Vanderbilt Law Review

Volume 39 Issue 3 Issue 3 - April 1986

Article 1

4-1986

Alas! Poor Yorick," I Knew Him Ex Utero: The Regulation of Embryo and Fetal Experimentation and Disposal in England and the United **States**

Nicolas P. Terry

Follow this and additional works at: https://scholarship.law.vanderbilt.edu/vlr



Part of the Health Law and Policy Commons, and the Medical Jurisprudence Commons

Recommended Citation

Nicolas P. 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 Vanderbilt Law Review 419 (1986) Available at: https://scholarship.law.vanderbilt.edu/vlr/vol39/iss3/1

This Article is brought to you for free and open access by Scholarship@Vanderbilt Law. It has been accepted for inclusion in Vanderbilt Law Review by an authorized editor of Scholarship@Vanderbilt Law. For more information, please contact mark.j.williams@vanderbilt.edu.

VANDERBILT LAW REVIEW

Volume 39 April 1986 Number 3

"Alas! Poor Yorick," I Knew Him Ex Utero: The Regulation of Embryo and Fetal Experimentation and Disposal in England and the United States

Nicolas P. Terry*

I.	Introduction			
II.	Experimentation, Disposal, and the Abortion De-			
	BATE	422		
III.	FETUSES AND FETAL MATERIALS: DISPOSAL	426		
	A. Disposal—Specific Legislation	427		
	B. Disposal—Indirect Regulation	430		
	C. Fetus Disposal and Tort Law	431		
IV.	FETUSES AND FETAL MATERIALS: POSSESSORY RIGHTS	432		
	A. Common Law Possessory Interests	432		
	B. Possessory Interests in Nonburial Situations.	433		
	C. Fetal Possession—Specific Legislation	437		
V.	FETAL EXPERIMENTATION	440		
	A. Definitional Problems	441		

^{*}Associate Professor of Law, St. Louis University. Formerly, Locturer in Law, University of Exeter, England. B.A. (Law) Kingston Polytechnic; LL.M. Cambridge. I owe a debt of gratitude to Kate Whitby, my research assistant, for her painstaking work. I would like to thank my colleagues, Isaak Dore, Stanislaw Frankowski, Sandra Johnson, and Carolyn Jones for their support and encouragement.

	В.	Guidelines for Research in England	442
	C.	Federally Funded Fetal Research	444
	D.	State Regulation of Fetal Research	446
	E.	Fetal Experimentation Regulation and Pri-	
		vacy Guarantees	450
	F.	Fetal Experimentation as Protected Speech .	452
	G.	Fetal Research and Tort Law	454
VI.	Емі	BRYOS: POSSESSORY RIGHTS	456
	\boldsymbol{A} .	Use, Disposal, and Possession	456
	B.	Inheritance Implications	459
VII.	Емі	BRYOS: REGULATION OF RESEARCH	460
	A.	Proposed Regulation in England	461
	B.	Specific Regulation in the United States	462
VIII.	Issues of Consent and Veto 4		
TX	Conclusion 46		

I. Introduction

And the law—that rule of action which touches all human things—must touch also this thing of death. It is not surprising that the law relating to this mystery of what death leaves behind cannot be precisely brought within the letter of all the rules regarding corn, lumber and pig iron. And yet the body must be buried or disposed of. If buried, it must be carried to the place of burial. And the law, in its all-sufficiency, must furnish some rule, by legislative enactment or analogy, or based on some sound legal principles, by which to determine between the hiving questions of the disposition of the dead and rights surrounding their bodies. In doing this the courts will not close their eyes to the customs and necessities of civilization in dealing with the dead and those sentiments connected with decently disposing of the remains of the department which furnish one ground of difference between men and brutes.

Replete with analogies drawn to war crimes and expressed fears that the progress of medical science would be halted, the debate over the ethics of human experimentation is nothing if not complex. Nevertheless, in 1978 The Belmont Report was at least able to identify certain generalized ethical principles to guide researchers: "respect for persons," "beneficence," and "justice."

Louisville & N.R.R. v. Wilson, 132 Ga. 62, 63-64, 51 S.E. 24, 25 (1905).

^{2.} The Nat'l Comm'n for the Protection of Human Subjects of Biomedical and Behavorial Research, The Belmont Report, Ethical Principles and Guidelines for the Protection of Human Subjects of Research 4-10 (1978). For the purposes of *The Belmont Report*, the phrase "respect for persons" incorporated two basic ethical convictions: "first, that individuals should be treated as autonomous agents, and second, that persons with diminished autonomy are entitled to protection." *Id.* at 4. The term "beneficence," often understood to cover acts of a charitable nature, described a two-pronged obligation: "(1) do not harm, and (2) maximize possible benefits and minimize possible harms." *Id.* at 6. "Justice" encompassed several formulations for the purposes of distributing burdens and bene-

These ethical principles, however, are based ultimately on our perceptions of humanity and personality. Applying these principles to research on fetuses or embryos is fraught with difficulty. Neither of our pluralistic societies has resolved the "separate" debate regarding the appropriate status afforded pre-viable human forms. Moreover, The Belmont Report guidelines for the performance of human experimentation, such as the informed consent of the research subject, are factually inappropriate in a pre-viable context.

