly valuable today because it represents a potential increase in the supply of babies at a time when there is a serious shortage of healthy, white infants available for adoption. Posner, *The Regulation of the Market in Adoptions*, 67 B.U.L. REV. 59, 65 (1987). The Court's decision in *Roe v. Wade* aggravated this shortage by leading to an increase in the number of legal abortions in the United States from 600,000 in 1972 to 1,300,000 in 1983. *Id.* at 63 (citing CENTERS FOR DISEASE CONTROL, U.S. PUB. HEALTH SERV., ABORTION SURVEILLANCE 1983, tab 1 (not yet published)). As a result, a significant number of infants who might otherwise be put up for adoption are now aborted as fetuses. *Id.*

Simultaneous with this shortage of white, healthy infants, the demand for such infants has increased, due in part to the recent trend of couples postponing parenthood until their thirties. *Id.* at 61. At such a time, a couple is more likely to have infertility problems. *Id.* This shortage in supply combined with increasing demand makes the fetus very valuable in today's adoption market.

As Posner notes, a market system for infants is already in operation. *Id.* at 60. A black market operates for the selling of infants to those who can pay the price. In the black market, the middleman often demands high prices to offset the risks of operating outside the law. *Id.* Independent adoptions, which are legally arranged through a lawyer or obstetrician, also involve aspects of a sale in the fee paid by the adoptive parents. *Id.* at 60. Independent adoptions are, therefore, often characterized as making up a "gray market" for the selling of babies. *Id.* Even adoption agencies charge fees, which often are used in part to subsidize the maintenance of the natural mother. *Id.* Judge Posner's controversial view on "baby selling" argues for actual deregulation of the adoption market through the legalization and regulation of the black market, thereby promoting a more efficient adoption market. *Id.* Posner suggests, that such a system would provide the missing financial incentive for women to choose birth and adoption instead of abortion. *Id.* at 63.

For a further discussion of Posner's proposed market system for adoptions see Cass, *Coping With Life, Law, and Markets: A Comment on Posner and the Law-And-Economics Debate*, 67 B.U.L. REV. 73 (1987). For a critical view of Posner's approach see Frankel and Miller, *The Inapplicability of Market Theory to Adoptions*, 67 B.U.L. REV. 99 (1987).

16. See *supra* note 4 and accompanying text discussing the availability of fetal organs.

17. Parkinsonism, commonly known as Parkinson's disease, is defined as "1. shaking or trembling palsy; spasmus agitans; a neurological syndrome usually resulting from arteriosclerotic changes in the basal ganglia and characterized by rhythmical muscular tremors, rigidity of movement, festination, droopy posture, and masklike faces." STEDMAN'S MEDICAL DICTIONARY 1032 (24th ed. 1982).

Alzheimer's disease is defined as "dementia presenilis (presenile dementia) (2); organic dementia occurring usually in persons under 50 years of age, associated with Alzheimer's sclerosis, neurofibrillary degeneration, and senile plaques." *Id.* at 403.

Diabetes mellitus is "a chronic form of diabetes involving an insulin deficiency

tus into an adult patient.¹⁸ This treatment is understandably controversial because it creates a temptation to conceive with the intent to abort, thus ending a potential life for the benefit of another.¹⁹

and characterized by excess of sugar in the blood and urine, hunger, thirst, and gradual loss of weight. WEBSTERS NEW WORLD DICTIONARY 501 (2d ed. 1972).

18. Research in the treatment of Parkinson's disease involves the transplantation of fetal brain tissues. Mahowald, *supra* note 3, at 10. The treatment requires inducing an abortion and removing of the fetus in a way that will preserve the needed tissue. *Id.* Cells from the fetal adrenal glands are then removed and transplanted into the brain of the adult patient. *Id.* The transplanted fetal cells restore the chemical balance in the adult patient's brain by secreting the chemical Dopamine. *Id.*

The first reported application of this treatment occurred on September 12, 1986. The operation took place at the LaRaza Medical Center in Mexico City, Mexico. Chicago Tribune, Jan. 7, 1988, at 19, col. 1. In the operation, pieces of the adrenal gland of a spontaneously aborted fetus were transplanted into the brains of a 50 year old man and a 35 year old woman. *Id.* Both adults reportedly showed significant improvement within two weeks of the operation. *Id.*

In the treatment of Alzheimer's disease, United States researchers have transplanted fetal cells into the brains of mice. Mahowald, *supra* note 3, at 10. The fetal cells have shown an ability to regenerate undamaged nerve fibers in the hippocampus, the area of the brain affected by Alzheimer's disease. *Id.* The transplanted cells secrete acetylcholine, a memory enhancing substance that improved the learning and memory abilities of the mice studied. Chicago Sun-Times, Nov. 20, 1987, at 48, col. 1. Researchers hope to have similar success when the technique is applied to human patients. *Id.*

In treating diabetes, researchers have transplanted the cells from fetal pancreases into adult diabetics. *Id.* The adult patients were able to reduce their insulin injections following the treatment. *Id.* Finally, researchers also hope that fetal tissues may help regenerate damaged spinal cords. Mahowald, *supra* note 3, at 10.

19. The Hippocratic Oath, which is the foundation for medical ethics, states that a physician should "first, do no harm." Comment, *The Sale of Human Organs: Implicating a Privacy Right*, 21 VAL. U.L. REV. 741, 749 (1987). This has touched off a debate as to whether the removal of a non-vital organ from a healthy donor for transplantation constitutes unethical conduct. *Id.* See also Starzl, *Will Live Organ Donations No Longer Be Justified?* 15 HASTING CENTER REP. 5 (1985). This debate centers on whether cutting into the healthy body of a live donor violates the medical ethics embodied in the Oath. Comment, *supra*, at 749. The ending of one life by the removal of a vital organ for transplantation is, however, a clear violation of medical ethics. See *Id.* In such a case, there can be no question that the physician has inflicted harm on the donor. *Id.*

According to the Hippocratic Oath, abortions performed solely for the purpose of producing transplantable organs would also constitute a violation of medical ethics. See *Id.* Such a procedure obviously inflicts harm on the fetus (since it is necessarily destroyed), and the personal privacy justification relied on by the Roe Court for its decision guaranteeing the right to an abortion is no longer present. The ethical violations presented in removing a healthy fetus to harvest its organs are even more evident because of the recent recognition by the medical community of the fetus as a patient. See Lenow, *The Fetus as a patient: Emerging Rights as a Person?*, 9 AM. J.L. & MED. 1 (1983-84).

The abortion of a healthy fetus with the intent to use its organs may also implicate the thirteenth amendment's prohibition against involuntary servitude. See Note, *The Brave New World: Can the Law Bring Order Within Traditional Concepts of Due Process?*, IV SUFFOLK U.L. REV. 894, 901 n. 39 (1970). If a fetus is considered a person for purposes of the thirteenth amendment, then a mother's destruction of her fetus in order to secure its organs for transplants could constitute a violation of the prohibition against involuntary servitude because her actions would be akin to ownership of the fetus. *Id.* But see *Roe v. Wade*, 410 U.S. 113, 158 (1973) (held that fetus is not a "person" for 14th amendment purposes).

The second controversial use is the transplantation of whole organs from the aborted fetus.²⁰ In addition to intentionally ending a potential life for the benefit of another, the transplantation of whole organs presents additional problems. First, in order to obtain the whole organs needed for transplants, it is necessary to abort the fetus whole.²¹ However, it is often in the mother's best interest for the fetus to be broken apart in the womb. This greatly lessens the risk to a woman²² but is less likely to produce organs that are suitable for transplants. Thus, a conflict may exist between the goals of terminating the pregnancy with minimal risk to the mother and protecting the fetal organs and tissues.

The use of organs from a fetus aborted whole also presents the additional problem of determining when the aborted fetus is dead. It is possible for the fetus to be aborted with signs of life²³ and yet

20. Currently, most organs used in infant transplant operations come from anencephalic infants. See *The New York Times*, Dec. 14, 1987, at 18. col. 1; Capron, *supra* note 3, at 5-8. For a discussion of infants with anencephaly, see Baird & Sadovnick, *Survival in Infants with Anencephaly*, 23 *CLINICAL PEDIATRICS* 268 (1984). For a discussion of the ethical issues involved in infant organ donations see Harrison & Meilaender, *The Anencephalic Newborn as Organ Donor*, 16 *HASTINGS CENTER REP.* 21 (1986) and Levine, Maguire & Warren, *Can the Fetus be an Organ Farm?*, 8 *HASTINGS CENTER REP.* 23 (1978).

21. The gestational age of the fetus may be critical to the success of a transplant operation. Mahowald, *supra* note 3, at 10. To ensure the success of the operation, the method of abortion chosen must preserve the desired fetal tissues. *Id.* Abortion by hysterectomy produces the most usable organs because the fetus is removed whole, but it also involves the greatest risk to a woman. *Id.* at 13. In contrast, dilation and evacuation may be the safest method for the mother, yet it is the most destructive to the fetus and, therefore, may not produce the whole organs needed for a transplant operation. *Id.* (citing CENTERS FOR DISEASE CONTROL, PUB. HEALTH SERV., DEPT. OF HEALTH AND HUMAN SERV., *ABORTION SURVEILLANCE*, 49 (Nov. 1980)).

22. The safest methods of abortion are dilation and curettage (D&C) or dilation and evacuation (D&E). Special Project, *Legal Rights and Issues Surrounding Conception, Pregnancy and Birth*, 39 *VAND. L. REV.* 597, 624 (1986). In these procedures, a mechanical evacuation of the uterus is performed by dilating the cervix and either scraping or sucking the fetus out by a vacuum tube. *Id.* These procedures result in a fragmentation of the fetus and, therefore, the possible destruction of the developing organs desirable for transplantation. See *id.* at 625.

During the second trimester, the fetus is more developed and, therefore, the mechanical evacuation of the uterus becomes dangerous. 1 *ENCYCLOPEDIA OF BIOETHICS* 3 (W. Reich ed. 1978). During the second or third trimester, the fetus is removed either surgically by hysterectomy or by medical evacuation. *Id.* In medical evacuation, the doctor induces uterine contractions by injecting saline or prostaglandin. *Id.*

While 90% of abortions in America are performed by D&C or D&E during the first trimester, doctors perform nearly 100,000 second trimester abortions each year. Rhoden, *The New Neonatal Dilemma: Live Births from Late Abortions*, 72 *Geo. L.J.* 1451, 1455 (1984). The majority of these late abortions are sought by women who are very young, poorly educated and of a low socio-economic class. *Id.* Other women may choose a late abortion after amniocentesis reveals a fetal defect. *Id.* The possibility of producing fetal organs for transplant operations may, however, give some women an incentive to postpone an abortion procedure until later in their pregnancy, thereby increasing the risk involved in the procedure. See Mahowald, *supra* note 3, at 13.

