

POLITICS AND PRIVACY: REFINING THE ETHICAL AND LEGAL ISSUES IN FETAL TISSUE TRANSPLANTATION*

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I. INTRODUCTION

It should come as little surprise that the ethical and legal treatment afforded fetal tissue transplantation will be influenced by the abortion debate. However, when the extent and dimensions of that synergy are analyzed, it is difficult not to conclude that we are faced with a purposeful confusion of the issues destined to pre-empt any meaningful discussion of fetal tissue transplantation. The issues identified are not so much ethical concerns, but instead reflect settled positions taken for strategic reasons. What could have been identified as discrete legal problems turn out to be recycled arguments as to privacy and reproductive autonomy. Herein lies a considerable irony. For those opposed to either abortion or fetal tissue transplantation, the effective strategy is to press the link between the two issues. For the proponent of tissue transplantation the political strategy is to maintain the issues as separate. However, when the proponent rallies her *legal* arguments she must confront, indeed utilize, abortion-related principles. And, if our policy-makers and judges have in fact become locked into positions on this issue by their stance on the abortion debate, it may well be that the fetal tissue debate is over before it has begun.

II. ETHICAL ISSUES

There are always some fringe elements who oppose any human intervention from conception through birth, be it abortion, tissue transplantation, or even therapeutic fetal surgery or ultrasonography. However, in

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practice, the most extreme position likely to be encountered in organized opposition to fetal tissue transplantation may be characterized with the slogan "fetus as person." At this extreme, any intrusive intervention involving the fetus, or subjugation of the interests of the fetus (interests presumably identified by persons) to the interests of a person is considered ethically unacceptable. In this camp, abortion is regarded as the ultimate offense. Adherents to these views immediately integrate any consideration of fetal tissue transplantation into the ethics of the preceding abortion, leading to statements such as, "[t]he abuse is not in the sale of those tissues, but in killing the baby in the first place."¹ The opposite extreme may be depicted by the position that "tissue is tissue;" abortion is legal and the fetus should not be dignified to a greater degree than any other piece of tissue surgically removed from a woman.

As is usually the case, however, the debate will concentrate in the middle of these extreme positions, where one may identify differently articulated convictions as to the permissible level of reification of the fetus.² The tolerable level of reification (and its pejoratively styled legal relative, alienation³) itself is a function either of a belief in what the fetus is or what it has the potential to become.⁴ Interestingly, that recognition of

1. Gorman, *A Balancing Act of Life and Death*, TIME, Feb. 1, 1988 at 49 (quoting Dr. John Willke, President, National Right to Life Committee). This was echoed by a statement from the Society for the Protection of Unborn Children, a British anti-abortion group, following the first fetal cell implant there, proclaiming that fetal tissue transplantation amounts to "the deliberate killing of unborn children for transplantation spare parts," N.Y. Times, Apr. 19, 1988, at C9, col. 3.

2. See, e.g., Will, *Respecting the Human Body*, Wash. Post, Oct. 3, 1985, at A23, col. 3.

Human beings are neither mindless matter nor minds isolated from the physical matter of bodies. Ideas and even minds may be intangible, but particular ones belong to particular "embodied" persons—persons with bodily natures. To be human is to be "embodied," to have the form, powers, capabilities and limits of the human body.

The instinct to show some respect toward any human body—even a cadaver, even an aborted fetus—is natural, and is not a mere residue of pre-scientific superstition. It expresses the felt conviction that a body is never "merely" a body, because a human being is never merely a ghost in a corporeal machine.

3. See generally 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, 432-38 (1986). For a discussion of appropriate levels of commodification or market-alienation of children, see Landes & Posner, *The Economics of the Baby Shortage*, 7 J. LEGAL STUD. 323 (1978); Radin, *Market-Inalienability*, 100 HARV. L. REV. 1849 (1987); Posner, *The Regulation of the Market in Adoptions*, 67 B.U.L. REV. 59 (1987).

4. I.e., the level of reification turns on whether one views a fetus as a person rather than, say, an older organ. See Nathan, *Fetal Research: An Investigator's View*, 22 VILL. L. REV. 384, 390 (1976-77). For a telling example of the potentiality argument as seen by an anti-Roe Justice, see Thornburgh v. American College of Obstetricians and Gynecologists, 476 U.S. 747 (1986):

However one answers the metaphysical or theological question whether the fetus is a "human being" or the legal question whether it is a "person" as that term is used in the

potential remains relevant for many in determining the ethical approach to tissue transplantation, even when termination of the fetus has made it clear that such potential will never be fulfilled.

It is those who inhabit the broad middle ground of attitudes toward fetal tissue transplantation who seem most susceptible to the argument that some ethical division exists which is supportable on the basis of the abortion typology: a distinction based on whether the purpose of the abortion was contraceptive rather than tissue farming. Notwithstanding any ethical import this distinction might convey, it is singularly ineffective in the real world. First, it is flawed in practice because women who abort may have mixed motives. Second, it is overly narrow. In the vast gulf between contraceptive and tissue farming motives, there are numerous additional concerns, such as genetic and therapeutic, that motivate abortions.

Any discussion of motivation spills over into ethical concerns regarding incentives to abort prior to any transplantation. There are two concerns here. One is the straightforward incentive issue: the encouragement of abortion is wrong or, at least, distasteful. This position may be held by those on either side of the abortion rights debate. The second concern is more subtle and, I believe, more important. It is the fear that permitting the commercialization of the fetal tissue transplantation system will result in the exploitation of the women who bear tissue for profit and of the critically ill patients who want to acquire it. This important ethical question frequently becomes distorted because the debate confuses the technology with its practitioners' motives. For example, there is arguably nothing wrong with *in vitro* fertilization and surrogacy. What is wrong and what may justify regulation is commercialized exploitation and de-humanization of the woman, the recipient, and perhaps the fetus.⁵

Constitution, one must at least recognize, first, that the fetus is an entity that bears in its cells all the genetic information that characterizes a member of the species *homo sapiens* and distinguishes an individual member of that species from all others, and second, that there is no nonarbitrary line separating a fetus from a child or, indeed, an adult human being.

Id. at 2195-96 (White, J., dissenting).

5. The well-known New Jersey surrogacy case, *In the Matter of Baby M.*, 537 A.2d 1227 (N.J. 1988), held a surrogacy contract to be in conflict with public policy and aspects of New Jersey family law. Currently, thirty-four states are considering legislation designed to regulate surrogacy. N.Y. Times, Jun. 26, 1988, § 1, at 1, col. 6, 11, col. 3 (nat'l ed.). Following recommendations contained in the REPORT OF THE COMMITTEE OF INQUIRY INTO HUMAN FERTILIZATION AND EMBRYOLOGY, CMD. 9314, § 8.18 (1984) (commonly referred to as the Warnock Report), Great Britain introduced

Certainly, the abortion/tissue transplantation relationship is not a trivial one. First, factors in the abortion procedure affect the usefulness of the tissue for transplantation. When researchers need tissue for *experimentation*, it may well be the case that liberal abortion laws make it *more* difficult to acquire good tissue because they tend to facilitate earlier abortions.⁶ However, the comfort of that palliative is not available in the tissue transplantation debate because studies suggest that the products of early abortions produce better results upon transplantation.⁷ This fact raises the potential problem of researchers influencing the timing of the abortion decision.

A problem related to the question of abortion timing⁸ concerns a transplanters' preferences as to the condition of the fetal tissue following the abortion procedure. A transplant team might prefer the fetal tissue to be fresh or, in some sense, "living." Novel ethical and legal⁹ questions then arise as to the definition of death applicable to an aborted pre-viable fetus, and the appropriateness of tissue removal before all signs of "life" are extinguished.¹⁰

Second, unlike other uses of fetal tissue, such as experimentation, with

The Surrogacy Arrangements Act, 1985, which is aimed at those negotiating surrogacy arrangements on a commercial basis, rather than the mother or future "parents."

Commercialization of fetuses has also been the target of recent legislation affecting *in vitro* fertilization. See, e.g., FLA. STAT. ANN. § 873.05 (West 1987); NEB. REV. STAT. § 451.015 (1987) (prohibiting market transfers of human embryos).

6. See, e.g., Levine, *The Impact on Fetal Research of the Report of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research*, 22 VILL. L. REV. 367, 369-70 (1976-77).

7. See, e.g., Mahowald, Silver & Ratcheson, *The Ethical Options In Transplanting Fetal Tissue*, HASTINGS CENTER REP. Feb. 1987, at 9, 10. This has been indicated from the earliest transplantations of fetal monkey tissue. N.Y. Times, Jul. 6, 1985, § 1, at 6, col. 2 (nat'l ed.). With regard to human fetal pancreas transplants, it seems crucial to remove the fetal pancreas when only the islet (insulin producing) cells have developed, prior to the development of extraneous tissue which causes rejection. Thus, transplantation should take place prior to a sixteen week gestational age, see L.A. Times, Sep. 18, 1985, § 1, at 3, col. 1, or even earlier, McAuliffe, *A Startling Fount of Healing*, U.S. NEWS & WORLD REP., Nov. 3, 1986, at 68. Even fetal islet cells, however, have to be stripped of trigger antigens prior to transplantation. Dorfman, *Help from the Unborn*, TIME, Jan. 12, 1987 at 62.

8. Certainly, since the earliest rodent experiments, the gestational age of the fetus has been of crucial importance to success of the transplantation. See *supra* note 7.

9. E.g., one legal question is whether the Uniform Anatomical Gift Act's prohibition of experimentation on a live fetus would apply if tissue was withdrawn prior to the "death" of the fetus. 8A U.L.A. 34, 15-67 (1987).