Somewhat distinct from the ethical debate whether fetal or embryo experimentation should be permitted is the general recognition that most current medical research is conducted responsibly. Dead fetuses are being used not to make soap, but rather for valuable research into virology, cancer, arterial degenerative disease, immunology, congenital deformities, and the effects of maternally ingested drugs. Live fetuses in utero are studied with a view toward facilitating fetal treatment, and while research on pre-viable fetuses ex utero is comparatively rare, various metabolic studies have been performed.

fits: "(1) to each person an equal share, (2) to each person according to individual need, (3) to each person according to individual effort, (4) to each person according to societal contribution, and (5) to each person according to merit." Id. at 9.

^{3.} Id at 10-20

^{4.} For a discussion of the ethical debate, see The Nat'l 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 (1975) [hereinafter cited as Research on the Fetus]; G. Annas, L. Glantz & B. Katz, Informed Consent to Human Experimentation 198-200 (1977); R. Levine, Ethics and Regulation of Clinical Research 197-202 (1981); Grobstein, The Moral Uses of 'Spare' Embryos, 12 Hastings Center Rep. 5 (1982); Jones, Research on Human Embryos: The Ethics of Pragmatism, 1 Prof. Negl. 19 (1985); Parkin, Research on Human Embryos: A Search for Principle, 1 Prof. Negl. 164 (1985); Tiefel, The Cost of Fetal Research: Ethical Considerations, 294 New Eng. J. Med. 85 (1976); Walters, Ethical Issues in Experimentation on the Human Fetus, 2 J. Religious Ethics 33 (1974); Comment, Social Values in a Brave New World: Toward a Public Policy Regarding Embryo Status and In Vitro Fertilization, 29 St. Louis U.L.J. 817, 830-33 (1985); see also P. Ramsey, The Ethics of Fetal Research (1975); Hellegers, Fetal Research, in 2 Encyclopedia of Bioethics 489, 491-92 (Reich ed. 1978).

^{5.} See, e.g., C. Francome, Abortion Freedom 165-68 (1984) (discussing allegations made in the English press).

^{6.} See Editorial, The Use of Human Fetal Material for Research, 40 MEDICO-LEGAL J. 75, 75 (1972) (discussing the use of fetuses to research the production of the poliomyelitis vaccine).

^{7.} See generally The Use of Fetuses and Fetal Material for Research, Report of the Advisory Group §§ 7-14 app. 2 (H.M.S.O. 1972) (Chairman Sir John Peel) [hereinafter cited as Peel or The Peel Report].

^{8.} See Research on the Fetus, supra note 4, at 10-12.

See id. at 7.

^{10.} Id. at 14-15.

^{11.} PEEL, supra note 7, § 16; RESEARCH ON THE FETUS, supra note 4, at 12-14.

The purpose of this Article is to detail aspects of the current regulatory treatment by England and the United States of prenatal life forms pertaining to disposal, possession, and research; to illustrate the legal difficulties encountered in attempting such regulation; and to question aspects of the models so far employed.

II. EXPERIMENTATION, DISPOSAL, AND THE ABORTION DEBATE

The abortion laws of England¹² and the United States possess one important commonality; in practice the laws are very liberal.¹³ They differ markedly, however, in their juridical basis and jurisprudential approach. Relying on Roe v. Wade¹⁴ and its progeny, United States courts have struck down state criminal abortion statutes because a woman, in consultation with her physician, has a right to terminate her pregnancy protected by, and derived from, a right of privacy founded in the due process clause of the four-teenth amendment. English law, lacking as it does any hierarchical normative structure,¹⁵ has instead proceeded with a structured, statutory decriminalization of existing prohibitions.¹⁶

The two systems also differ in their jurisprudential approach. The United States Supreme Court consistently has described a woman's termination decision as a "fundamental right," albeit one subject to compelling state interests in maternal health after the

^{12.} The limitation of the scope of this Article to English law is due to the limited jurisdictional reach of some of the English statutes herein considered. For example, the Congenital Disabilities (Civil Liability) Act, 1976, ch. 28, does not apply to Scotland (although the common-law position there is similar); the Abortion Act, 1967, ch. 82, does not apply to Northern Ireland; and the Infant Life (Preservation) Act, 1929, 19 & 20 Geo. 5, ch. 34, does not apply to Scotland or Northern Ireland.