23. The Department of Health and Human Services has also, by negative impli-

still, in the physician's determination, not be viable because it is not "potentially able to live outside the mother's womb, [even] with artificial aid."²⁴ The urgent need for immediate removal of organs from this pre-viable fetus presents a temptation to remove the organs while the fetus still shows signs of life.²⁵ Because the freshness of the transplantable organs often determines the success of a transplant operation,²⁶ it is possible for such concerns to adversely effect the determination of fetal viability as well as the point when fetal death occurs.²⁷

cation, defined "live fetus" through its definition of a dead fetus: "'Dead fetus' means a fetus *ex utero* which exhibits neither heartbeat, spontaneous respiratory activity, spontaneous movement of voluntary muscles, nor pulsation of the umbilical cord (if still attached)." 45 C.F.R. § 46.203(f) (1986). In this definition, the four signs used to determine whether a fetus is alive are: 1) the presence of a heartbeat; 2) the presence of respiratory activity; 3) the spontaneous movement of voluntary muscles; and 4) the pulsation of an attached umbilical cord. *Id.* See generally NATIONAL COMM'N FOR THE PROTECTION OF HUMAN SUBJECTS OF BIOMEDICAL AND BEHAVIORAL RESEARCH, REPORT AND RECOMMENDATIONS: RESEARCH ON THE FETUS, reprinted in 40 Fed. Reg. 33,530 Appendix 13, 9-11 (1976) [hereinafter *Nat'l Comm'n Report*] (discussing fetal life and death.) See also Rhoden, *supra* note 21, at 1476-78 (differentiating viable from non-viable infants).

24. *Roe v. Wade*, 410 U.S. 113, 160 (1973) (citing L. HELLMAN & J. PRITCHARD, WILLIAMS OBSTETRICS 493 (14th ed. 1971) [hereinafter HELLMAN]; DORLAND'S ILLUSTRATED MEDICAL DICTIONARY 1689 (24th ed. 1965)). The Department of Health and Human Services similarly defines viability as "being able, after either spontaneous or induced delivery, to survive (given the benefit of available medical therapy) to the point of independently maintaining a heartbeat and respiration." 45 C.F.R. § 46.203(d)(1986). Because viability is determined by the available medical technology, it does not occur at a predetermined point in the pregnancy. See Comment, *Viability and Abortion*, 64 Ky. L.J. 146 (1975). For example, at the time of the *Roe* decision in 1973, "viability" generally occurred as early as the 24th week of pregnancy. 410 U.S. at 160 (citing HELLMAN, *supra*, at 493). In 1982, however, viability was medically defined as occurring as early as the 20th week of pregnancy. STEDMAN'S MEDICAL DICTIONARY 1556 (24th ed. 1982).

Because of the difficulty of determining the point at which viability occurs, courts will defer to the decision of the attending physician. Comment, *supra*, at 151-54. In *Roe*, the Court held "when those trained in [the] discipline of medicine . . . are unable to arrive at any consensus, the judiciary . . . is not in a position to speculate as to when viability occurs." 410 U.S. at 159. This position was reaffirmed by the Court in *Planned Parenthood of Central Missouri v. Danforth*, 428 U.S. 52 (1976). In *Danforth*, the Court held that viability was a flexible time that could vary in each pregnancy and should, therefore, be determined by the attending physician. *Id.* at 64. Allowing the physician to determine viability on a case by case basis is, however, problematic because the most accurate method for determining gestational age the basis for any informed decision about viability, has an error factor of plus or minus five days. Lenow, *supra* note 18, at 11. See also Special Project, *supra* note 22, at 629-31 (discussing fetal viability); *Nat'l Comm'n Report*, *supra* note 22, at 123-31 (discussing live but non-viable fetuses).

25. See *supra* note 23 for a listing of criteria for determining fetal life *ex utero*.

26. Prottas, *The Rules for Asking and Answering: The Role of Law in Organ Donation*, 63 U. DET. L. REV. 183, 184 (1984); Quay, *Utilizing the Bodies of the Dead*, 28 ST. LOUIS U.L.J. 889, 892 (1984). See also Capron, *supra* note 3, at 5 discussing the reclassification of anencephalic infants as dead to allow swift removal of transplantable organs).

27. See Mahowald, *supra* note 3, at 14; Chicago Sun-Times, Nov. 20, 1987, at 48, col. 1.

This comment, however, focuses on a third controversy presented by the use of fetal tissue for transplants and research: the temptation for conception with the sole intent to abort and produce transplantable organs and tissues.²⁸ This scenario of using the womb to manufacture organs is controversial because the ending of one human life for the benefit of another is morally repugnant.²⁹ Additionally, an abortion for the express purpose of creating donative material is not justified by the reasoning of the Supreme Court in *Roe v. Wade*, which recognized a woman's fundamental right to procure an abortion.³⁰

II. DEFINING ABORTION

A. *Mother's Right to Abortion*

In determining the nature of a woman's interest in her aborted fetus, it is first necessary to analyze the nature of a woman's right to choose an abortion. The United States Supreme Court established a woman's right to terminate her pregnancy in *Roe v. Wade*.³¹ In *Roe*, the Court looked to the United States Constitution's guarantee of personal privacy.³² Although not expressly stated, the Court found that a right of privacy (or more accurately stated, a right of personal autonomy)³³ was implied from the Constitution's express guarantee of rights.³⁴ Contained within this broad right of privacy are certain

28. Physicians have recently reported inquiries by women who want to become pregnant so that a subsequent abortion will produce organs and tissues for transplants. *Chicago Sun-Times*, Nov. 20, 1987, at 48, col. 1.

29. See *supra* note 19 for an analysis applying the Hippocratic Oath to this scenario.

30. 410 U.S. 113 (1973). For this comment's interpretation of the *Roe* decision see *supra* notes 33-57 and accompanying text.

31. 410 U.S. 113.

32. *Id.* at 152-53. See *infra* note 35 for Supreme Court cases discussing personal privacy.

33. In one of its first decisions recognizing an implied constitutional right to personal privacy, the United States Supreme Court suggested this right was one of personal autonomy. *Union Pacific R.R. Co. v. Botsford*, 141 U.S. 250 (1891). In that opinion, the Court held "[n]o right is held more sacred, or is more carefully guarded, by the common law, than the right of every individual to the possession and control of his own person. . . ." *Id.* at 251. In a subsequent decision, Justice Brandeis suggested that this "right to be let alone [was] the most comprehensive of rights and the right most valued by civilized men." *Olmstead v. United States*, 277 U.S. 438, 478 (1928) (Brandeis, J., dissenting). See generally Special Project, *supra* note 22, at 821-24 (applying mother's right of privacy to issues of procreation, abortion and child rearing).

34. The Court found the right to privacy included in many of the Constitution's express provisions. *Roe*, 410 U.S. at 152. (citing *Stanley v. Georgia*, 394 U.S. 557, 564 (1969)) (first amendment); *Terry v. Ohio*, 392 U.S. 1, 8-9 (1968) (fourth and fifth amendment); *Griswold v. Connecticut*, 381 U.S. 479, 484-85 (1965) (the penumbra of the Bill of Rights); *Id.* at 486 (Goldberg, J., concurring) (the ninth amendment); *Meyer v. Nebraska*, 262 U.S. 390, 399 (1923) (first section of fourteenth amendment)).

fundamental rights, such as the right to marry, procreate, and practice contraception.³⁵ The *Roe* Court concluded that the right to an abortion was one of the fundamental rights contained within this broader right of privacy.³⁶

The Court further defined the nature of a woman's right to an abortion by listing the possible harms imposed upon a woman when the state totally proscribed abortion.³⁷ The Court suggested that the medical complications associated with pregnancy, the emotional distress due to maternity or additional offspring, the mental and physical burdens of child care (especially when the child is unwanted), and the social stigma of unwed motherhood all constituted possible harms imposed on a woman when a state denied her the right to choose an abortion.³⁸ A review of these harms, especially in light of

35. *Id.* (citing *Eisenstadt v. Baird*, 405 U.S. 438, 453-54 (1972) (White, J., concurring) (personal privacy extends to contraception)); *Loving v. Virginia*, 388 U.S. 1, 12 (1967) (personal privacy extends to marriage); *Prince v. Massachusetts*, 321 U.S. 158, 166 (1944) (personal privacy extends to family relationships); *Skinner v. Oklahoma*, 316 U.S. 535, 541-42 (1942) (personal privacy extends to procreation); *Pierce v. Society of Sisters*, 268 U.S. 510, 535 (1925) (personal privacy extends to child rearing and education).

36. The Court held that these fundamental rights to privacy were "founded in the fourteenth amendment's concept of personal liberty and restrictions upon state action." *Id.* at 153.

37. To determine the harms the Texas legislature sought to remedy, the *Roe* Court reviewed Texas statutes that made it a crime to secure an abortion. *Roe v. Wade*, 410 U.S. 113 (1973). The Texas statute states, in pertinent part:

Article 1191. Abortion

If any person shall designedly administer to a pregnant woman or knowingly procure to be administered with her consent any drug or medicine, or shall use towards her any violence or means whatever externally or internally applied, and thereby procure an abortion, he shall be confined in the penitentiary not less than two nor more than five years; if it be done without her consent, the punishment shall be doubled. By "abortion" is meant that the life of the fetus or embryo shall be destroyed in the woman's womb or that a premature birth thereof be caused.

Article 1192. Furnishing the means

Whoever furnishes the means for procuring an abortion knowing the purpose intended is guilty as an accomplice.

Article 1193. Attempt at abortion

If the means used shall fail to produce an abortion, the offender is nevertheless guilty of an attempt to produce abortion, provided it be shown that such means were calculated to produce that result, and shall be fined not less than one hundred nor more than one thousand dollars.

Article 1194. Murder in producing abortion

If the death of the mother is occasioned by an abortion so produced or by an attempt to effect the same it is murder.