10. For example, see the allegations which were made by the Foundation on Economic Trends against the National Disease Research Interchange, that fetal tissue is removed without regard to the usual death verification safeguards. Wash. Post, Sep. 9, 1987, at A4, col. 1.

transplantation one cannot sidestep the ethical problems associated with abortion. When resisting ethical condemnation or legal regulation of fetal experimentation, it is traditional for its proponents to point out that the abortion debate is irrelevant because the fetal researcher would be as content to utilize the product of a spontaneous abortion (or miscarriage) as of an induced procedure.¹¹ However, this avenue of enlightened retreat is unavailable to the transplantor, because sanctioning the use of spontaneously aborted tissue for transplantation into a human involves distinct ethical problems.¹²

Third, a real connection may exist between the volume of transplants and the volume of abortions. At first sight the perceived "encouragement," (if not "legitimation" or "entrenchment") link between fetal transplants and induced abortion may appear defused because of the annual availability of one to two million aborted fetuses.¹³ In the United States alone, however, ten million people suffer from diabetes¹⁴ ten per cent of whom must make regular use of insulin.¹⁵ Of course, in these days of rampant cost containment, it may seem whimsical to consider

11. This distinction has particular importance given the fact that many states tend to concentrate their regulatory efforts on the remains of induced abortions, thus opening up the possibility of a "rational connection" constitutional challenge. See *infra* text accompanying note 108.

12. Specifically, the problem arises whether a researcher should use tissue which for genetic or other reasons, known or unknown, has been spontaneously aborted. See generally Dorfman, *Help From the Unborn*, TIME, Jan. 12, 1987 at 62. Notwithstanding, researchers in Australia switched from using induced to spontaneously aborted fetuses after protests from anti-abortion groups. L.A. Times, Sep. 18, 1985, § 1, at 3, col. 1. Further, the reported first fetal brain tissue transplantations performed in Mexico involved spontaneously aborted tissue, N.Y. Times, Jan. 7, 1988, at B13, col. 1, and when the Assistant Secretary of Health refused his consent to a proposed transplantation procedure, he did not ban transplantation of spontaneously aborted material, see *infra* note 131.

13. The latest figures available for U.S. abortions in 1985, are 1,588,550 induced terminations and 910,967 spontaneous abortions. Telephone interview with the Alan Guttmacher Institute of New York (July 1988). Furthermore, research indicates that spontaneous abortions occur in 31% of pregnancies. N.Y. Times, July 27, 1988, at A1, col. 1.

14. N.Y. Times, May 10, 1983, at C1, col. 5. According to a study by one U.S. drug company, more than 15 million people in the United States are diabetics, of which four to five million are undiagnosed and five million are pre-diabetic, *Treating Diabetes*, THE ECONOMIST, Dec. 17, 1983, at 70 (U.S. edition).

15. Furthermore, insulin alleviates the symptoms but does not cure the disease. For example, regular use of insulin does not prevent the onset of many problems associated with diabetes, such as: diabetic retinopathy, i.e., blindness, see L.A. Times, Sept. 18, 1985, § 1, at 3, col. 1 (Diabetes causes 15% of all blindness); loss of limbs, see L.A. Times, Sept. 18, 1985, § 1, at 3, col. 1 (Diabetes is the second-most-common cause of amputations); renal failure; heart disease; and often, premature death. N.Y. Times, May 10, 1983, at C1, col. 5. A diabetic diagnosed before the age of 30 has only a fifty per cent chance of reaching the age of 50. *Treating Diabetes*, THE ECONOMIST, Dec. 17, 1983 at 70 (U.S. edition). Diabetes kills 300,000 people per year in the United States. Bylinsky, *Closing in on a Cure for Diabetes*, FORTUNE, Aug. 6, 1984, at 70.

that any major program of transplantation of insulin-producing fetal pancreas cells would be undertaken. However, fetal tissue transplantation already is running ahead of its predicted schedule,¹⁶ and it is shortsighted to ignore the possibility that further breakthroughs might make mass treatment possible and dramatically increase the demand for aborted tissue. Add into the equation the two and one half million Alzheimer's patients whose neural pathways have deteriorated and some 500,000 to one million Parkinson's disease sufferers¹⁷ who might benefit from dopamine-producing¹⁸ fetal brain cells¹⁹ and shortages may soon result.²⁰ Any concerns that a tissue shortage will encourage abortions will only be heightened as researchers find new uses for fetal tissue,²¹ and an unfortunate biotechnical squeeze play would result from improved contraceptive methodologies leading to any decrease in the U.S. abortion rate.²²

16. See generally Gorman, *Steps Toward a Brave New World*, TIME, Jul. 13, 1987, at 56. The earliest experimenters on rodents suggested that human applications would not be possible until the 1990's. Wash. Post, Dec. 12, 1980, at A16, col. 4; N.Y. Times, Jul. 5, 1983, at C1, col. 4. However, the first human fetal tissue transplants in the United States were performed in 1985. L.A. Times, Sep. 18, 1985, § 1, at 3, col. 1. The first transplantations of fetal brain tissue into Parkinson's disease patients occurred in Mexico in 1987. L.A. Times, Jan. 7, 1988, § 1, at 17, col. 4; N.Y. Times, Jan. 7, 1988, at B13, col. 1. One research group in France has been transplanting fetal tissue into patients with congenital immunodeficiencies since 1974. J.-L. Touraine & F. Touraine, *Greffe de tissus foetaux: aspects medicaux et ethiques*, 27 (9) AGRESSOLOGIE, 771 (1986).

17. One report, however, suggests that as few as 50,000 such patients might prove suitable for transplant surgery. N.Y. Times, Apr. 15, 1987, at A21, col. 1.

18. Dopamine is a neurochemical linked to motor coordination. Parkinson's disease occurs when more than 80% of a person's dopamine-producing cells are missing.

19. Wash. Post, Jul. 5, 1985, at A4, col. 1 (detailing success in transplantation of fetal dopamine-producing cells from monkey fetuses into afflicted monkeys).

20. According to Lee Ducat of the National Disease Research Interchange, a shortage of fetal cells for research already exists, prompting scientists to persist with animal tissue studies, BUS. WK., Dec. 7, 1987, at 116.

21. For example, transplanting human fetal tissue into rodents which are then used for testing drugs might demonstrate the teratogenic effects of such drugs on fetuses *in utero*. N.Y. Times, Mar. 2, 1982, at C3, col. 1. Other suggested uses include treating damaged spinal cords and correcting brain cell degeneration associated with Huntington's chorea, N.Y. Times, Jul. 5, 1983, at C1, col. 4; multiple sclerosis, TIME, Aug. 8, 1983 at 59; infertility, L.A. Times, Apr. 10, 1986, § 1, at 1, col. 1; and blood disorders such as leukemia, aplastic anemia, sickle-cell anemia, and thalassemia. McAuliffe, *A Startling Fount of Healing*, U.S. NEWS & WORLD REP., Nov. 3, 1986 at 68; Dorfman, *Help from the Unborn*, TIME, Jan. 12, 1987 at 62. See generally, N.Y. Times, Apr. 7, 1987, at C1, col. 3.

The most highly publicized, though ultimately unsuccessful, use of fetal tissue transplantation was performed by Dr. Robert Gale of UCLA who transplanted fetal liver cells into six victims of the 1986 Chernobyl nuclear accident in the Soviet Union. See, e.g., N.Y. Times, Aug. 16, 1987, § 1, at 1, col. 5 (nat'l ed.).

22. According to a study by the Alan Guttmacher Institute of New York, the United States'

Certainly, there are sufficient market incentives to spur continued research in all these fields.²³ At present, however, there appears to be no market system (white, grey or even black) in place involving the supply of fetal tissue,²⁴ although, that could change rapidly. The tissue transplantation scenario features low producer (aborte) costs and low producer valuation of aborted tissue coupled with particularly high consumer (e.g., Parkinson's disease patient) value. Given the obstacles to these groups negotiating directly, this price disparity should attract middlemen, whose early transactions probably will feature overreaching until increased middlemen competition, or consumer access to producers, reduces consumer cost. Beyond that initial stage of market development, any continued consumer shortage of tissue should stimulate production. Indeed, at the macro level, eventually we might see a net flow of foreign tissue into the United States from countries with high abortion rates and low level bio-medical technology.²⁵

One potential answer to the ethical concerns some have with regard to encouraging abortions is to transplant laboratory grown cells rather than cells recovered from aborted tissue.²⁶ A slightly different approach, albeit one bringing along its own ethical baggage, would be to harvest the tissue from laboratory conceived embryos. After all, in the United States, there is comparatively little regulation of embryo experimentation,²⁷ and such experimentation would be difficult to control under current and proposed regulation of fetal tissue transplantation²⁸.

comparatively low level of contraceptive use was responsible for its high abortion rate. The study also concluded, "[W]omen in the United States have an average of 2.56 pregnancies during their reproductive years. Based on current abortion rates, the researchers project that among every 100 women in the United States, there will be 76 abortions, with some women having more than one." N.Y. Times, Jun. 2, 1988, at A22, col. 1.

23. One estimate has put the U.S. market for pancreatic islet cells at \$600 million per year. Bylinsky, *Closing in on a Cure for Diabetes*, FORTUNE, Aug. 6, 1984, at 70.

24. Fetal tissue currently being used for experimental purposes in the United States generally is harvested by the nonprofit National Disease Research Interchange, a clearinghouse established by the National Institutes of Health. There would appear to be no allocation through price mechanisms. As demand is stimulated, supply will have to become more elastic to avoid, for example, rationing.

25. Lest this be thought an exaggeration, it should be noted that at least one state has reacted to the general scarcity of organs for donation by directing its organ procurement agencies to give preferential treatment to state residents. 1987 Ga. Laws 1101 (H.B. 541).

26. This is the main avenue of research being explored by Hana Biologics, Inc. of California. BUS. WK., Dec. 7, 1987, at 116.

27. See Terry, *supra* note 3, at 462-66.

28. See *infra* text accompanying note 64.

III. THE OVERLOOKED OR IGNORED: DONOR AND DONEE

An often forgotten factor distinguishes the fetal tissue transplantation debate from the traditional abortion or fetal experimentation scenario. Transplantation alone involves an immediate and needy third party, the critical diabetic or Parkinson's disease patient,²⁹ not "tainted" by any termination decision and for whom the fetal tissue constitutes one final hope. While the existence of this interested third party will not suffice to support any exotic theory of constitutional rebuke for anti-transplantation legislation, it should affect the ethical landscape.

For the diabetic or brain-diseased patient, fetal tissue offers the most consistent hope. Only 18 per cent of the 316 human pancreas, as opposed to fetal pancreas, transplants performed in the United States in the past two decades have been successful.³⁰ Transplantation of the patient's own adrenal gland tissue into the brain to treat Parkinson's disease has had mixed results,³¹ and is intrinsically limited as a methodology because most of the other human cells needed for transplantation into the brain are unavailable outside the brain.³² Further, in all cases, the immunological naivet and regenerative properties of the fetal cells make them the preferred source of tissue.³³

Even those opposed to fetal tissue transplantation show some concern for the potential donee. In contrast, such opponents frequently cast the donor—the abortee—as the ultimate villain. Of course, that characterization is understandable from those who concentrate on the detriment to the fetus rather than the benefit to the woman. From the woman's perspective, however, the donation of the tissue might provide a beneficial

29. A moving sketch of the Parkinson's disease patient is portrayed in Mahowald, Silver & Ratcheson, *supra* note 7, at 10.

30. Bylinsky, *Closing in on a Cure for Diabetes*, FORTUNE, Aug. 6, 1984, at 70. In general, tissue rejection of the whole human pancreas has been impossible to overcome. L.A. Times, Sep. 18, 1985, § 1, at 3, col. 1.

31. N.Y. Times, Sep. 11, 1984, at C1, col. 2; McAuliffe, *A Startling Fount of Healing*, U.S. NEWS & WORLD REP., Nov. 3, 1986, at 68; 257 J.A.M.A. 2691 (1987). Recently, there has been considerable skepticism voiced by U.S. researchers over the claims of success by Mexican surgeons. N.Y. Times, Apr. 21, 1988, at A1, col. 4, Aug. 30, 1988, at A17, col. 1.

32. For example, cells producing brain hormones such as norepinephrine and acetylcholine are unavailable outside the brain and brain tissue transplantation is not yet feasible. L.A. Times, Apr. 10, 1986, § 1, at 1, col. 1. See also L.A. Times, Jul. 5, 1987, § 1, at 3, col. 5.

33. Dorfman, *Help from the Unborn*, TIME, Jan. 12, 1987 at 62. However, considerable research continues into the possibility of using animal tissue, N.Y. Times, Jul. 1, 1987, at A20, col. 4. Also it must be recognized that early fetal tissue transplant experiments have been disappointing. N.Y. Times, Aug. 30, 1988, at A15, col.1.

psychological release.³⁴ For some women, this release might be "guilt" motivated. For others, the emotions that they would assuage through a donation of fetal tissue are more complex. For example, there have been reports of women carrying fetuses diagnosed as anencephalic wishing to donate their organs or tissue for transplantation.³⁵

IV. ABORTION AND THE POLITICS OF FETAL PROTECTION

Little, if any, objection to fetal tissue transplantation seems to exist simply because it involves *transplantation*. Transplantation appears generally accepted, although forthcoming problems involving, for example, organ donations from anencephalic newborns and cadavers will re-open aspects of that debate such as the definition of death and the preservation of the donor's dignity.³⁶ Indeed, one must recognize that most of the ethical objections to fetal tissue transplantation are in fact not even direct attacks on *tissue transplantation*. The fetal tissue question's inextricable embroilment in the abortion debate suggests that many of the ethical complaints with regard to the utilization of fetal tissue are in fact triggered by abortion concerns, and aimed at minimizing abortions.³⁷

Indeed, the characterization of the arguments against fetal tissue transplantation as essentially ethical misses the point. They *are* ethical in that abortion, experimentation, and transplantation all have been viewed as exploitive of the fetus for the ends of the person. However, the motivation for promoting such debate is less ethically-based than it is strategically and politically-based.³⁸ There is more going on here than

34. See generally Murray, *Gifts of the Body and the Needs of Strangers*, HASTINGS CENTER REP., Apr. 1987, at 21, 30.

35. See, e.g., N.Y. Times, Dec. 7, 1987, at A23, col. 2, detailing attempts of an anencephalic's parents to donate the body of the child, and noting that U.S. transplant centers tend to turn down such donors because of legal problems with the definition of death in such cases. The most famous case is that of the Canadian, "Baby Gabriel," detailed in TIME, Feb. 1, 1988, at 49.

36. For example, many will be troubled anew by the applicable definition of death in such cases. See, e.g., Harrison, *Organ Procurement for Children: The Anencephalic Fetus as Donor*, THE LANCET, Dec. 13, 1986, at 1383, 1384-85. See generally Christian Science Monitor, Mar. 29, 1988, at 1. Still further new concerns—this time as to the dignity and resultant "humanness" of the donee—will arise if the transplantation of animal organs into humans progresses beyond the experimental stage. See, e.g., St. Louis Post-Dispatch, Jul. 31, 1988, at D9, col. 1, relating British discovery of method to reduce human rejection of pigs' kidneys and hearts.

37. Anti-abortion activists in Australia were quick to direct their protests at the earliest fetal pancreas research which was being performed exclusively with and on rodent tissue. N.Y. Times, May. 10, 1983, at C1, col. 5.

38. Of course, it could be argued that the abortion debate is, itself, a feature of a broader socio-economic struggle. See *Beal v. Doe*, 432 U.S. 438, 455-7 (1977),

symbolism; every fetal "right" recognized furthers a circumscription of a woman's reproductive behavior and every state statute which is challenged before the courts brings closer the re-examination and ultimate demise of *Roe v. Wade*.

V. POLITICS AND ABORTION REFORM LEGISLATION

The political activity engendered by protestations that fetal tissue transplantation and research will legitimize, encourage or entrench abortion advances a quite fundamental stratagem adopted by the anti-abortion lobby. This stratagem involves continual onslaughts on the penumbra of *Roe v. Wade*.³⁹ Thus, attacks have been made on the public funding of abortions, tort wrongful life actions, and the disposal of fetal remains. The stratagem is a sound one, not least because it keeps abortion or abortion-related issues before legislatures and courts.

Central to the *politics* of the fetal tissue debate is the encourage/supply relationship between abortion and tissue transplantation. This could be challenged by the figures tending to show that, at the moment, the supply of fetuses outstrips demand from researchers.⁴⁰ However, the politics of the link make it too important for anti-abortion proponents to discard. First, maintaining the link transforms every criticism of fetal tissue transplantation into a symbolic attack on abortion itself. Second, it furthers the goal of political litigation, i.e., arguing a "fresh" issue before the courts. Third, it widens the constituency for regulation beyond those who object to fetal tissue transplantation to the full range of abortion foes.⁴¹

As the court well knows, these [state Medicaid] regulations [denying abortion funding to contraceptive abortions] inevitably will have the practical effect of preventing nearly all poor women from obtaining safe and legal abortions. The enactments challenged here brutally coerce poor women to bear children whom society will scorn for every day of their lives. Many thousands of unwanted minority and mixed-race children now spend blighted lives in foster homes, orphanages and "reform" schools. Many children of the poor, sadly, will attend second-rate segregated schools. . . I am appalled at the ethical bankruptcy of those who preach a "right to life" that means, under present social politics, a bare existence in utter misery for so many poor women and their children.

Id. (Marshall, J., dissenting) (citations and footnote omitted).

Notwithstanding, positions taken on abortion remain the touchstones of general political orientation.

39. For example, see the Pennsylvania debate reported in *Thornburgh v. American College of Obstetricians and Gynecologists*, 737 F.2d 283, 288-89 (3d Cir. 1984).

40. See *supra* text accompanying note 13.

41. The link may also have an interesting micro-political dynamic, in that those who are not opposed to fetal tissue transplantation may fear being characterized as pro-abortion unless they act

VI. POLITICS AND ABORTION LITIGATION

Although pro-choice groups only recently have begun to move more onto the offensive,⁴² the courts seem aware that they are a battleground of choice in a stage of a war which, primarily, is about politics and media exposure.⁴³

The primary reason for heightening the debate over fetal disposal and experimentation was that, in the post-*Roe* wave of refurbished state abortion statutes, the state legislatures included disposal and experimentation controls in the statutes as invitations for the courts to further delineate the limits of the reproductive autonomy principle. This inclusive approach is not to be confused with the elevating of issues to facilitate public debate. Rather, it seeks to conclude any such debate by welding the bond between abortion and fetal disposal. If the pattern of post-*Roe* legislation continues,⁴⁴ it seems highly likely that the next wave of state statutes will include the regulation of fetal tissue transplantation. A proposed California statute would have proven to be an exception. The bill contained a general approval of such research and transplantation.⁴⁵

against it, and those who are opposed to fetal tissue use may refrain from action to avoid an anti-abortion label.

42. For example, in *Bering v. Share*, 106 Wash.2d 212, 721 P.2d 918 (1986), *cert. dismissed*, 107 S. Ct. 940 (1987), the Supreme Court of Washington upheld an intricately worded permanent injunction limiting the quantity and quality of picketing at a medical clinic by an anti-abortion group. (with one minor point to be modified on remand, *id.* at 935-38). See also *Northeast Women's Center, Inc. v. McMonagle*, 624 F.Supp. 736 (E.D. Pa. 1985), *vacated and remanded*, 813 F.2d 53 (3d Cir. 1987), *on remand*, 665 F.Supp. 1147 (E.D. Pa. 1987), 670 F.Supp. 1300 (E.D. Pa. 1987) (abortion clinic successfully brings RICO action against abortion protesters).

43. Consider, for example, *Planned Parenthood Ass'n v. City of Cincinnati*, 822 F.2d 1390 (6th Cir. 1987), involving a city's fetal disposal law, which had been passed for largely symbolic and political reasons. Dissenting from the court's grant of injunctive relief, Judge Nelson seemed to suggest that the plaintiff's request for relief was as politically motivated. *Id.* at 1403.