Article 1196. By medical advice

Nothing in this chapter applies to an abortion procured or attempted by medical advice for the purpose of saving the life of the mother.

TEX. PENAL CODE ANN., arts. 1191-119 4, 1196 (Vernon 1961).

38. *Roe*, 410 U.S. at 153. See generally Regan, *Rewriting Roe v. Wade*, 77 MICH. L. REV. 1569, 1579-83 (1979) (relying on G. BOURNE & DANFORTH, *PREGNANCY* (rev. ed. 1975)) (listing some fifty minor complaints of physical discomfort normally associated with pregnancy).

the right to personal autonomy under which they are classified, suggests that the mother's right to an abortion is one of disassociation with the fetus and potential child.³⁹ Conversely, a woman's decision to continue her pregnancy may fairly be characterized as her consent to an intrusion on her personal autonomy through her acceptance of the harms that the *Roe* Court suggested accompany pregnancy.⁴⁰ Viewed in this light, abortion is a termination of the connection between the mother and the potential child. By terminating this connection and, thus, disassociating herself from the fetus, a woman alleviates all the harms listed by the *Roe* Court.⁴¹ The *Roe* Court's implied definition of abortion supports this view of the mother's right to an abortion as the right to disassociate herself from her fetus.

Medical authorities define abortion as the termination of pregnancy, spontaneously⁴² or by induction⁴³, prior to viability.⁴⁴ After

39. The harms listed by the *Roe* Court focus on the effects of an unwanted child, not an unwanted pregnancy. Notes and Comments *Artificial Gestation: New Meaning for the Right to Terminate Pregnancy*, 21 ARIZ. L. REV. 755, 766 (1979). Putting a newborn infant up for adoption, for example, would remove an unwanted child from the mother without terminating the potential life. *Id.*

This view of the right to an abortion as a right of disassociation rather than a right to commit feticide is further supported by the *Roe* Court's suggestion that a state proscription of abortion after viability would be permissible. Rhoden, *Trimesters and Technology: Revamping Roe v. Wade*, 95 YALE L.J. 639, 666 (1986). After viability, the distinction between termination of pregnancy and feticide becomes meaningful because the destruction of the fetus becomes uncomfortably similar to infanticide. *Id.* at 666-67.

The American College of Obstetricians and Gynecologists adopted a similar position in its 1976 policy statement. 1 ENCYCLOPEDIA OF BIOETHICS 4 (W. Reich ed. 1978). The policy statement announced the position that "abortion is a process of separating conflicting parties and does not primarily aim at destruction of the fetus directly." *Id.*

40. Because the *Roe* Court held that a woman has a fundamental right to terminate her pregnancy, her decision to continue the pregnancy becomes one of choice and, therefore, is one of accepting her moral responsibilities to the fetus. Dougherty, *The Right to Begin Life with Sound Body and Mind: Fetal Patients and Conflicts with Their Mothers*, 63 U. DET. L. REV. 89, 106 (1985). See Regan, *supra* note 38, at 1611-18.

41. See *supra* note 37-40 and accompanying text for a discussion of the possible harms associated with pregnancy.

42. Abortion is generally defined as "[g]iving birth to an embryo or fetus prior to the stage of viability at about 20 weeks of gestation (fetus weighs less than 500 grams). A distinction is made between abortion and premature birth: premature infants are those born after the stage of viability has been reached but before full term. Abortion may be either spontaneous (occurs from natural causes) or induced." STEDMAN'S MEDICAL DICTIONARY 3 (24th ed. 1982). A spontaneous abortion is commonly known as a miscarriage. 1 ENCYCLOPEDIA OF BIOETHICS 3 (W. Reich ed. 1978). Unlike the legal definition of abortion, the medical definition does not necessarily imply an intentional termination of pregnancy. Compare STEDMAN'S MEDICAL DICTIONARY 3 (24th ed. 1982) with BLACK'S LAW DICTIONARY 7 (5th ed. 1979). See generally Special Project, *supra* note 32, at 624 (drawing distinction between medical and legal definitions of abortion).

43. An induced abortion is the intentional termination of a pregnancy. 1 ENCYCLOPEDIA OF BIOETHICS 3 (W. Reich ed. 1978). This termination usually describes the removal of a growing embryo or fetus that is implanted in the uterus. See *Id.* at 626-

viability, termination of pregnancy is termed delivery.⁴⁵ Throughout the *Roe* opinion, the Court appeared to follow this medical definition by using the terms abortion and termination of pregnancy interchangeably.⁴⁶ It is clear, however, that the *Roe* decision focused on the intentional termination of pregnancy by induction.⁴⁷ In fact, Justice Blackmun stated the question presented in *Roe* as that of "a woman's right to decide to terminate her pregnancy."⁴⁸ By referring to an abortion as a termination of pregnancy, the Court implied that the nature of a woman's right to an abortion is the right to terminate her relationship with the fetus.⁴⁹

This definition of abortion as a termination of pregnancy, while not crucial at the time of the *Roe* decision, becomes important in light of recent advances in prenatal care. At the time *Roe* was decided, the limitations in prenatal care were such that abortion almost invariably resulted in the death of the fetus, thus making abortion synonymous with feticide.⁵⁰ Therefore, terminating a pregnancy

28 (discussing function of the intrauterine contraceptive device ("I.U.D."); *Id.* at 3 (discussing salpingectomy and diagnostic uterine curettages).

Finally, an induced abortion, (i.e. a non-natural termination of pregnancy prior to viability), may also be characterized as therapeutic or non-therapeutic. *Id.* A therapeutic abortion is often synonymous with a legal abortion because the physician performing the abortion was not prosecuted under criminal abortion statutes when the life of the mother is in jeopardy. *Id.*

While birth control pills and I.U.D.'s may cause "abortion" in the technical sense of a medical definition, this comment focuses on induced abortions of the fetus after implantation in the uterus. This type of procedure was the subject of the decisions in *Roe v. Wade*. See *supra* note 37 for a description of the Texas statute at issue in *Roe*.

44. See *supra* note 24 and accompanying text for various definitions of viability.

45. Delivery is "[t]he passage of the fetus and the placenta from the genital canal into the external world." *STEDMAN'S MEDICAL DICTIONARY* 372 (24th ed. 1982). Delivery generally denotes a termination of pregnancy after the fetus reaches viability. 1 *ENCYCLOPEDIA OF BIOETHICS* 2-3 (W. Reich ed. 1978).

46. See *Roe v. Wade*, 410 U.S. 133, 129 (1973) (woman's right "to choose to terminate her pregnancy") (emphasis added); *Id.* at 150 ("[s]tate has legitimate interest in seeing . . . that abortion . . . is performed under circumstances that insure maximum safety for the patient.") (emphasis added); *Id.* at 153 ("Fourteenth Amendment [] . . . is broad enough to encompass a woman's decision whether or not to terminate her pregnancy") (emphasis added); *Id.* at 154 ("right of personal privacy includes the abortion decision. . . ."); *Id.* at 163 ("patients' pregnancy should be terminated.") (emphasis added).

47. The *Roe* case involved a constitutional challenge to a Texas statute that prohibited induced abortions. See *supra* note 37 for the text of the Texas Criminal Abortion statute.

48. *Roe*, 410 U.S. 113, 129 (1973).

49. See generally Note, *supra* note 39, 763-68 (discussing the *Roe* decision as the right to terminate pregnancy, not feticide).

50. Among the recent advances in medical technology are advances in the method used to perform late abortions. In the early 1970's the only non-surgical method of late abortion was saline amnioinfusion. Rhoden, *supra* note 22, at 1452. This procedure destroys the placental and fetal actions that prevent uterine contractions, thereby inducing contractions to expel the fetus. 1 *ENCYCLOPEDIA OF BIOETHICS* 3 (W. Reich ed. 1978). This procedure also kills the fetus. Rhoden, *supra* note 22, at 1452.

by abortion also necessarily terminated the fetus' life.⁵¹

The definition of abortion as feticide, however, is not consistent with the Supreme Court's definition.⁵² Today, advancing technology in fetal transplantation,⁵³ in the development of an artificial womb,⁵⁴ and in caring for extremely premature infants⁵⁵ presents several pos-

The use of saline injections was followed by the development of the hormone prostaglandin which directly stimulates uterine contractions. 1 *ENCYCLOPEDIA OF BIOETHICS* 3 (W. Reich ed. 1978). The use of prostaglandins became widespread in the latter part of the 1970's and resulted in substantial increase in live births following late abortions. Rhoden, *supra* note 22, at 1452 (citing Stubblefield, Noftolm, Frigolette & Ryan, *Laminaria Augmentation of Intra-Amniotic PG F2d for Mid-trimester Pregnancy Termination*, 10 *PROSTAGLANDIN* 413, 420 (1975)).

One medical authority suggests that an abortion using prostaglandin is about 40 times more likely to result in a live birth than an abortion using saline. *Id.* at 1458 (citing CATES & GRIMES, *MORBIDITY AND MORTALITY, IN SECOND TRIMESTER ABORTIONS* 163, 171 (G. Berger, W. Brenner & L. Kieth eds. 1981)). For this reason, many physicians still use saline amnioinfusion to avoid live births, despite its greater risk of complications for women. *Id.* at 1457-58.

51. One study showed that during 1973, the year of the *Roe* decision, live births occurred in only .12% of abortions. Bok, Nathanson, Nathan & Walters, *The Unwanted Child: Caring for the Fetus Born Alive After an Abortion*, 6 *HASTINGS CENTER REP.* 10, 13-14 (1976). *But c.f. supra* note 50 (use of prostaglandin increases chance of live birth from abortion).

52. *Compare supra* note 10 (legal and medical definitions of feticide) with *supra* notes 39, & 46 (the *Roe* Court's implied definition of abortion as the termination of pregnancy, not feticide).

53. Post-implantational fetal transference involves the removal of a fetus that is implanted in the wall of one uterus and the subsequent re-implantation in another uterus. Notes and Comments, *supra* note 39, at 756-59. Scientists have already successfully performed this procedure using lower mammals. *Id.* at 758. In one such experiment, fetal lambs in England were removed from their mothers, transferred to the uteri of rabbits and flown to Africa. *Id.* at 759. Ten days later they were transferred to the uteri of African sheep and later born alive. *Id.* (citing Gourney, *The New Biology and the Future of Man*, 15 *U.C.L.A. L. REV.* 273, 281 (1968)).

In humans, doctors are now able to transfer an embryo, prior to implantation, from the uterus of one woman into the uterus of another woman. Rhoden, *supra* note 39, at 670-71. If scientists are able to develop a post-implantation procedure for the transference of human fetuses, a viable alternative to traditional abortion procedures would exist. Comment, *supra* note 39, at 767. Additionally, post-implantational transference could affect a woman's right to secure an abortion. *See* Rhoden, *supra* note 39, at 670-71. If the receiving woman is defined as "artificial aid," then the fetus meets the requirements of viability, that is, potentially able to live outside the mother's womb (albeit with artificial aid), and the state could proscribe the removal of the fetus. *See id.* Such an interpretation is also possible with pre-implantation fetal transference. *Id.*

54. An artificial womb is a man-made organ designed to house the developing fetus. Notes and Comments, *supra* note 39, at 757 n.16 (citing L. KARP, *GENETIC ENGINEERING: THREAT OR PROMISE?* 161 (1976)). The artificial womb could provide a site upon which the placenta could attach to provide the fetus with oxygen and nourishment. *Id.* An artificial womb could also provide a viable alternative to current abortion procedures and would affect the determination of fetal viability in much the same way as post-implantation fetal transference. *See supra* note 53 for a discussion of possible alternatives to abortion.

55. Since the Court's decision in *Roe v. Wade*, doctors have made substantial advances in neonatal intensive care. Rhoden, *supra* note 22, at 1461. Doctors can now successfully treat infants of very low birth weight. *Id.* In 1965, only 10% of infants weighing less than 1500 grams and suffering from respiratory distress syndrome lived,

sible alternatives to the termination of a fetal life by abortion. The focus of a woman's right to an abortion has thus shifted to the termination of the maternal-fetal relationship and away from the termination of a potential life.

B. State Interests

In establishing the fundamental right of a woman to choose to terminate her pregnancy, the *Roe* Court also concluded that such a right was not absolute.⁵⁶ The Court expressly rejected the idea that the fundamental right to an abortion entitled the woman to "termi-

while by 1979 the survival rate was 80%. *Id.* at 1462. In the early 1960's, infants weighing 1001 to 1500 grams had less than a 50% chance of survival, while by 1981 the survival rate had risen to 80%. *Id.* at 1463. Even infants at 100 grams or less, who had a 94% mortality rate in the 1960's, had an increased survival rate of nearly 50% by 1981. *Id.*

Many of these increased survival rates are due to technological advances in respiration therapy. *Id.* at 1461. Doctors now use constant distending pressure to prevent lung collapse in premature infants, as well as mechanical ventilation to prevent apnea (cessation of breathing). *Id.* at 1461-62. Advances have also been made in feeding low birth weight infants by a tube into either the stomach or the small intestine. *Id.* at 1462. Finally, the development of computerized tomography (c.t.-scan) and real time ultrasound have allowed doctors to better diagnose and treat intraventricular hemorrhages before brain damage occurs. *Id.*

There are two important drawbacks to this new technology. First is the expense. *Id.* at 1464. When the medical costs for those infants who do not survive are added to the costs for those who do survive but require follow-up care, the average cost of producing a normal survivor totaled \$88,058 in 1978. *Id.* at 1465. The other drawback is that, while the rate of survivors who suffer some handicap has decreased, a substantial number are, nevertheless, impaired. *Id.* at 1463. One study suggests that over forty-one percent of survivors born weighing less than 1500 grams have some impairment. *Id.* (citing Sinclair, Torrance, Boyle, Horwood, Saigal & Sackett., *Evaluation of Neonatal-Intensive-Care Programs*, 305 *NEW ENG. J. MED.* 489, 491 (1981)).

56. *Roe v. Wade*, 410 U.S. 113, 153 (1972). The *Roe* Court held the right to an abortion is a fundamental right protected by the fourteenth amendment. *Id.* The due process clause of the fourteenth amendment empowers the federal government to invalidate state statutes that encroach on a person's right to life, liberty or property. J. NOWAK, R. ROTUNDA, & J. YOUNG, *CONSTITUTIONAL LAW* 416-17 (2d ed. 1983) [hereinafter *NOWAK*]. The due process clause of the fourteenth amendment reads: "No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property without due process." U.S. CONST. amend. XIV, § 1.

In determining the validity of a challenged state statute, the federal court's standard of review is determined by the nature of the right the statute interferes with. *NOWAK*, *supra*, 418-19. If the challenged statute infringes on an express constitutional right, then the courts apply a strict scrutiny standard which requires that the statute further a compelling state interest by the least intrusive means. *Id.* If, however, the challenged statute infringes on an interest not recognized by the Constitution, then courts apply a rational basis test, which only requires the showing of a reasonable relationship between the statute and a legitimate state objective. *Id.* at 418. Therefore, even the fundamental rights guaranteed by the Constitution are not absolute because they are subject to state regulation following a showing of a compelling state interest. *Id.* See generally Gunther, *The Supreme Court 1971 Term Forward: In Search of Evolving Doctrine on a Changing Court: A Model for a Newer Equal Protection*, 86 *HARV. L. REV.* 1, 8 (1972) (value of using strict scrutiny and rational basis tests to implement constitutional protections).

nate her pregnancy at whatever time, in whatever way and for whatever reason" she chose.⁵⁷ The Court announced that states might impose limitations on a woman's right to an abortion to further the state's interests in protecting both maternal health⁵⁸ and the potential human life.⁵⁹ The balancing of these conflicting state interests with the rights of the mother became the framework for the *Roe* Court's trimester system.⁶⁰

1. Protection of Maternal Health

In establishing the first pillar of its trimester framework,⁶¹ the Court examined the state's interests in protecting maternal health.⁶² At the time of the *Roe* decision, the state of medical technology was such that the mortality rate of a woman having an abortion during the first third of the pregnancy was less than for a woman carrying the fetus full-term.⁶³ Because abortion posed no additional risk to the mother, the *Roe* Court held that, during the first trimester, a woman and her physician could make the abortion decision without intrusive state regulation.⁶⁴ Following the end of the first trimester, however, the Court found that the risk of maternal death from abortion was greater than that for full-term pregnancies.⁶⁵ The *Roe*

57. *Roe*, 410 U.S. at 153.

58. *Id.* at 159.

59. *Id.*

60. See Comment, *Viability and Abortion*, 64 Ky. L.J. 146, 149 (1975).

61. The normal human gestational period is 266 days or 38 weeks. Comment, *Roe v. Wade and the Traditional Legal Standards Concerning Pregnancy*, 47 TEMP. L.Q. 715, 735-36 (1974). Fertilization of the ovum, however, normally occurs two weeks after a woman's last menstrual period. *Id.* By dating pregnancy from a woman's last menstrual period (the gestational method), the pregnancy period is 40 weeks, with the actual age of the fetus being about two weeks less than the length of the pregnancy. *Id.* If the pregnancy is dated from conception (the conceptual method), the pregnancy term is 38 weeks and the age of the fetus coincides with the length of the pregnancy. *Id.*

The *Roe* Court used the common, yet imprecise trimester division to establish the point when the state could regulate abortions to protect maternal health. 410 U.S. at 163. This first trimester/second trimester division was fixed at the twelfth week of pregnancy. *Akron v. Akron Center for Reproductive Health*, 462 U.S. 416, 429 n.11 (1983).

62. *Roe*, 410 U.S. at 163.

63. In 1973, doctors performed the relatively safe abortion methods of dilation and curettage ("D&C"), and dilation and evacuation ("D&E"), routinely until the twelfth week of pregnancy. Rhoden, *supra* note 38, at 644. See also *supra* note 22 (defining the D&C and D&E procedures). These procedures were less hazardous than child birth. Rhoden, *supra* note 37, at 644.

64. *Roe*, 410 U.S. at 163.

65. In 1973, the only second trimester abortion method available was saline amniocentesis. Rhoden, *supra* note 39 at 644. This procedure was generally not performed until the sixteenth week of pregnancy. As a result, physicians simply did not perform abortions during the thirteenth, fourteenth and fifteenth weeks. *Id.* Second trimester saline abortions were also more hazardous to a woman. *Id.* It was this clear distinction between first and second trimester abortions that provided the *Roe* Court

Court therefore concluded that the state's interest in protecting maternal health becomes compelling after the first trimester and that, at this point, the state could regulate abortion procedures.⁶⁶ Such regulations, however, must be reasonably related to the protection of the mother's health and cannot be imposed for the protection of the fetus.⁶⁷

2. Protection of Potential Life

The second pillar in the *Roe* Court's trimester framework⁶⁸ was established at the point when the fetus reaches viability.⁶⁹ The Court adopted the medical definition of viability, which is that point when the fetus is "potentially able to live outside the mother's womb, albeit with artificial aid."⁷⁰ When the fetus reaches the point of viability, it is no longer merely a *potential* life but, instead, a sustainable life. The state's interest in protecting the fetus therefore becomes compelling at this point and,⁷¹ according to the *Roe* court, the state can then strictly regulate or proscribe abortion altogether.⁷²

Although the *Roe* Court determined that the point of fetal viability was at the beginning of the third trimester of pregnancy, it did not expressly conclude that the state's interest in protecting the fetus became compelling *only* during the last trimester of pregnancy.⁷³

with the justification for its first trimester pillar. *Id.*

Advancing medical technology has, however, blurred this clear distinction. In 1980, the D&E abortion method became more common than saline amniocentesis during the sixteen to twenty week period of pregnancy. Rhoden, *supra* note 22, at 1460. This has resulted in a reduction in the mortality rate for second trimester abortions and presented a challenge to the *Roe* Court's first trimester decision. Rhoden, *supra* note 39, at 648. The Court, however, upheld *Roe's* original first trimester/second trimester division despite this change in the mortality rates by peremptorily holding that the original distinction "continues to provide a reasonable legal framework for limiting a state's authority to regulate abortions." *Akron*, 462 U.S. at 429 n.11. This has led at least one commentator to suggest that the division was never justified. See Rhoden, *supra* note 39, at 644-55.

66. *Roe*, 410 U.S. at 163.