44. See generally Pearson & Kurtz, *The Abortion Controversy: A Study in Law and Politics*, 8 HARV. J. L. & PUB. POL'Y 427 (1985).

45. Proposed amendment to CAL. HEALTH & SAFETY CODE § 7151.8. S.B. No 2425 (introduced by Senator Torres) [hereinafter S.B. No. 2425].

7151.8. Any woman of sound mind and 18 years of age or older who has suffered a fetal loss may donate the fetus or any fetal part upon the death of the fetus.

(a) No consideration, including payment in the form of money or other valuables or in-kind services may be offered to a pregnant woman to influence her decision to terminate the pregnancy for the purposes of making a gift of the fetus or any fetal part under this section.

(b) A gift of a fetus or any fetal part may be made only for the purposes of medical research or therapeutic application. No specific or named individual may be designated as a transplant recipient under this section.

(c) Any facility which receives a fetus or any fetal parts donated pursuant to this section shall test the part designated to be transplanted to discover the presence of any infec-

However, the bill was withdrawn after opposition from pro-life groups.

VII. STATE REGULATION OF FETAL DISPOSAL AND EXPERIMENTATION

Some of the existing prohibitions on fetal disposal,⁴⁶ possession,⁴⁷ disposition,⁴⁸ and, most importantly, experimentation⁴⁹ may already apply to fetal tissue transplantation. However, one can find little visible evidence of any existing state enforcement practices.⁵⁰ Indeed, the uncertainties surrounding the reach of such state regulatory regimes may both create a dangerous chilling effect on even peripheral research, and leave the regimes exposed to constitutional attack.⁵¹

tious or contagious disease. Any fetal tissue found to be contaminated with such a disease shall be isolated, clearly labeled as such, and made available only upon request.

(d) Prospective donors under this section shall be provided with consultation by the attending physician and surgeon regarding the purposes and methodology of fetal donation.

(e) Any physician and surgeon participating in the procedures resulting in the loss of a fetus shall not participate in the procedures for removing, processing, preserving, disposing, storing, maintaining quality control, transporting, or implanting a fetus or any part thereof.

46. See Terry, *supra* note 3, at 428-30. See also ARK. STAT. ANN. § 20-17-802 (1987); FLA. STAT. ANN. §§ 390.001(7), 390.012 (West Supp. 1986); N.Y. PUB. HEALTH LAW § 4162 (McKinney 1985); N.D. CENT. CODE § 14-02.1.09 (1981); VT. STAT. ANN. tit. 18 § 5224 (1987); WYO. STAT. § 35-6-109 (1977).

47. See Terry, *supra* note 3, at 437-38.

48. See Terry, *supra* note 3, at 438 n.124. See also H.B. No. 1479, 84th Gen. Ass., 2d Reg. Sess. § 5 (1988) (to be codified at MO. REV. STAT. § 188.036).

49. ARIZ. REV. STAT. ANN. § 36.2302 (1986); ARK. STAT. ANN. § 20-17-802 (1987); CAL. HEALTH & SAFETY CODE §§ 25956-25957 (West 1984); FLA. STAT. ANN. § 390.001(6) (West Supp. 1986); ILL. REV. STAT. ch. 38, paras. 81-26(7) (1987); IND. CODE ANN. § 35-1-58.5-6 (Burns 1985); KY. REV. STAT. ANN. § 436.026 (Baldwin 1985); LA. REV. STAT. ANN. § 40:1299.35.13 (West Supp. 1988); ME. REV. STAT. ANN. tit. 22, § 1593 (1980); MASS. ANN. LAWS ch. 112, § 12J (Law Co-op 1985); MICH. STAT. ANN. §§ 14.15(2685-2692) (Callaghan 1988); MINN. STAT. ANN. §§ 145.421-.422 (West Supp. 1988); MO. ANN. STAT. § 188.037 (Vernon 1983); MONT. CODE ANN. §§ 50-20-108(3) (1987); NEB. REV. STAT. §§ 28-342 to -346 (1985); N.M. STAT. ANN. §§ 24-9A, -3, -5 (1986); N.D. CENT. CODE §§ 14-02.2-01 to -02 (1981); OHIO REV. CODE ANN. § 2919.14 (Baldwin 1986); OKLA. STAT. ANN. tit. 63, § 1-735 (West 1984); 18 PA. CONS. STAT. ANN. § 3216 (Purdon 1983); R.I. GEN. LAWS § 11-54-1 (Supp. 1987); S.D. CODIFIED LAWS ANN. § 34-23A-17 (1986); TENN. CODE ANN. § 39-4-208 (1982); UTAH CODE ANN. § 76-7-310 (1978); WYO. STAT. § 35-6-115 (1977).

50. Cf. Culliton, *Fetal Research (III): The Impact of a Massachusetts Law*, 187 SCIENCE 1175 (1975).

51. Uncertainty as to the legality of contemplated conduct is indicia of unconstitutional vagueness. See *infra* text accompanying note 118.

VIII. REPRODUCTIVE AUTONOMY AND TRANSPLANT MOTIVATED ABORTIONS

As hasty state legislatures succeed in preempting a policy discussion of fetal tissue transplants, and introduce prohibitions rather than more measured responses, the debate will be forced into the courts. However, whereas the introduction of the abortion issue into the ethical debate over fetal tissue is a political stratagem, the abortion cases constitute a vital component of the *legal* debate.

The relationship between abortion and fetal experimentation or transplantation has a vitally important legal perspective. However, it is by no means conclusive of the legal debate. The crucial factor in identifying the correct legal analysis for determining whether a state's fetal tissue transplantation regimen is constitutional is whether the regimen seeks to regulate or prohibit the pre-transplantation abortion or the post-abortion transplantation. While the former would lead straight into the sights of *Roe v. Wade*,⁵² the latter probably lacks direct *Roe* protection. Both scenarios implicate *Roe* on the margin and involve the issue of the appropriate legal management of abortion motivation. The former poses the question of whether a state may legitimately ban a species of pregnancy termination defined by a specific abortee motivation. The latter scenario poses the question of whether a state may legitimately ban an activity that follows a fundamentally protected abortion when the prohibited activity was the motive for the abortion.

Contemporary attacks on *Roe* are familiar. Two avenues of judicial back-peddling may be discerned. First, the Court has subjected the characterization of the right to choose abortion as fundamental to more restrictive readings of the constitution,⁵³ and subjected the espoused right

52. *Roe v. Wade*, 410 U.S. 113, 164-65 (1973), held:

- (a) For the stage prior to approximately the end of the first trimester, the abortion decision and its effectuation must be left to the medical judgment of the pregnant woman's attending physician;
- (b) For the stage subsequent to approximately the end of the first trimester, the State, in promoting its interest in the health of the mother, may, if it chooses regulate the abortion procedure in ways that are reasonably related to maternal health;
- (c) For the stage subsequent to viability, the State in promoting its interest in the potentiality of human life may, if it chooses, regulate, and even proscribe, abortion except where it is necessary, in appropriate medical judgment, for the preservation of the life or health of the mother.

53. See, e.g., Thornburgh v. American College of Obstetricians and Gynecologists, 476 U.S. 747 (1986) (White, J., dissenting).

of abortion to an increasingly narrow interpretation.⁵⁴ Second, *Roe's* description of the countervailing state interest in potential life as not compelling until viability has received both technological⁵⁵ and philosophical⁵⁶ attacks.

Clearly, the battle over whether or not there is some all-embracing, amorphous privacy right has been lost. What remains is the doctrine-rich protection of a narrow range of marital, conception and abortion decisions. Indeed, it was to this doctrine-rich approach that the respondent in *Bowers v. Hardwick*⁵⁷ pandered. However, only Justice Blackmun's dissent adopted the strategic doctrinalization that the respondents sought: the duality of "decisional and spatial" privacy.⁵⁸

Today's non-conceptual, doctrinalised *Roe v. Wade*, eking out its meager protection from a vulnerable Supreme Court majority, survives as a laundry list of state do's⁵⁹ and don'ts⁶⁰ and lacks the expansive reach of a

54. See, e.g., *Thornburgh v. American College of Obstetricians and Gynecologists*, 476 U.S. 747 (1986) (White, J., dissenting). Cf. Stevens, J., concurring at 2187-88.

55. *City of Akron v. Akron Center for Reproductive Health, Inc.*, 462 U.S. 416, 453-59 (1983) (O'Connor, J., dissenting). Cf. Rhoden, *Trimesters and Technology: Revamping Roe v. Wade*, 95 YALE L.J. 639 (1986).

56. See, e.g., *Thornburgh v. American College of Obstetricians and Gynecologists*, 476 U.S. 747, (1986).

57. 478 U.S. 186 (1986) (holding that there was no fundamental right to engage in homosexual sodomy).

58. Justice Blackmun argued that previous Supreme Court cases recognized these two distinct types of privacy rights. Blackmun defined "decisional" privacy as protecting "certain decisions that are properly for the individual to make," and "spatial" privacy as protecting "certain places without regard for the particular activities in which the individuals who occupy them are engaged." *Bowers*, 478 U.S. at 204 (second emphasis in original). See *infra* text accompanying notes 84 and 100.

59. For example, requirements include: that the procedure be performed by a licensed physician, *Connecticut v. Menillo*, 423 U.S. 9, 11 (1975); that written consent is obtained, *Planned Parenthood of Central Missouri v. Danforth*, 428 U.S. 52, 65-67 (1976); and that records kept, *Planned Parenthood of Central Missouri v. Danforth*, 428 U.S. 52, 79-81 (1976).

60. The state must refrain from impinging on the physician's professional judgment by dictating how, *Colautti v. Franklin*, 439 U.S. 379, 397-401 (1979); when, *Thornburgh v. American College of Obstetricians and Gynecologists*, 476 U.S. 747 (1986) (first trimester only); or where an abortion should be performed, *Sendak v. Arnold*, 429 U.S. 968 (1976). Following the first trimester, the state has the burden of showing that there is a reasonable relationship between its regulation and the preservation of maternal health. *City of Akron v. Akron Center for Reproductive Health, Inc.*, 462 U.S. 416, 430-31 (1983).

Neither may the state dictate the content of the physician's disclosure or otherwise attempt to chill or burden the decision, *City of Akron v. Akron Center for Reproductive Health, Inc.*, 462 U.S. 416, 443-44 (1983); *Thornburgh v. American College of Obstetricians and Gynecologists*, 476 U.S. 747 (1986); require the consent of any other person, *Planned Parenthood of Central Missouri v. Danforth*, 428 U.S. 52, 67-75 (1976); *Bellotti v. Baird*, 443 U.S. 622 (1979); interfere with the physician's professional judgment as to the gestational age of the fetus, *Colautti v. Franklin*, 439 U.S. 379, 388-

fully articulated fundamental right. Nevertheless, a state statute which prohibits a transplant motivated conception or abortion falls foul of even a stripped down *Roe v. Wade*.

Consider a state prohibition on abortions for transplantation purposes, or "pre-transplantation abortions." Hypothesize an established pattern of blatant commercial fetal tissue farming. A state passes a tightly drawn (*i.e.*, non-vague⁶¹) prohibition. Would the woman-state interests balance necessarily be answered in the same way as in *Roe v. Wade*? For example, Missouri's recently enacted fetal tissue legislation⁶² seeks to prohibit the harvesting abortion itself by stating,

No physician shall perform an abortion on a woman if the physician knows that the woman conceived the unborn child for the purpose of providing fetal organs or tissue for medical transplantation to herself or another, and the physician knows that the woman intends to procure the abortion to utilize those organs or tissues for such use for herself or another.⁶³

Leaving aside the effortless vagueness challenge that could be mounted,⁶⁴ strict scrutiny will be applicable unless the fragile *Roe* majority crumbles and demotes post-conception reproductive autonomy,⁶⁵ or reinterprets that fundamental right as applicable only to, for example, therapeutic or genetic abortions, and not to tissue farming abortions.⁶⁶

89 (1979); or adopt a position as to when life begins, *City of Akron v. Akron Center for Reproductive Health, Inc.*, 462 U.S. 416, 444 (1983).

Record-keeping protocols must not entail potential public disclosure. *Thornburgh v. American College of Obstetricians and Gynecologists*, 476 U.S. 747 (1986).

61. Of course, therein lies the rub. Such statutes will almost always prove amenable to vagueness challenges. See *infra* text accompanying note 118.

62. H.B. No. 1479, 84th Gen. Ass., 2d Reg. Sess. (1988) (to be codified at MO. REV. STAT. § 188.036) [hereinafter H.B. No. 1479.]

63. *Id.* at § 188.036(1).

64. See *infra* text accompanying note 118.

65. See *supra* note 54.

66. Presumably, an argument could be made that the reach of the *Roe* fundamental right should be limited by reference to the arguable rationale for the finding of that right:

The detriment that the State would impose upon the pregnant woman by denying this choice altogether is apparent. Specific and direct harm medically diagnosable even in early pregnancy may be involved. Maternity, or additional offspring, may force upon the woman a distressful life and future. Psychological harm may be imminent. Mental and physical health may be taxed by child care. There is also the distress, for all concerned, associated with the unwanted child, and there is the problem of bringing a child into a family already unable, psychologically and otherwise, to care for it. In other cases, as in this one, the additional difficulties continuing stigma of unwed motherhood may be involved. All these are factors the woman and her responsible physician necessarily will consider in consultation.

On the basis of elements such as these, appellant and some *amici* argue that the woman's

By its terms, the Missouri prohibition is applicable to first trimester abortions. Thus, if strict scrutiny continues to apply, the state would have to demonstrate some compelling interest to justify its prohibition on transplant motivated abortions. Under *Roe*, obvious and legitimate state interests such as maternal health and prenatal life are not compelling during the first trimester.⁶⁷ This is because "until the end of the first trimester, mortality in abortion may be less than mortality in normal childbirth."⁶⁸ The state has an interest in reinforcing the *Roe* assumption as to comparative maternal mortality. Therefore, just as the state may require that even first trimester abortions must be performed by a licensed physician,⁶⁹ so, it might be argued that the state could insist that a physician not consider the future transplantation when determining, for example, the timing or method of abortion.⁷⁰ However, such a state interest could be satisfied with far less stringent regulation than banning the abortion. Similarly, although it would be possible to manufacture a state interest out of a comparison between the dangers to a transplant donee and the donor abortee, such interest would not be compelling so as to justify interference with a fundamental right, as the state could achieve its purpose merely by banning the transplantation rather than the pre-transplantation abortion. In other words, the banning of the abortion itself would not be medically necessary.⁷¹

Absent the establishment of some other as yet unidentified "compelling" interest, it must be concluded that state interferences with first trimester abortions are restricted to those which "have no significant impact on the woman's exercise of her right . . . where justified by important state health objectives."⁷² *Roe* and its progeny have not attempted to distinguish between abortions based on the woman's motivation. A court which attempted to introduce any such distinction would place an impossible strain on the physician-patient relationship. And any court which sought to "modify" the decisional privacy of *Roe* by outlawing

right is absolute and that she is entitled to terminate her pregnancy at whatever time, in whatever way, and for whatever reason she alone chooses. *With this we do not agree.*

Roe v. Wade, 410 U.S. 113, 153 (1973) (emphasis added).

67. And it is first trimester tissue that researchers seem primarily interested in harvesting. *See supra* note 7.

68. *Roe v. Wade*, 410 U.S. 113, 163 (1973).

69. *See Connecticut v. Menillo*, 423 U.S. 9-10 (1975).

70. For example, by erecting some institutional barrier between researchers and those performing abortions.

71. *See generally Ragsdale v. Turnock*, 841 F.2d 1358, 1368 (7th Cir. 1988).

72. *City of Akron v. Akron Center for Reproductive Health, Inc.*, 462 U.S. 416, 430 (1983).

certain motivations would actually destroy the core concept.⁷³

IX. THE LIMITS OF REPRODUCTIVE AUTONOMY

The Missouri statute attacks not just the abortion but also the *motivation* for the abortion by providing: "No person shall utilize the fetal organs or tissue resulting from an abortion for medical transplantation, if the person knows that the abortion was procured for the purpose of utilizing those organs or tissue for such use."⁷⁴ In this situation, the issue that arises is whether a state ban on the *transplant* (not on the abortion, but on its motivation) unconstitutionally chills the abortion decision.⁷⁵ There is no indication that the *Roe*-delineated fundamental right extends to any such peripheral aspect of the abortion decision. A fortiori, neither would it extend to Missouri's prohibition of an inducement to a motivation to the exercise of the protected right.⁷⁶

It must be conceded that governmental interference with fetal tissue disposal, experimentation, or transplantation is subject to *Roe*-derived

73. A similar issue arises in the context of our technological abilities to detect fetal gender, which has induced state prohibition of sex-selective abortions. *See, e.g.*, ILL. REV. STAT. ch. 38, para. 81-26(8) (1987) ("No person shall intentionally perform an abortion with knowledge that the pregnant woman is seeking the abortion solely on account of the sex of the fetus"). These statutes may be approached from two directions. First, is there any suggestion that the abortion right excludes fetal sex-selection motivation because the right is limited to, for example, terminations for therapeutic or genetic reasons? Second, given that the state interest in prenatal life, that allows it to restrict abortion, does not become compelling until the beginning of the third trimester, are there any other legitimate state interests which might be compelling at an earlier time? For example, the question might be whether a state has a legitimate and compelling interest in the prevention of a male-female imbalance resulting from sex-selective abortions. *See Green, The Fetus and the Law, GENETICS AND THE LAW*, 19, 21-22 (Milunsky & Annas eds. 1976). Consider also that in the Indian state of Maharashtra, amniocentesis is only permitted to test for genetic disorders because of a developing trend of aborting female fetuses, N.Y. Times, July 20, 1988, at A1, col. 2.

74. H.B. No. 1479 *supra* note 62, at § 188.036(2).

75. The California bill raised similar problems. It contained a provision aimed narrowly at what is probably the most ethically troubling abortion-transplantation issue: donor specific tissue-farming. Its narrow prohibition stated, "[n]o specific or named individual may be designated as a transplant recipient . . ." S.B. No. 2425; *supra* note 45, at § 7151.8(b).

76. The legislation prohibits inducements to conceive or abort for tissue farming purposes. H.B. No. 1479, *supra* note 62, at § 188.036(3) provides: "No person shall offer any inducement, monetary, or otherwise, to a woman or a prospective father of an unborn child for the purpose of conceiving an unborn child for the medical, scientific, experimental or therapeutic use of the fetal organs or tissue." H.B. No. 1479, *supra* note 62, at § 188.036(4) provides: "No person shall offer any inducement, monetary or otherwise, to the mother or father of an unborn child for the purpose of procuring an abortion for the medical, scientific, experimental or therapeutic use of the fetal organs or tissue." Of course, this very dilution may help to establish vagueness. *See infra* text accompanying note 118.

scrutiny. However, under the terms of *Roe*, the validity of such governmental interference will only be challengeable under this fourteenth amendment privacy guarantee when the regulation directly or indirectly interferes with the reproductive autonomy privilege. However, while some psychological and informational burdens will be struck down, the exact reach of the autonomy principle remains unclear.

One may argue for both vertical and horizontal expansion of the principle. They differ, primarily, in emphasis. Vertical expansion seeks to extend the reproductive autonomy principle beyond conception or termination to protect *in vitro* fertilization,⁷⁷ fetal experimentation and transplantation. Horizontal expansion seeks to extend the reproductive autonomy shield to the physicians and researchers involved.