67. *Id.*

68. The *Roe* Court established the second pillar at the point when the fetus became viable. *Id.* At the time of the decision, medical authority found that viability usually occurred between the twenty-fourth and twenty-eighth weeks. *Id.* at 160 (citing L. HELLMAN & J. PRITCHARD, *WILLIAMS OBSTETRICS* 493 (14th ed. 1971)). Today, however, viability may occur much earlier. See *supra* note 56 and accompanying text (advances in prenatal care provide for earlier viability).

69. See *supra* note 24 (definition of viability).

70. *Roe*, 410 U.S. at 160 (citing L. HELLMAN & J. PRITCHARD, *WILLIAMS OBSTETRICS* 493 (14th ed. 1971); *DORLAND'S ILLUSTRATED MEDICAL DICTIONARY* 1689 (24TH ED. 1965)).

71. *Id.* at 163.

72. *Id.* The *Roe* Court did hold, however, that a state could not proscribe abortions "necessary to preserve the life or health of the mother." *Id.* at 164.

73. See Comment, *supra* note 61, at 149-50 ("viability is being interpreted as

Instead, the Court aligned this second pillar of its "trimester" framework with the medical definition of viability. In doing so, the Court impliedly provided for advances in prenatal care by allowing the second pillar to shift to an earlier point on the continuum of the pregnancy.⁷⁴ Recent advances in medical technology that have caused viability to occur earlier in the pregnancy have, therefore, redefined the point at which the state's interest in the potential life becomes compelling.⁷⁵ The effect, as Justice O'Connor has stated, is that the *Roe* trimester framework may well be on a "collision course with itself."⁷⁶

C. Fetal Rights/Maternal Duties

The Supreme Court's decision in *Roe v. Wade* established a framework for balancing a woman's right to personal autonomy, as encompassed in her fundamental right to choose to terminate her pregnancy, against the conflicting state interests of protecting maternal health and potential life.⁷⁷ The Court's recognition of a woman's right to an abortion and the state's interest in protecting potential human life, however, implied two additional factors that must be addressed. First, by recognizing the state's interest in protecting the potential human life of the fetus, the Court implied that the fetus does, in fact, have a right to life.⁷⁸ Second, in recognizing

shifting phenomenon, tied to the 24 to 28-week period only by the current state of medical technology.").

74. This position is supported by court decision's that seek to interpret *Roe*'s "trimester" framework. In *Wolfe v. Schroering*, a 1974 Kentucky abortion statute that prohibited abortions after the fetus reached viability was challenged because it did not adhere to the rigid three month division of the original trimester framework in *Roe*. 388 F. Supp. 631 (W.D. Ky. 1974). The district court rejected the challenge because "[a] close inspection of the language in the *Roe* decision reveal[ed] that the Court spoke only of a single trimester, the first. The Court used no language to indicate that the stages of pregnancy . . . were evenly divided." *Id.* at 635. Similarly, a 1974 Missouri abortion statute was challenged in part because it adopted a medical definition of viability to establish when abortions could be prohibited, rather than distinguishing prohibited abortions by a trimester method. *Planned Parenthood of Central Missouri v. Danforth*, 428 U.S. 52 (1976). The Court upheld the use of a medical definition of viability and stated "it is not the proper function of the legislature or the court to place viability . . . at a specific point in the gestation period." *Id.* at 64.

75. See *supra* note 55 and accompanying text (modern medical advances redefine the point of viability).

76. Justice O'Connor, in her dissenting opinion in *Akron v. Akron Center for Reproductive Health*, 462 U.S. 416, 458 (1983), suggests that as the medical risks to a woman undergoing an abortion are decreased, the first pillar of the *Roe* trimester framework will be pushed to a later point in the pregnancy. Conversely, as medical technology becomes better able to treat low birth weight infants, viability occurs earlier in the pregnancy and, therefore, the second pillar of the *Roe* framework is pushed to an earlier point. *Id.* It is very possible then to envision a collision between these two pillars of the *Roe* trimester system. *Id.* See Rhoden, *supra* note 22, at 1490-93.

77. See Dougherty, *supra* note 40, at 102; Comment, *supra* note 58, at 146-49.

78. Dougherty, *supra* note 40, at 103.

that a woman has a fundamental right to terminate her pregnancy, the Court also implied that a woman's decision to continue her pregnancy is a decision to accept the maternal duty to protect her fetus' right to life.⁷⁹

1. Fetal Rights

The *Roe* Court found that the state's interest in the potential life becomes compelling at the point when the fetus can potentially live outside the womb. In doing so, the Court expressly rejected the contention that a fetus was a person as defined by the fourteenth amendment⁸⁰ and, therefore, that it was entitled to all fourteenth amendment protections.⁸¹ The Court, however, declined to address the issue of when life begins.⁸² Instead, the Court chose to determine when the state's interest in that potential life becomes compelling.⁸³

The *Roe* Court held that the state has an interest in protecting the potential life of the fetus throughout the entire pregnancy in the same way that the state has an interest in protecting maternal health throughout the entire pregnancy.⁸⁴ In utilizing the current level of medical technology to establish the pillars of its trimester system, the *Roe* court, however, only established the points during the pregnancy when the competing interests become compelling, not when the interests come into existence.⁸⁵ In holding that the state has an interest in protecting the potential life of the fetus, the *Roe* Court necessarily implied that the fetus has a right to life.⁸⁶ It is this

79. *Id.*

80. *Roe v. Wade*, 410 U.S. 113, 158 (1973).

81. Defining a fetus as a person under the fourteenth amendment would, of course, also provide constitutional protection of its right to life. Dougherty, *supra* note 40, at 104.

82. *Roe*, 410 U.S. at 159. As the Court stated "[w]hen those trained in the respective disciplines of medicine, philosophy, and theology are unable to arrive at any consensus, the judiciary, at this point in the development of man's knowledge, is not in a position to speculate as to the answer." *Id.*

83. See *supra* note 52 discussing the application of strict scrutiny tests in constitutional law.

84. *Roe*, 410 U.S. at 162. The Court stated that "[t]hese interests are separate and distinct. Each grows in substantiality as the woman approaches term and, at a point during pregnancy, each becomes 'compelling.'" *Id.* at 162-63. The Court recognized the existence of these interests during pregnancy and then sought to determine when they become compelling. *Id.*

85. The state's interest in protecting the mother from the medical harm of abortion becomes compelling when abortion presents a greater risk to the mother than childbirth. See *supra* notes 63-64 and accompanying text (comparing the risks of pregnancy to those of abortion). The state's interest in protecting the fetus' potential life becomes compelling at viability. See *supra* note 68 and accompanying text (discussing the point of fetal viability).

86. In holding that states have a legitimate interest in protecting the potential life of a fetus and that this interest becomes compelling at viability, the *Roe* Court suggested that the fetus itself has a right to life and that at the point of viability this right outweighs a woman's right to personal privacy. *Roe*, 410 U.S. at 163-66. This

right to life that the state has an interest in protecting and that becomes compelling at the point of viability, thereby outweighing any right of the mother's to personal privacy.⁸⁷ Thus, *Roe v. Wade* only established a *framework* for determining when the fetus' right to life outweighs a woman's right to choose to terminate her pregnancy.⁸⁸ The Court's decision necessarily implies that questions of maternal health risks and fetal viability are determined by the current level of medical science.

2. Maternal Duties

The Court's decision in *Roe v. Wade* also implied that when a woman decides to continue her pregnancy, she accepts a maternal duty to protect the fetus' right to life.⁸⁹ The *Roe* decision provides a woman with an alternative to full-term pregnancy and also allows

argument is based on the fact that because the fetus is incapable of speaking for itself, one of the legitimate interests the state has is to protect the potential life by asserting the fetus' right to life. See Special Project, *supra* note 34, at 824.

Such a position is supported by recent court decisions extending fetal rights. In *Berger v. Weber*, a Michigan court allowed an infant to sue for negligently inflicting prenatal injuries. 82 Mich. App. 199, 267 N.W.2d 124 (1978). The Court held that a "child has a right to begin life with a sound body and mind." *Id.* In *Commonwealth v. Cass*, the Massachusetts Supreme Court defined homicide, in part, as the infliction of prenatal injuries that result in the death of a viable fetus, whether it is born alive or dead. 392 Mass. 799, 467 N.E.2d 1324 (1984). The *Cass* court relied on its own previous decision holding that a viable fetus is a person for the purpose of the Massachusetts wrongful death statute. *Id.* at 800, 467 N.E.2d at 1325 (relying on *Mone v. Greyhound Lines, Inc.*, 368 Mass. 354, 331 N.E.2d 916 (1975)). Finally, in *Summerfield v. Supreme Court, Maricopa City*, the parents of a viable fetus that was stillborn were permitted to recover for wrongful death caused by a physician's negligence. 144 Ariz. 467, 698 P.2d 712 (1985). In its opinion, the *Summerfield* court noted that 32 jurisdictions allow a wrongful death cause of action when a viable fetus is stillborn as the result of tortious negligence. *Id.* at 467-77 nn.5,6, 698 P.2d at 721 nn. 5,6.

87. See *supra* notes 33-35 and accompanying text discussing a woman's right to personal autonomy. One justification for recognizing a compelling state interest in the protection of potential life after viability is that abortion after viability is similar to infanticide. See Tribe, *The Supreme Court, 1972 Term - Foreword: Toward a Model of Roles in the Due Process of Life and Law*, 87 HARV. L. REV. 1 (1973). Tribe suggests that viability does not signal "any morally significant change in the developing human." *Id.* at 28. Instead, because the fetus is capable of life outside the mother, the harm or death caused to it by abortion is similar to infanticide. *Id.* Therefore, "a state wishing to prevent the killing of infants simply has no way to distinguish the deliberate destruction of the latter from what is involved in post-viability abortions." *Id.*

88. The state's interest in protecting the potentiality of human life reflects the fetus' right to life. It is this fetal right to life that is weighed against a woman's right to personal autonomy and which becomes "compelling" at the point of viability. By enforcing her right to personal autonomy over her fetus' right to life by choosing an abortion, a woman terminates her parental relationship with her fetus. One effect of ending this relationship should be to terminate a woman's right to execute an anatomical gift of the fetal organs. This result would ensure that the decision to conceive and/or terminate a pregnancy is an exercise of a woman's fundamental privacy rights and not a means of producing organs for harvest.