Horizontal expansion to any significant degree appears unlikely. The attending physician of a woman seeking an abortion is entitled to "derivative constitutional protection."⁷⁸ Notwithstanding the continued medicalization of the woman's reproductive autonomy,⁷⁹ it remains clear that "the rights of medical researchers are not fundamental under the constitution."⁸⁰

Notwithstanding some courts have sought to expand the protection of the privacy principle to such attenuated situations as guaranteeing a physician access to his clinic.⁸¹ To qualify as unconstitutional, however, hindrances placed in the way of the physician must directly interfere with

77. See Terry, *supra* note 3, at 463-65, discussing *inter alia* the apparent concession by the defendant Attorney General in *Smith v. Hartigan*, 556 F. Supp. 157, 161 (N.D. Ill. 1983), that a fundamental right to *in vitro* fertilization exists. See also ILL. REV. STAT. ch. 38, para. 81-26 § 6(7) (1987) stating, "Nothing in this [section prohibiting commercial disposition or experimentation on a fetus] is intended to prohibit the performance of *in vitro* fertilization."

78. *Wynn v. Scott*, 449 F. Supp. 1302, 1322 (N.D. Ill. 1978), *appeal dismissed for want of jurisdiction sub nom. Carey v. Wynn*, 439 U.S. 8 (1978), *aff'g.* 599 F.2d 193 (7th Cir. 1979). See also *Planned Parenthood v. Danforth*, 428 U.S. 52, 64-65, 78-79 (1976); *Akron v. Akron Center for Reproductive Health, Inc.*, 462 U.S. 416, 445-49 (1983).

79. See Appleton, *Doctors, Patients and the Constitution: A Theoretical Analysis of the Physician's Role in "Private" Reproductive Decisions*, 63 WASH. U.L.Q. 183 (1985).

England's decriminalized abortion law is explicit in placing medicalization at the core of abortion decision-making. See generally Terry, *England in ABORTION AND PROTECTION OF THE HUMAN FETUS* 75, 79-83 (Frankowski & Cole eds. 1987).

80. *Wynn*, 499 F. Supp. at 1322. See also *Margaret S. v. Treen*, 597 F. Supp. 636, 674 (E.D. La. 1984) ("The right of physicians to engage in their profession, although not recognized as a fundamental right, nonetheless is entitled under the Constitution to protection from arbitrary infringement"), *aff'd on other grounds sub nom. Margaret S. v. Edwards*, 794 F.2d 994 (5th Cir. 1986)(*Margaret S. II*).

81. See, e.g., *Bering v. Share*, 106 Wash. 2d 212, 227-30, 721 P.2d 918, 928-29 (1986), *cert. dismissed*, 107 S. Ct. 940 (1987).

his ability to counsel or treat his patient who seeks an abortion. While it is correct that the identity of one affected by any state abortion regulation is essentially irrelevant,⁸² to merit *Roe*-derived scrutiny, a physician's complaint must implicate the due process rights of his patients, not merely his own equal protection rights.⁸³

Similarly, there seems little cause for optimism as to any vertical expansion of the autonomy principle. For example, in *Bowers v. Hardwick*,⁸⁴ neither the majority nor the minority opinions of the Supreme Court appear to support the further extension of the shield of reproductive autonomy to protect an activity such as fetal tissue transplantation. The majority talked in terms of "a fundamental individual right to decide whether or not to beget or bear a child,"⁸⁵ and of a requirement that the activity for which protection is sought must be connected to "family, marriage or procreation."⁸⁶ In contrast, while the minority⁸⁷ recognized a right of privacy with both "decisional and spatial aspects,"⁸⁸ only the dissenting voice of Justice Stevens envisioned anything more broadly constructed.⁸⁹

Thus, with the vertical and horizontal limits of *Roe v. Wade* at least temporarily fixed, contemporary constitutional protection for fetal tissue transplantation from preemptive state strikes will depend upon a two-part strategy. Either the objections to a transplantation regulation must relate directly to the core understanding of *Roe*, or must rely on a non-privacy based argument.

82. See, e.g., *Charles v. Carey*, 627 F.2d 772, 782 (7th Cir. 1980).

83. *Birth Control Centers, Inc. v. Reizen*, 743 F.2d 352, 358 (6th Cir. 1984).

84. 478 U.S. 186 (1986).

For a more attenuated reading of the privacy right, see *Bering v. Share*, 106 Wash.2d 212, 222-29, 721 P.2d 918, 928 (1986), cert. dismissed, 107 S. Ct. 940 (1987). Cf. *Frisby v. Schultz*, No. 87-168, slip op. (Sup. Ct. June 27, 1988) (upholding the constitutionality of ordinance prohibiting picketing near individual's residence in the face of first amendment challenges by anti-abortion protesters; the court referred to residential privacy but did not allude to any concept of reproductive privacy in examining whether there was a significant state interest present).

85. 478 U.S. at 190 (apparently approving of that characterization).

86. *Id.* at 191.

87. Blackmun J., dissenting, joined by Brennan, Marshall and Stevens JJ.

88. 478 U.S. at 204.

89. 478 U.S. at 216 (joined by Brennan and Marshall JJ.). See also *Thornburgh v. American College of Obstetricians and Gynecologists*, 476 U.S. 747, (1986) (Stevens, J., concurring). See also *Schochet v. State*, 75 Md.App. 314, 541 A.2d 183 (Md.App. 1988).

X. SUCCESSFUL FETAL DISPOSAL AND EXPERIMENTATION CHALLENGES

The above model is applicable to cases involving governmental regulation of fetal disposal which has the effect of chilling or otherwise burdening the woman's reproductive decision.⁹⁰ Indeed, courts have struck down fetal disposal regulations because the regulations financially⁹¹ or psychologically⁹² burden a woman's abortion decision.⁹³

A small sample of the panoply of fetal experimentation regulation⁹⁴ has also been scrutinized. However, these challenges have tended to arise in the course of review of an entire post-*Roe* state abortion statute. Thus, the reviewing courts may have regarded the experimentation prohibitions as somewhat peripheral.⁹⁵ Notwithstanding, the scrutinizing courts have shown little enthusiasm for extending the reproductive autonomy principle to protect fetal research. As one district court said of a state prohibition on fetal experimentation, "These provisions do not impose any burden on the woman who is deciding whether to terminate her pregnancy. They do not place any prior obstacle in the path of the attending physician."⁹⁶ This argument would apply as to a ban on fetal tissue transplantation.

Ironically, this probably accurate statement regarding the effect of such regulations on conception and termination (and ignoring the effect on any broader reproductive or sexual freedoms), has offered one small window of vulnerability for state regulation. This is because it follows that the legislation will require strict scrutiny review if the woman's termination decision is shown to be burdened, or her physician's role impeded. In *Margaret S. (II)*⁹⁷ that crucial link was successfully forged before the district court, enabling the plaintiffs to mount a *Roe*-based

90. See Terry, *supra* note 3, at 428-30.

91. See, e.g., Planned Parenthood Ass'n v. Fitzpatrick, 401 F. Supp. 554, 573 (E.D. Pa. 1975), *aff'd mem. sub nom.* Franklin v. Fitzpatrick, 428 U.S. 901 (1976).

92. See, e.g., Leigh v. Olson, 497 F. Supp. 1340, 1351 (D. N.D. 1980).

93. Additional challenges have been successful on grounds of vagueness. See *infra* text accompanying note 127.

94. See *supra* text accompanying note 49.

95. In contrast, the courts have always treated state attempts to regulate fetal disposal as fundamental attacks on the abortion decision.

96. Wynn v. Scott, 449 F. Supp. 1302, 1322 (N.D. Ill. 1978), *appeal dismissed for want of jurisdiction sub nom.* Carey v. Wynn, 439 U.S. 8 (1978), *aff'g* 599 F.2d 193 (7th Cir. 1979).

97. Margaret S. v. Treen, 597 F. Supp. 636 (E.D. La. 1984) *aff'd on other grounds sub nom.* Margaret S. v. Edwards, 794 F.2d 994 (5th Cir. 1986). Margaret S. v. Edwards, 488 F. Supp. 181 (E.D. La. 1980) is referred to hereinafter as *Margaret S. (I)*.

challenge to Louisiana's ban on fetal experimentation.⁹⁸ This link was posited on the theory that the experimentation regulation constituted an indirect chilling of the reproductive decision. Specifically, the court was prepared to accept that a state enforced denial of experimentation on a woman's aborted fetus could deprive her (and, presumably, her physician) of potential research-derived information necessary to make future conception or termination decisions.⁹⁹

This approach seems in accord with the decisional privacy rule espoused by the minority of the Supreme Court in *Bowers v. Hardwick*.¹⁰⁰ The approach gives content to the concept of decisional privacy because it recognizes that the validity of a decision is inversely proportional to the rational decisionmaker's information costs. Just as decisional privacy will protect the woman from being burdened by information she neither wants nor requires,¹⁰¹ so it should follow that the reach of that informational privacy extends to ensuring the availability of certain information she *does* want or require.¹⁰²

Presume, however, that the legislation had contained instead an explicit ban on fetal tissue transplantation. Where is the denial of informational privacy that would cause a chilling effect on any reproductive decision? A ban on fetal research may be suspect when it hinders the provision of information to a woman regarding the likelihood of future sibling hereditary defects, just as a state ban on amniocentesis would be. However, it is distinctly arguable that the *Roe*-derived autonomy reaches the end of its acceptable attenuation when we consider non-familial research or transplantation.¹⁰³

Closely related to the "chilling" argument is the frequently espoused statement that the pregnant woman's reproductive decisionmaking must not be unduly burdened. The Supreme Court has refused to conclude that this requires state funding of abortions.¹⁰⁴ However, the imposition of a state regulation which has the effect of *increasing* the cost of an

98. LA. REV. STAT. ANN. § 40:1299.35.13 (West Supp. 1988)

99. 597 F. Supp. at 673.

100. 478 U.S. 186, 203-04 (1986).

101. See generally *City of Akron v. Akron Center for Reproductive Health, Inc.*, 462 U.S. 416 (1983); *Thornburgh v. American College of Obstetricians and Gynecologists*, 476 U.S. 747, (1986).

102. See, e.g., *Planned Parenthood of Central Missouri v. Danforth*, 428 U.S. 52, 67 (1976) (Blackmun, J.).

103. See generally *Terry*, *supra* note 3, at 449-52.

104. See, e.g., *Maher v. Roe*, 432 U.S. 464 (1977); *Beal v. Doe*, 432 U.S. 438 (1977); *Harris v. McRae*, 448 U.S. 297 (1980).

abortion might be considered unconstitutionally burdensome.¹⁰⁵ If abortion clinics and hospitals find that they can subsidize their terminations by either selling fetal tissue for transplantation or supplying their own transplantation teams, then a ban on transplantation would, in practical terms, burden the woman's abortion decision. Unfortunately, much the same factual observation could be made of a non-discriminatory state ban on hospital bingo games. As the alleged burdening of the abortion decision is seen as distanced from the decision itself so the *Roe* protection will be considerably diluted.

XI. EQUAL PROTECTION

Absent an acceptance of such arguments as to the chilling effect or burden on the abortion decision itself, conventional teaching dictates that constitutional scrutiny of a fetal transplantation prohibition will be considerably limited. However, a challenge could be mounted on a rational connection theory similar to the scrutiny extended to the Louisiana experimentation statute in *Margaret S. (II)*.¹⁰⁶

The district court in that case found no legitimate state interest rationally connected to denying researchers the right to engage in their profession. First, the state could not rely upon its interest in protecting human life, because the prohibition extended to experimentation on a dead, aborted fetus. Second, the state had enacted no equivalent regulation of experimentation on a deceased person.¹⁰⁷

Extrapolating from the decision in *Margaret S. (II)* to the fetal tissue transplantation context, a case presumably would turn on whether the state could supply a rational basis for a legislative distinction between the regulation of the transplantation of fetal tissue as opposed to human tissue, or tissue resulting from an induced rather than spontaneous

105. See, e.g., *City of Akron v. Akron Center for Reproductive Health, Inc.*, 462 U.S. 416, 434-39 (1983); *Planned Parenthood Ass'n v. Ashcroft*, 462 U.S. 476, 481-82 (1983); *Ragsdale v. Turnock*, 841 F.2d 1358, 1370-71 (7th Cir. 1988); *Birth Control Centers, Inc. v. Reizen*, 743 F.2d 352, 364-66 (6th Cir. 1984).

106. 597 F. Supp. 636, 674-75 (E.D. La. 1984). Cf. *Margaret S. (I)*, 488 F. Supp. 181, 221 (E.D. La. 1980)(holding, further, that, "[s]tatutes regulating human experimentation and *in utero* fetal experimentation are a reasonable exercise of the State's police powers.") See generally *Terry*, *supra* note 3, at 450.

107. The other form of discrimination in regulation which is common in post-*Roe* experimentation statutes turns on whether the abortion was induced or spontaneous.

abortion.¹⁰⁸

The starting position for an examination of any state regulation of transplantation is the universally adopted Uniform Anatomical Gift Act (UAGA).¹⁰⁹ However, the UAGA provides an incomplete answer. While it makes legal the donation of a dead fetus¹¹⁰ and its receipt by certain researchers, it contains no explicit statement that fetal transplantation (or experimentation) is lawful.¹¹¹ In fact, aside from the procedure-dominated UAGA, there exists only a most rudimentary patchwork of transplantation regulation, tissue origin notwithstanding. Nevertheless, three detectable regulatory trends may be emerging: first, encouraging more active and principled self-regulation in this area, typically through insistence upon the development by hospitals of transplant protocols;¹¹² second, regulating organ and tissue banks, and;¹¹³ third, regulating, and typically prohibiting, the commercial exploitation of human tissue.¹¹⁴

The suggestion from *Margaret S. (II)*¹¹⁵ is that while a state might have a legitimate interest in regulating tissue banks or commercial exploitation of tissue, legislation which regulates only *fetal* tissue or only fetal tissue from *induced* abortions would not be rationally connected to that interest.

Notwithstanding, the validity of even this narrow area of constitu-

108. Many of the state fetal experimentation statutes utilize this latter distinction. See Terry, *supra* note 3, at 447 n.197.

109. 8A U.L.A. 34, 15-67 (1987). As used in the statute, "Decedent" means a deceased individual and includes a stillborn infant or fetus." *Id.* at § 1(b).

110. *Quaere* the applicability of UAGA to tissue from an aborted, non-viable fetus which is transplanted while still "alive?"

111. See Terry, *supra* note 3, at 446.

112. See, e.g., Colo. Sess. Laws, Ch. 38 (H.B. 1149); 1987 Conn. Acts, P.A. 173 (H.B. 7463); KAN. STAT. ANN. § 65-3218(a) (1987); KY. REV. STAT. ANN. § 311.241 (Baldwin 1988); MISS. CODE ANN. § 41-39-15 (1987); Neb. Laws, L.B. 74; 1987 N.M. Laws, Ch. 74 (S.B. 196); 1987 N.C. Sess. Laws, Ch. 719 (H 285); 1987 Tex. Gen. Laws, Ch. 28 (S.B.16). A slightly less diluted approach to regulation is to establish some state supervisory or advisory council to review transplantation procedures and recommend standards. See, e.g., FLA. STAT. § 381.602 (1986); MASS. ANN. LAWS ch. 17 § 15 (Law. Co-op 1986).

113. See, e.g., D.C. CODE ANN. § 2-1602 to 2-1604 (1981 & Supp. 1986); IDAHO CODE § 39-3401A (1988).

114. See, e.g., FLA. STAT. ANN. § 873.01 (West 1987); 1987 Ill. Laws, P.A. 85-191 (H.B. 404); 1987 MD. HEALTH-GEN. CODE ANN. § 5-408 (Supp. 1987); 1987 Nev. Stat. Ch. 641 (S.B. 485); N.Y. PUB. HEALTH LAW § 4307 (Consol. 1976); TEX. PENAL CODE ANN. § 48.02 (Vernon Supp. 1986); W. VA. CODE § 16-19-7a (Supp. 1988); 1987 Wis. Laws, Ch. 97 (A.B. 23). See generally National Organ Transplant Act, 42 U.S.C. § 274e (Supp. II 1984).

115. *Sub nom. Margaret v. Edwards*, 794 F.2d 994 (5th Cir. 1986).

tional vulnerability may now be suspect. When *Margaret S. (II)* was appealed to the Fifth Circuit, Judge Williams, concurring, dismissed all the vagueness challenges¹¹⁶ and affirmed the district court judgement on the basis that the statute failed the rational connection test. For Judge Williams, the absence of any comparable Louisiana restrictions on human tissue experimentation, or evidence of any rational basis for singling out the tissue from an induced abortion, robbed the statute of the required "rational relationship to an important state interest."¹¹⁷ In stark contrast, the majority opinion did affirm the district court's opinion but only on the narrower ground of vagueness.

XII. VAGUENESS CHALLENGES

The district court in *Margaret S. (II)* had addressed the question of vagueness and had concluded that the Louisiana prohibition on fetal experimentation was impermissibly vague because,

[I]t is impossible for a pathologist or other physician to distinguish or separate fetal tissue from maternal tissue in the handling and treatment of tissue which is the result of abortion [and] it is impossible for a pathologist or other physician to distinguish tissue which is the product of an induced abortion from that which is the product of a spontaneous abortion.¹¹⁸

In contrast, on appeal the Fifth Circuit found vagueness in the statute's silence as to the legality of the grey areas that lie somewhere between experimentation and routine medical tests.¹¹⁹ From the tenor of that opinion it would appear that, once that distinction was clarified, then the court would have no problems with the state ban on fetal experimentation¹²⁰ or, presumably, fetal tissue transplantation.

A vagueness challenge also succeeded before the district court in *Charles v. Carey*.¹²¹ There a statutory disposition and experimentation prohibition applied to "any fetus . . . aborted alive." The court considered that the term "alive" was capable of covering such a broad spectrum of indicia that it could not control the criminality of conduct.¹²²

A court should sustain a similar challenge against most aspects of the

116. 794 F.2d at 1000-02.

117. 794 F.2d at 1002.

118. *Margaret S. II*, 597 F.Supp. 636, 675-76 (footnote omitted).

119. 794 F.2d at 999.

120. *See, e.g., Id.* at 794 F.2d 999 n.13.

121. 579 F.Supp. 377 (N.D. Ill. 1983) (sufficient likelihood of unconstitutionality entitled plaintiffs to preliminary injunction).

122. 579 F.Supp. at 383.

Missouri fetal tissue transplantation statute. Prohibitions involving criminal sanctions therein are based upon such uncertainties as knowledge of the motives of others.¹²³ Further, it follows from *Margaret S. (II)*¹²⁴ that it is unconstitutional in a situation such as this to shift the risk of identifying the source of the fetal tissue to the transplantor.¹²⁵

An alternate challenge could be posited on vagueness as to exactly what conduct is prohibited or mandated. For example, a Cincinnati fetal disposal ordinance required that aborted fetuses, "be interred, deposited in a vault or tomb, cremated or *otherwise disposed of in a manner approved by the Commissioner of Health.*"¹²⁶ The Court of Appeals for the Sixth Circuit stated that,

The parameters of prohibited or permitted activity must be ascertainable from the statute or regulations implementing the statute. That is, there must be some objective guidance. The portion of the instant Ordinance permitting disposal in manners otherwise approved by the Health Commissioner is purely subjective and open to *ad hoc* changes in policy. Consequently, it fails to provide sufficient warning to parties as to what methods will or will not be disapproved and therefore be subject to prosecution.¹²⁷

Similarly, one may argue that the Missouri fetal tissue statute¹²⁸ insufficiently identifies the proscribed conduct, by failing to be specific as to whether it includes, for example, the transplantation of fetal blood,¹²⁹ or the transplantation of human fetal tissue into animals.¹³⁰

123. See, e.g., H.B. 1479, *supra* note 64, at § 188.036(1):

No physician shall perform an abortion on a woman if the physician *knows* that the woman conceived the unborn child for the purpose of providing fetal organs or tissue for medical transplantation to herself or another, and the physician *knows that the woman intends* to procure the abortion to utilize those organs or tissue for such use for herself or another. (emphasis added).