89. See Dougherty, *supra* note 40, at 196.

her to exercise her right to personal autonomy by choosing an abortion. In establishing a legal alternative to full-term pregnancy, the Court has made a woman's decision to continue her pregnancy more an exercise of a free will.⁹⁰ Because the decision to continue a pregnancy is an exercise of a woman's free choice, it may also be characterized as "an intervening act of proximate cause,"⁹¹ thus making a woman accountable for her continued pregnancy. This conscious decision, made with the freedom to choose an alternative, necessarily creates a greater moral responsibility of the mother for the fetus.⁹² By choosing full-term pregnancy over abortion, therefore, the woman is affirmatively accepting the maternal responsibility that accompanies that decision.⁹³

Conversely, in viewing the decision to proceed with a pregnancy as an election to assume maternal responsibilities, abortion may be characterized as a rejection of these same maternal duties. The most obvious maternal duty rejected when a woman decides to have an abortion is that of protecting the rights of the child.⁹⁴ By choosing abortion, a woman is, in effect, placing her right to personal autonomy above the fetus' right to life.⁹⁵ The state must then intervene to protect its compelling interest in protecting the fetus.⁹⁶

Thus, when a pregnant woman terminates her pregnancy by

90. The popular view of abortion as a viable alternative to full-term pregnancy is supported by the growing number of abortions performed in the United States each year. Rhoden, *supra* note 22, at 1455. In 1975, the number of legal abortions performed in the United States surpassed the one million mark for the first time, rising to 1.27 million by 1977. *Id.* at 1455 n.29. These numbers may even be higher since it is generally believed that not all abortions are reported. *Id.*

91. *Curlender v. Bio-science Laboratories*, 106 Cal. App. 3d 811, 829, 165 Cal. Rptr. 477, 488 (1980). In *Curlender*, a wrongful life action was brought against a testing laboratory on behalf of a girl born with Tay-Sach's disease. *Id.* at 815, 106 Cal. Rptr. at 480. The suit alleged that the girl's parents were incorrectly informed that they were not carriers of the disease and, as a result, they did not seek an abortion. *Id.* at 815-16, 106 Cal. Rptr. at 480. In allowing the cause of action, the court suggested that a patient's decision to continue a pregnancy would bring about additional moral and legal responsibilities to the child. *Id.* at 829, 165 Cal. Rptr. at 488. The Court held that if "parents made a conscious choice to proceed with a pregnancy, with full knowledge that a seriously impaired infant would be born, that conscious choice would provide an intervening act of proximate cause . . . [and] these parents [should be] answerable for the pain [and] suffering . . . they have wrought upon their offspring." *Id.*

92. Dougherty, *supra* note 40, at 106.

93. See Robertson, *Procreative Liberty and the Control of Conception, Pregnancy, and Childbirth*, 69 VA. L. REV. 405, 437 (1983).

94. See Shapiro, *Medical Treatment of Defective Newborns: An Answer to the "Baby Doe" Dilemma*, 20 HARV. J. ON LEGIS 137, 145-46 (1983).

95. See *supra* 83-87 and accompanying text (discussing the balancing of a fetus' right to life with a woman's right of personal autonomy).

96. While . . . [the child] 'belongs' to his parents, he belongs also to his state . . . [t]he fact [that] the child belongs to the state imposes upon the state many duties. Chief among them is the duty to protect his right to live and to grow up with a sound mind in a sound body and to brook no interference with that right by any person or organization.

an abortion, it is an intentional disassociation of herself from the fetus, and a rejection of her maternal duties, with a corresponding loss of any and all the maternal rights she might otherwise have in the fetus.

Summary

The *Roe* Court delineated the right to an abortion by balancing the rights of a woman against the interest of the state as protector of the fetus' right to life. While the constitutional right to privacy encompasses a woman's right to choose an abortion, this right is not absolute and must be exercised in light of the fetus' right to life.⁹⁷ A woman's conscious decision to terminate her pregnancy is a justifiable rejection of the maternal responsibilities associated with a full-term pregnancy. However, by exercising her decision of free choice and rejecting any maternal responsibilities, it follows that the mother also relinquishes any parental rights that are associated with the decision to carry the fetus to a full-term pregnancy.⁹⁸ Such parental rights include her possessory interests in the fetus and her right to donate the fetal tissue.

III. POSSESSORY INTEREST IN THE ABORTED FETUS

When a woman becomes pregnant with the intention of donating her aborted fetus for use in a transplant operation or for experimentation, it is with the assumption that she will have control over the disposition of her fetus. Such a right to oversee the disposition of the fetus arises out of the same possessory interest the parent has in a deceased child.⁹⁹ If, however, abortion is correctly viewed as a

Shapiro, *supra* note 94, at 146 (citing *In re Clark*, 21 Ohio Op. 2d 86, 90, 185 N.E. 2d 128, 132 (1962)). When applied to post-viability abortions, this position seems to place a duty on the states to intervene on behalf of a viable fetus and to prohibit the abortion in such cases. In pre-viability abortions, which would operate as a termination of parental duties, the state would again have a duty to intervene and assume responsibility for disposition of the fetal remains.

97. See *supra* note 87 and accompanying text discussing the balancing of a woman's right to privacy against fetus' right to life.

98. See *infra* notes 94, 135-59, and accompanying text discussing the rejection of parental rights.

99. The right to direct the disposition of a fetus flows from the possessory interest that the next of kin has in directing the burial of the human remains of a deceased relative. See H. BERNARD, *THE LAW OF DEATH AND DISPOSAL OF THE DEAD* 13-21 (2d ed. 1979). The next of kin's possessory interest in the disposal of human remains arose from the English common law recognition of the next of kin's duty to dispose of the dead body. See *The Queen v. Stewart*, 113 Eng. Rep. 1007 (1840) (duty to provide the deceased with proper burial); see also *Rees v. Huges*, 1 K.B. 517 (1946) (burial expense to be born by decedent's estate).

American courts have also found that a right to possession of the deceased's remains arises from the next of kin's duty to bury. See *Nichols v. Central Vt. Ry. Co.*, 94 Vt. 14, 16, 109 A. 905, 906 (1919). The duty of disposal and, therefore, right to

disassociation of the mother from the fetus, a question arises as to what parental rights, if any, the mother retains in the aborted fetus. This section analyzes the possessory interest involved in the disposition of a human body and suggests that a woman's decision to abort her fetus operates as a rejection of all her parental rights.¹⁰⁰

A. Common Law Possessory Interests

Under common law, the next of kin of a deceased person is entitled to the possession of the dead body.¹⁰¹ The reason for this rule¹⁰² is that the state's interest in protecting both the public health and the emotional well-being of the surviving family is generally best served when the next-of-kin have possession of the deceased.¹⁰³ The state has an interest in protecting the living from the possibility of disease associated with improper disposal of remains, as well as protecting the living from the emotional and sensory offense associated with improper disposal.¹⁰⁴

With these concerns in mind, courts have recognized that close relatives of the deceased have a quasi-property right to possession of a dead body¹⁰⁵ for the purpose of burial because such a right or duty of burial promotes the state's interest in two ways. First, family members will, in most cases, willingly assume the duty of proper disposition because of their emotional ties with the deceased.¹⁰⁶ The sense of sacredness in a human corpse, felt especially by the close relatives of the deceased, will most likely ensure a decent disposal according to the individual's religious or traditional customs.¹⁰⁷ While this observance of a decent burial will most likely ensure swift

direct disposition of a fetus falls to the parents. See e.g., *Wilde v. Milwaukee Elec. Ry. & Light Co.*, 147 Wis. 129, 132, 132 N.W. 885, 886 (1911); *Przybyszewski v. Metropolitan Dade County*, 363 So. 2d 388 (Fla. Dist. Ct. App. 1978).

100. See *supra* notes 91 & 94 and accompanying text discussing abortion as a rejection of parental rights.

101. See *supra* note 99 and accompanying text discussing the possessory interest of the next of kin in the body of the deceased.

102. Terry, "Alas! Poor Yorick," *I Knew Him Ex Utero: The Regulation of Embryo and Fetal Experimentation and Disposal in England and the United States*, 39 VAND. L. REV. 419, 433 (1986) (citing Calabresi & Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972)). An entitlement is defined as a "[r]ight to benefits, income or property which may not be abridged without due process." BLACK'S LAW DICTIONARY 477 (5th ed. 1979).

103. Terry, *supra* note 102, at 433.

104. Quay, *Utilizing the Bodies of the Dead*, 28 ST. LOUIS U.L.J. 889, 901-04 (1984).

105. Although reluctant to find a true property right in a dead body, courts have recognized a quasi-property right in order to determine custody for burial. *Cohen v. Groman Mortuary, Inc.* 231 Cal. App. 2d 1, 4-5, 41 Cal. Rptr. 481, 483-84 (1964). See also Quay, *supra* note 104, at 901-04.

106. See Quay, *supra* note 104, at 901-02.

107. See generally *id.* at 904-10 (discussing a family's obligation to follow the decedent's wishes for proper burial).

disposal of the remains, it is also likely that a close relative may already be in possession of the dead body and, therefore, the disposal can be accomplished with a minimum of body transactions.¹⁰⁸

The second reason for placing the duty of proper disposition of human remains on the family is that it will, in most cases, fairly allocate the costs of disposal. It is likely that these close relatives upon whom the duty of disposal is generally placed will stand to benefit from the decedent's estate.¹⁰⁹ Some of the benefits from the estate can, therefore, easily be allocated to cover the costs of burial,¹¹⁰ especially when there is an obligation on the family to observe the potentially costly burial and disposition wishes of the deceased.¹¹¹

With respect to fetal remains, this same type of reasoning also supports the quasi-property possessory interest the mother has in the fetal remains of her "child." While it is unlikely that a fetus will possess an estate, the benefits of which the next of kin can use to cover the cost of burial, the emotional ties between family members are enough to ensure a swift and decent disposal.¹¹² When a pregnant woman intentionally aborts her fetus, however, she rejects those emotional ties and abandons the fetus together with her possessory interest in the remains.

B. *Statutes and the Uniform Anatomical Gift Act*

In addition to the common law possessory interests in the aborted fetus, specific state legislation,¹¹³ as well as the Uniform Anatomical Gift Act ("UAGA"),¹¹⁴ regulates the uses of the aborted fetus. Much of the applicable state legislation appears in the area of fetal research.¹¹⁵ Conversely, the UAGA regulates human organ and tissue donations.¹¹⁶ As applied to the abortus,¹¹⁷ these laws generally

108. Terry, *supra* note 102, at 433-34.

109. The Uniform Probate Code distributes the estate of an intestate decedent to a living spouse and/or the decedent's lineal descendants according to the closeness of their relationship to the decedent. UNIF. PROB. CODE §§ 2-102, 2-103, 8 U.L.A. 59-61 (1983). This distribution is designed to follow the desires of most decedents. UNIF. PROB. CODE at § 2-102 comment 8 U.L.A. at 59. Unless the decedent executes a valid will altering this distribution, the close relatives of the decedent will take from his estate.

110. Terry, *supra* note 102, at 434.

111. See *supra* note 106 for a discussion of the next of kin's obligation to provide burial.

112. Terry, *supra* note 106.

113. See Terry, *supra* note 100, at 427-32.

114. See *infra* notes 125-127 and accompanying text for a discussion of how the U.A.G.A. operates).

115. See Terry, *supra* note 100, at 440-56.

116. U.A.G.A. 8A U.L.A. 16 prefatory note (1983).

117. An abortus is simply "[t]he fruit of an abortion. . . ." BLACK'S LAW DICTIONARY 7 (5th ed. 1979).

do not address the possessory interests in the remains, but instead regulate the market for aborted fetuses.

State legislation focuses on either slowing the growth of the fetus market or on a total proscription of fetal experimentation.¹¹⁸ States control the uses of fetal tissue by regulating storage and transportation, by limiting those who may receive the aborted fetus, and by prohibiting its sale.¹¹⁹ Such legislation, however, does not prohibit a woman from intentionally conceiving with the intent to use the fetal organs or tissues for transplant purposes.¹²⁰ A strict prohibition on fetal experimentation poses problems in distinguishing permitted research from prohibited experimentation.¹²¹ An additional concern is the effect such a proscription would have in limiting advances in prenatal care.¹²²

With the development of transplant technology, the UAGA was proposed and quickly adopted by all fifty states.¹²³ The purpose of the UAGA is to harmonize the competing interests of donors, donees and recipients in the donative tissue and answer the legal questions arising from the conflict between these competing interests.¹²⁴ Under the UAGA, a decedent includes a fetus or a stillborn infant.¹²⁵ The UAGA further provides that the parties with the right to donate remains are, in descending order of priority, either a parent, an adult sibling, the guardian of the decedent at the time of his death, or any other person authorized or with a duty to dispose of

118. Terry, *supra* note 100, at 437-38. See generally Fletcher & Schulman, *Fetal Research: The State of the Question*, 15 HASTINGS CENTER REP. 6 (Apr. 1985) (reviewing current statutes on fetal research).

119. Terry, *supra* note 102, at 437-38.

120. Robertson, *supra* note 93, at 405-07 (a woman has a constitutional right to procreate).

121. Terry, *supra* note 102, at 441-42. See generally *Nat'l Comm'n Report*, *supra* note 23, app. 13 (reviewing the law of fetal research); *Id.* at app. 14 (review of the legal issues in fetal research).

122. See Fletcher and Schulman, *supra* note 120, at 8-11; Baron, *Fetal Research: The Question in the States*, 15 HASTING CENTER REP. 12 (Apr. 1985).

123. Comment, *supra* note 19, at 742.

124. Quay, *supra* note 26, at 896-900. The U.A.G.A. suggests five competing interests in the donation of organs. 8A U.L.A. 16 prefatory note (1983). They are: (1) the wishes of the deceased during his lifetime concerning the disposition of his body; (2) the desires of the surviving spouse or next of kin; (3) the interest of the state in determining by autopsy, the cause of death in cases involving crime or violence; (4) the need of autopsy to determine the cause of death when private legal rights are dependent upon such cause; and (5) the need of society for bodies, tissues and organs for medical education, research, therapy and transplantation.

Id.

The prefatory note also recognized twelve specific legal questions arising from organ transplantation for which the U.A.G.A. provided answers. *Id.* at 16-17. These questions include how consent is obtained, how the gift is executed, how death is defined, and the nature and extent of the physician's liability. *Id.*

125. § 1(b), 8A U.L.A. 30 (1983).

the remains.¹²⁶ Just as at common law, under the UAGA a mother retains a possessory interest in the fetal remains, and has the right to execute an anatomical gift of the fetal organs and tissue.

This right to consent to donation of fetal organs should not be viewed as absolute. Case law has established that maternal consent is not in and of itself sufficient to allow a minor child or legal incompetent to become an organ donor.¹²⁷ In addition to necessary parental consent, the courts have held that the parents must prove a benefit to the donor before such consent is effective.¹²⁸ Applying this rule of law to the fetal donor, the parents would need to prove some benefit to the fetal donor in order to justify the anatomical gift of fetal organs and tissue. Because the use of such tissue and organs presupposes the death of the donor-fetus, it is quite impossible to establish any benefit to the fetus from the donation.

The common law possessory interest in a dead body, as well as the statutory right to execute an anatomical gift under fetal experimentation legislation and the UAGA, address the maternal rights of a woman to direct the disposal of her fetus.¹²⁹ The question arises, however, whether those rights exist when a woman chooses to abort her fetus for the purpose of making the fetal organs and tissues available for transplantation. Because the right to an abortion arises from a woman's fundamental right to personal autonomy, proceeding with an abortion represents a conscious decision to exercise that right over the fetus' corresponding right to life.¹³⁰ A woman's decision to put her personal autonomy ahead of her maternal duties to the fetus implies that she has rejected those maternal duties. Because abortion is a rejection of the fetus, it therefore operates as a legal abandonment.¹³¹ When a woman has an abortion, she necessarily rejects all maternal rights, including the right to direct the disposition of the fetal remains.¹³²

126. § 2, 8A U.L.A. at 34-35.

127. *Strunk v. Strunk*, 445 S.W.2d 145 (Ky. 1969) (affirming equitable order allowing kidney transplant from mental incompetent to his brother).

128. In *Strunk*, the court used the "judgment doctrine" to permit the mother of a 27 year old mental incompetent to consent to the incompetent's donation of one of his kidneys to his 28 year old brother who was dying from kidney disease. *Id.* See *Lenow*, *supra* note 19, at 19, n.112. The court allowed the operation because the Department of Health demonstrated that the incompetent was emotionally and psychologically dependent on his brother and, therefore, the death of his brother would cause more severe harm than the loss of the kidney. *Strunk*, 445 S.W.2d at 146.

129. See *supra* notes 99 & 128 discussing a mother's right to direct the disposal of a dead fetus.

130. See *supra* note 85 and accompanying text discussing the right to an abortion as the result of balancing a woman's right to privacy against the fetus' right to live.

131. See *infra* notes 144-145 and accompanying text discussing abortion as abandonment.

132. See *infra* notes 151-153 and accompanying text for a discussion of the ter-

IV. ABORTION AS ABANDONMENT

A woman's decision to intentionally conceive with the intent to abort the fetus and execute an anatomical gift of the fetal organs and tissues raises the ethical dilemma of ending a potential human life solely for the medical benefit of another.¹³³ This issue has stirred controversy in the area of organ transplants, most notably in determining the time of death of the donor.¹³⁴ The determination of fetal death for transplant purposes becomes increasingly complex because the mother has a constitutionally protected right, grounded in her right to privacy, to the conception and abortion of the fetus.¹³⁵ Legislation that presents an outright ban on fetal donation or seeks to regulate the use of fetal tissue is problematic in its application. While such legislation may prevent exploitation of the fetus, it poses a severe limitation on the benefits obtained from current research and treatments that utilize fetal tissues.¹³⁶ By viewing induced abortion as a termination of all maternal rights and, therefore, also as an abandonment of the fetus, the states can retain and closely regulate the benefits of this new technology while, at the same time, preventing the use of the womb as a spare parts factory.¹³⁷

A. Termination of Maternal Rights by Abandonment

Applying the principles of adoption law to the abortion scena-

mination of parental rights.

133. See *supra* note 19 and accompanying text for a discussion of ethical violations of the Hippocratic Oath and implications the thirteenth amendment's proscription of involuntary servitude.

134. About 90% of neurosurgeons are in favor of brain death criteria being used to determine legal death. Prottas, *supra* note 25, at 189. A brain-dead patient is best suited to become an organ donor because the patient's heart can continue to pump and, therefore, sustain the body's organs. *Id.* at 184. Brain death presumes that "irreversible changes have taken place that preclude return to normal brain activity and self-sustaining bodily function." U.A.G.A. § 7 comment, 8A U.L.A. 60 (1983). This definition is problematic if applied to a developing fetus in order to determine whether its organs may be removed because a developing fetus has the potential to develop "normal brain activity and self-sustaining bodily functions." *Id.* See Capron, *supra* note 3, at 5-9 (arguing that anencephalic infants should not be classified as brain-dead to facilitate transplants).

135. See *supra* notes 35-36 and accompanying text discussing a woman's constitutionally protected right to procreative freedom.

136. See *supra* notes 121-22 and accompanying text for a list of harms caused by a total ban on fetal research.

137. Such a model would not present an intrusion on a woman's right to privacy because she would still have the procreative rights to practice contraception and to choose abortion. This model would, however, prevent a woman from exercising her procreative rights for the unethical production of transplantable tissues because the act of inducing an abortion would terminate her parental right to direct disposition. Viewing abortion as a termination of the right to direct disposition of the fetal organs would, therefore, eliminate the woman's incentive to consider such a procedure (or to even consider conceiving as a means to that end).

rio, the aborted fetus can reasonably be viewed as an abandoned child.¹³⁸ According to the Uniform Adoption Act ("UAA"), consent to adoption is not required when the natural parents have abandoned their child.¹³⁹ In defining abandonment, most courts have used a strict interpretation that requires physical abandonment, "as well as the subjective intent to relinquish parental ties."¹⁴⁰ The UAA has, however, liberalized the definition of abandonment by requiring only physical abandonment.¹⁴¹

A woman's act of procuring an abortion is tantamount to a physical abandonment of the fetus. By removing a pre-term fetus from her womb with the intent to donate the fetal organs and tissues, the mother has evidenced her withdrawal of support from the fetus.¹⁴² Removal of the fetus to harvest its organs is no less of an

138. This view of aborted fetus as abandoned infant is integrated into part of Tennessee's abortion law. The applicable sections state: "Custody of infant prematurely born alive during abortion. An infant prematurely born alive in the course of a voluntary abortion is hereby declared abandoned for purposes of custody only and the department of human services shall care for such infant as provided for in s34-106." Tenn. Code Ann. § 39-4-207 (1982).