124. See *supra* note 118.

125. See, e.g., H.B. 1479 *supra* note 62, at § 188.036(2): "No person shall utilize the *fetal organs or tissue resulting from an abortion* for medical transplantation, if the person knows that the abortion was procured for the purpose of utilizing those organs or tissue for such use." (emphasis added).

126. Planned Parenthood Ass'n v. City of Cincinnati, 822 F.2d 1390, 1392 (6th Cir. 1987) (emphasis added).

127. 822 F.2d. at 1399. See also City of Akron v. Akron Center for Reproductive Health, Inc., 462 U.S. 416, 451-52 (1983).

128. H.B. 1479 *supra* note 62, at § 188.036(2). "No person shall utilize the *fetal organs or tissue* resulting from an abortion for *medical transplantation*, if the person knows that the abortion was procured for the purpose of utilizing those organs or tissue for such use." *Id.* (emphasis added).

129. Researchers believe that blood disorders such as leukemia, aplastic anemia and sickle-cell anemia could be treated with fetal blood cells. McAuliffe, *A Startling Fount of Healing*, U.S. News & World Report, Nov. 3, 1986 at 68.

130. For example, in order to test drugs which might have the same teratogenic effects on fetuses *in utero*.

XIII. POLICY-MAKING AT THE FEDERAL LEVEL

On March 22, 1988, Dr. Robert Windom, the Assistant Secretary at the Department of Health and Human Services denied a request from the National Institutes of Health (NIH) for permission to use fetal tissue for transplantation.¹³¹ The director of NIH, Dr. James Wyngaarden, has interpreted the memorandum and moratorium to mean that future applications for research grants will be denied, and that already-allocated funds for such research will be frozen pending the outcome of the advisory committee meetings.¹³²

The questions that Dr. Windom has asked the advisory committee to consider succeed in conveying the complexity of the ethical and legal issues involved. Furthermore, in many respects his questions are posed in refreshingly neutral terms.¹³³ And, at this time, it would appear that

131. Date: March 22, 1988

From: Assistant Secretary for Health

Subject: Fetal Tissues in Research

To: Director, National Institutes of Health

I have given careful thought to your request to perform an experiment calling for the implantation of human neural tissue from induced abortions into Parkinson's patients to ameliorate the symptoms of this disorder.

This proposal raises a number of questions—primarily ethical and legal—that have not been satisfactorily addressed, either within the Public Health Service or within society at large. Consequently, before making a decision on your proposal, I would like you to convene one or more special outside advisory committees that would examine comprehensively the use of human fetal tissues from induced abortions for transplantation and advise us on whether this kind of research should be performed, and, if so, under what circumstances.

. . . .

Pending the outcome of the advisory committee(s)' assessment and your subsequent review, I am withholding my approval of the proposed experiment, and future experiments, in which there is performed transplantation of human tissue from induced abortions. You will note that this does not include research using fetal tissues from spontaneous abortions or stillbirths. However, I would like the special advisory committee(s) to consider whether current research procedures are adequate for the appropriate ethical, legal and scientific use of tissue from these other sources.

I believe that greater input from outside professionals and also from the public will enhance protections for research participants and will help assure greater public confidence in our work.

Memorandum from Dr. Robert Windom to Dr. James Wyngaarden, Mar. 22, 1988 (on file with Washington University Law Quarterly).

132. Telephone interview with Ms. Barbara Harrison, N.I.H., April 28, 1988.

133. Among other questions, I would like the advisory committee(s) to address the following:

1. Is an induced abortion of moral relevance to the decision to use human fetal tissue for research? Would the answer to this question provide any insight on whether and how this research should proceed?
2. Does the use of the fetal tissue in research encourage women to have an abortion that

will be answered without resort to the ideological baggage surrounding the abortion debate.¹³⁴

At this stage in the debate, the key for the federal policy-makers is to accommodate the non-extremist viewpoints expressed in our pluralistic society, and thus keep at bay all but the most determined state legislatures.¹³⁵ This tactic will essentially buy the time that is needed for a full

they might otherwise not undertake? If so, are there ways to minimize such encouragement?

3. As a legal matter, does the very process of obtaining informed consent from the pregnant woman constitute a prohibited "inducement" to terminate the pregnancy for the purposes of the research—thus precluding research of this sort, under HHS regulations?

4. Is maternal consent a sufficient condition for the use of the tissue, or should additional consent be obtained? If so, what should be the substance and who should be the source(s) of the consent, and what procedures should be implemented to obtain it?

5. Should there be and could there be a prohibition on the donation of fetal tissue between family members, or friends and acquaintances? Would a prohibition on donation between family members jeopardize the likelihood of clinical success?

6. If transplantation using fetal tissue from induced abortions becomes more common, what impact is likely to occur on activities and procedures employed by abortion clinics? In particular, is the optimal or safest way to perform an abortion likely to be in conflict with preservation of the fetal tissue? Is there any way to ensure that induced abortions are not intentionally delayed in order to have a second trimester fetus for research and transplantation?

7. What actual steps are involved in procuring the tissue from the source to the researchers? Are there any payments involved? What types of payments in this situation, if any, would fall inside or outside the scope of the Hyde Amendment?

8. According to the HHS regulations, research on dead fetuses must be conducted in compliance with State and local laws. A few States' enacted version of the Uniform Anatomical Gift Act contains restrictions on the research applications of dead fetal tissue after an induced abortion. In those States, do these restrictions apply to therapeutic transplantation of dead fetal tissue after an induced abortion? If so, what are the consequences for NIH-funded researchers in those States?

9. For those diseases for which transplantation using fetal tissue has been proposed, have enough animal studies been performed to justify proceeding to human transplants? Because induced abortions during the first trimester are less risky to the woman, have there been enough animal studies for each of those diseases to justify the reliance on the equivalent of the second trimester human fetus?

10. What is the likelihood that transplantation using fetal cell cultures will be successful? Will this obviate the need for fresh fetal tissues? In what time-frame might this occur?

Based on the findings and recommendations of the advisory committee(s), I would like you to reconsider whether you would like to proceed with this kind of research, and if so, whether you wish to make any changes, regulatory or otherwise, in your research review and implementation procedures for both extramural and intramural programs.

Memorandum, *supra* note 131.

134. Reports indicate that the preliminary review by the Special Advisory Panel has been completed and favors continued research on or transplantation of fetal tissue. *See, e.g.*, Wall St. J., Nov. 7, 1988, at A14, Col. 3; N.Y. Times, Nov. 14, 1988, at A23, Col. 1.

135. Extremism is not limited to state legislatures. There have been reports that prior to the convening of the advisory committee aides at the White House had drafted an executive order for Presidential signature that would ban all fetal experimentation, research or transplantation except

debate on the complicated policy decisions involved in fetal tissue transplantation. The most appropriate response would be to institute a medium-term code of conduct requiring:

- (i) The imposition of a "Chinese Wall" between those involved in abortion counselling and procedures and tissue harvesters and transplanters.
- (ii) The consent of the woman to the use of the fetal tissue for transplantation.¹³⁶
- (iii) The randomizing of fetal tissue collection such that specific donees may not be targeted.
- (iv) The development of harvesting protocols to determine general acceptability of tissue,¹³⁷ including continued research as to the appropriateness of using spontaneously aborted tissue.
- (v) The development of criteria to determine fetal death.¹³⁸

This self-regulatory code of practice is not revolutionary in its rationales or mechanisms. Neither is it intended to have any permanency. However, for the pragmatists in the middle of the debate, it will buy some time until it becomes clear whether, for example, large scale laboratory culture of transplantable fetal cells is feasible or whether isolation of the pivotal stem cell will otherwise permit rejection-free human blood and tissue transplantation.¹³⁹

XIV. CONCLUSION

As research involving fetal tissue transplantation continues apace overseas,¹⁴⁰ we need exposure to, not foreclosure of, the debate. Both federal and state policy-makers must resist the call for preemptive legislative

where it would directly benefit the fetus itself. N.Y. Times, Sept. 9, 1988, at A7, col. 5. Furthermore, on November 4, 1988 President Reagan signed an amendment to the National Organ Transplant Act extending the prohibition on the sale of tissue for transplantation to fetal tissue and organs. N.Y. Times, Nov. 6, 1988, at A14, Col. 3.

136. This functions as an extension and reaffirmation of the woman's reproductive autonomy.

137. See, e.g., J.-L. Touraine & F. Touraine, *Greffe de tissus foetaux: aspects medicaux et ethiques*, 27 (9) *AGRESSOLOGIE*, 771 (1986).

138. Protocols appropriate to dealing with donations from respirator-dependent anencephalic children also should be developed. See Harrison, *Organ Procurement for Children: The Anencephalic Fetus as Donor*, *THE LANCET*, Dec. 13, 1986, at 1383, 1385. See also Case Studies, *The Anencephalic Newborn as Organ Donor*, *HASTINGS CENTER REP.*, Apr. 1986 at 21.

139. See generally Wall St. J., July 11, 1988, at 6, col. 1.

140. Shortly after the NIH moratorium was declared, the first Parkinson's disease related fetal cell implant was performed in Britain. N.Y. Times, Apr. 19, 1988, at C3, col. 3. Experimentation continues in Sweden, France, Mexico and China.

strikes designed to form permanent and negative ethical and legal links between tissue transplantation and abortion.

Most extremist or hastily drawn state prohibitions will fail in their avowed purpose because the technology sought to be regulated is changing too quickly. Many—if not all—others will be struck down on one of the grounds outlined above. Some courts might even see fit to extend the reach of the reproductive autonomy principle so as to protect transplantation. Yet those would be hollow victories. Fetal transplantation must be judged on its own merits and not as an adjunct to, or a foil for, the abortion debate.