This statute, however, applies only to a fetus that is aborted alive. *Id.* Consequently, if the fetus showed no signs of life following the abortion procedure, the statute would not apply and the mother would retain the right to direct disposition of the fetal remains. *Id.* However, the mere act of securing an abortion should also terminate the mother's right to direct disposition, whether the fetus shows signs of life or is killed when removed from the womb.

139. UNIF. ADOPTION ACT. § 6, 9 U.L.A. 26-27 (1971) (hereinafter U.A.A.). Subsection (a) of section six states:

(a) Consent to adoption is not required of:

(1) a parent who has [deserted a child without affording means of identification, or who has] abandoned a child;

(2) a parent of a child in the custody of another, if the parent for a period of at least one year has failed significantly without justifiable cause (i) to communicate with the child or (ii) to provide for the care and support of the child as required by law or judicial decree.

Id.

140. Bartlett, *Rethinking Parenthood as an Exclusive Status: The Need for Legal Alternatives When the Promise of the Nuclear Family has Failed*, 70 VA. L. REV. 879, 895 (1984) (citing *In re T.C.M.*, 651 S.W.2d 525 (Mo. Ct. App. 1983); *In re Adoption of Ernst*, 318 N.W.2d 353 (S.D. 1983); *In re Adoption of Tyron*, 27 Wash. App. 842, 621 P.2d 775 (1980) (additional citations omitted).

141. No consent to adoption is required when the parent of a child unjustifiably fails to significantly communicate with the child or provide care and support for the period of one year. U.A.A. § 6(a)(2). Similarly, some state statutes, do not require a showing of subjective intent to prove abandonment. Bartlett, *supra* note 137 at 896 (citing CAL. CIV. CODE § 224 (West 1982); GA. CODE § 19-8-6(b) (1982); IND. CODE ANN. § 31-3-1-6(g)(1) (Burns 1980); MONT. CODE ANN. §§ 40-8-111(1)(a)(iii-v), 41-3-102(3)(d) (1983); N.H. REV. STAT. ANN. § 170-C:5(I) (1977); N.Y. DOM. REL. LAW § 111(6)(b) (McKinney 1977); N.C. GEN. STAT. § 48-2(1)(b) (Supp. 1983); OHIO REV. CODE ANN. § 3107.07 (A) (Page Supp. 1983); R.I. GEN. LAWS § 15-7-7(a) (Supp. 1083); UTAH CODE ANN. § 78-30-5 (1977); WIS. STAT. ANN. § 48.415(1)(b) (West Supp. 1983-1984)).

142. In the same way an infant is totally dependent upon its mother for its nutrition, protection and care, a fetus in the womb is also dependent upon its mother. In fact, because of the physical link between the fetus and the mother via the umbili-

abandonment than leaving an infant on a stranger's doorstep. An intentionally induced abortion is clearly a withdrawal of physical support and therefore must legally constitute a physical abandonment of the fetus by the mother.¹⁴³

When determining whether an intentional abortion provides evidence of the mother's intent to relinquish parental ties, the reason for the abortion need not be examined. The Supreme Court requires clear and convincing evidence for the termination of parental ties.¹⁴⁴ Here, however, the clear and convincing evidence of the mother's intent to abandon the fetus is implied from her unambiguous act of procuring an abortion.¹⁴⁵ Parental intent to sever ties with a child can be shown by actions that severely harm the child. Such intent is found when a parent is determined unfit because his or her actions have caused severe harm to the child.¹⁴⁶ A woman's act of withdrawing her support of the fetus through abortion goes well beyond the infliction of severe harm to the child. Moreover, when abortion is viewed as a disassociation of a woman from her fetus,¹⁴⁷ the intent to terminate parental ties is clearly evident.

B. *The Effect of Abandonment*

In adoption law, the abandonment of a child operates as a complete termination of all parental rights to that child without parental consent. In effect, the parents and the child become legal strangers.¹⁴⁸ The effect of this legal severing of parental rights is to discharge the parents from duties of care and support of the child.¹⁴⁹ The parents' rights to the disposition of the body of the deceased child are also severed.¹⁵⁰

cal cord, the fetus' dependence upon its mother is even more evident. Because abortion, correctly viewed, is a severing of the physical link between the mother and the fetus, abortion itself is evidence of the mother's withdrawal of support.

143. Abandonment, as pertaining to children, is legally defined in part as a "[f]oregoing [of] parental duties." BLACK'S LAW DICTIONARY 3 (5th ed. 1979). The initial parental duty, or more accurately, maternal duty, is to protect the fetus' right to life. See *supra* notes 86-92 and accompanying text for an explanation of maternal duty to protect the fetal right to live. Abortion is clearly a rejection of this parental duty and, therefore, is correctly characterized as abandonment of the fetus. *Id.*

144. *Santosky v. Kramer*, 455 U.S. 745 (1982).

145. By definition, the subjective intent of abandonment is proved by objective actions. BLACK'S LAW DICTIONARY 2 (5th ed. 1979).

146. See *e.g.*, *Ford v. Litton*, 211 So. 2d 871, 873 (Miss. 1968) (requiring a showing of "immoral conduct or vicious habits" to prove unfitness); *D.S. v. Department of Pub. Assistance & Social Servs.*, 607 P.2d 911, 919 (Wyo. 1980) (unfitness determined by actions imposing a "serious danger to the child's physical or mental well-being").

147. See *supra* notes 89-96 and accompanying text discussing abortion as a disassociation of a woman from her fetus.

148. *Bartlett*, *supra* note 143, at 894.

149. See U.A.A. § 14(a)(1), 9 U.L.A. 44 (1971).

150. See *Phillips v. Home Undertakers*, 138 P.2d 550 (Okla. 1943). In *Phillips*, the Court held that after the legal termination of a father's rights to his child by

If adoption law theory is applied to an intentionally induced abortion, the aborted fetus may be fairly characterized as abandoned by the mother. The induced abortion severs the maternal ties to the fetus and the mother should therefore no longer retain a common law possessory interest in the fetal remains.¹⁵¹ Such a severance of the maternal ties also removes the mother from the class of persons possessing rights to execute donations of fetal tissue under the UAGA.¹⁵² The fetus is then viewed as abandoned and the state can step in to protect it accordingly.¹⁵³

By viewing the aborted fetus as under the state's *parens patriae* control,¹⁵⁴ the benefits of using aborted fetuses are retained without allowing the mother to intentionally conceive and later harvest the fetus. Temptations for a woman to intentionally conceive a fetus for use as an organ donor may arise from the possibility of financial gain, or, more likely from the possibility of directing donations toward a family member or friend. Either case presents the possibility of ending one life for the benefit of another.¹⁵⁵ In such cases, the justifications which support a woman's fundamental right to an abortion are not implicated because personal autonomy is no longer the reason for securing the abortion.¹⁵⁶ Instead of securing an abortion for the purpose of exercising control over her own body, the mother's reason for abortion becomes control over the body of the fetus. Because an aborted fetus is abandoned, however, a woman's maternal rights, including the right to direct disposition of the fetal remains, are severed and the state may regulate to ensure that the sole reason for choosing an abortion is to exercise a woman's constitutionally protected right of personal autonomy.¹⁵⁷ Without control over the disposition of the fetal remains, the mother can neither receive financial gain from the aborted fetus nor direct its disposition to a predetermined transplant recipient. The state, however, can

divorce decree, the father had no duty to provide for the burial of the child.

151. See *supra* note 99 and accompanying text for a discussion of a mother's possessory interest in fetal remains.

152. See *supra* note 128 and accompanying text for a discussion of persons who may execute organ donations.

153. See *supra* note 96 and accompanying text for a suggestion that the state has a duty to protect the fetus' right to life.

154. *Parens patriae* is the state's power to "act as guardian to persons with legal disabilities such as infants." BLACK'S LAW DICTIONARY 1003 (5th ed. 1979). See also Comment, 95 THE L.Q. REV. 332 (July 1979) (suggesting the *parens patriae* power of Family Division of the High Court in England could justify wardship of a fetus to prevent abortion).

155. See *supra* note 19 and accompanying text discussing the application of the Hippocratic Oath to the ethical question of taking one life for the benefit of another.

156. See *supra* note 33 and accompanying text discussing the constitutional origins of the right to personal privacy.

157. See *supra* note 39 and accompanying text for a characterization of abortion as a disassociation of the mother from the fetus.

control the disposition of the fetus by more closely regulating the use of the remains for beneficial experimentation and treatments.

V. CONCLUSION

Recent advances in the area of transplant technology and in the treatment of some diseases have created new uses for fetal organs and tissues. These uses have created the temptation for a woman to intentionally conceive a fetus in order to obtain an abortion and use the fetal organs and tissues as donative material. The problem is whether a woman's constitutional right to procreate and secure an abortion allows her to end the potential life of the fetus for the benefit of others. An affirmative answer is not compelled by the rationale behind the Supreme Court's legalization of abortion as an exercise of a woman's right to personal autonomy. It also raises the ethical dilemma of whether a person should be able to end a potential human life solely for the benefit of others.

Recent advances in medical technology have, however, led to a greater understanding of fetal viability and, correspondingly, to an increase in the rights afforded the fetus. In the wake of these advances, the United States Supreme Court decision in *Roe v. Wade* is, in essence, a decision balancing the mother's right to personal autonomy against the fetus' right to life. In addition, a woman's conscious decision to secure an abortion is a clear rejection of any maternal duties. As an unambiguous act of physical abandonment, abortion terminates the woman's parental rights and duties, including the right to direct the disposition of the fetal remains.

By intentionally inducing an abortion, the mother should also lose her right to execute an anatomical gift of the fetal organs or tissues. Such an approach would remove the incentive for intentionally creating fetal organs as donative material, regardless of whether the incentive is profit or a purely altruistic reason. The benefits of using the tissues of aborted fetuses, however, may be retained by allowing the state to direct and regulate the disposition of the aborted fetus. Such a view of abortion prevents the intentional creation of fetal tissue for transplants and does not permit the fetus to become a mere harvested crop.

James David Roberts