^{13.} For a general perspective, see Cook & Dickens, A Decade of International Change in Abortion Law: 1967-1977, 68 Am. J. Pub. Health 637 (1978); Veitch & Tracey, Abortion in the Common Law World, 22 Am. J. Comp. L. 652 (1974).

^{14. 410} U.S. 113 (1973).

^{15.} It should be remembered that although the United Kingdom is bound by the European Convention on Human Rights (European Convention) as a matter of international law, the convention bas not been incorporated formally into domestic English law. For European Convention cases involving abortion issues, see Bruggemann & Scheuten v. Federal Republic of Ger., 1978 Y.B. Eur. Conv. on Human Rights (Eur. Comm'n on Human Rights) (basic abortion rights); Paton v. United Kingdom, 3 E.H.R.R. 408 (E.C.H.R. 1980) (no spousal veto of woman's termination decision).

^{16.} The basic criminal provisions are found in the Offences Against the Person Act, 1861, 24 & 25 Vict., ch. 100, §§ 58, 59. Decriminalization was initiated by Macnaughten, J., in the well-known case of The King v. Bourne, [1939] 1 K.B. 687, and was completed by the Abortion Act, 1967, ch. 87.

^{17.} E.g., City of Akron v. Akron Center for Reproductive Health, Inc., 452 U.S. 416, 420 n.1 (1983).

first trimester¹⁸ and in prenatal life after viability.¹⁹ The English Abortion Act²⁰ makes no such broad pronouncement. Rather, English law has sought to "medicalize" the abortion issue by making the abortion decision dependent upon medical discretion and the application of statutorily mandated clinical criteria.²¹ Nevertheless, the two abortion laws are identical in their practical effects; both laws permit abortion on demand up to the end of the second trimester²² and limit the performance of third trimester abortions to

- (1) Subject to the provisions of this section, a person shall not be guilty of an offence under the law relating to abortion when a pregnancy is terminated by a registered medical practitioner if two registered medical practitioners are of the opinion, formed in good faith—
 - (a) That the continuance of the pregnancy would involve risk to the life of the pregnant woman, or of injury to the physical or mental health of the pregnant woman or any existing children of her family, greater than if the pregnancy were terminated; or
 - (b) that there is a substantial risk that if the child were horn it would suffer from such physical or mental abnormalities as to be seriously handicapped.
- (2) In determining whether the continuance of a pregnancy would involve such a risk of injury to bealth as is mentioned in paragraph (a) of subsection (1) of this section, account may be taken of the pregnant woman's actual or reasonably foreseeable environment.
- (3) Except as provided by subsection (4) of this section, any treatment for the termination of pregnancy must be carried out in a hospital vested in the Minister of Health or the Secretary of State under the National Health Service Acts, or in a place for the time heing approved for the purposes of this section by the said Minister or the Secretary of State.
- (4) Subsection (3) of this section, and so much of subsection (1) as relates to the opinion of two registered medical practitioners, shall not apply to the termination of a pregnancy by a registered medical practitioner in a case where he is of the opinion, formed in good faith, that the termination is immediately necessary to save the life or to prevent grave permanent injury to the physical or mental health of the pregnant woman.
- Id. § 1. This Act bears an obvious similarity to the Model Penal Code. See MODEL PENAL CODE § 230.3 (Proposed Official Draft 1962).
- 22. Roe v. Wade, 410 U.S. 113, 163 (1973) (United States law). This position obtains in England for two reasons. First, § 1(1)(a) of the Abortion Act, although ostensibly concerned with therapeutic abortions, permits some forms of contraceptive abortions because the medical practitioners may consider the risk of injury to the woman's "mental health" and to her "existing children." The Abortion Act, 1967, ch. 87, § 1(1)(a). Further, in assessing mental health the medical practitioners also may consider "the pregnant woman's actual or reasonably foreseeable environment." Id. § 1(2). Second, the balancing test central to § 1(1)(a) requires a comparison of the risks of the continuation of the pregnancy with its termination. Because more maternal deaths occur from childbirth than early abortions, see figures provided by the Under Secretary of State, Department of Health and Social Security, quoted in 1 Fam. L. 167 (1971); cf. Mortality from Abortion and Childbirth, 250 J. A.M.A. 361 (1983) (letter to editor), any abortion decision may be justified on purely statis-

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

^{19.} Id. Viability is the developmental stage at which the fetus "has the capability of meaningful life outside the mother's womb." Id.

^{20.} The Abortion Act, 1967, ch. 87.

^{21.} The Abortion Act provides:

maternal-health-preserving situations.23

As the central themes of this Article are considered, it is important to note that neither of these liberal abortion laws is necessarily incompatible with extensive legal protection for the fetus or embryo. The potential for this incompatibility has been far more pronounced in the United States because Roe v. Wade held that a fetus was not a person within the protection of the fourteenth amendment.²⁴ Yet, when the Missouri Supreme Court was asked to construe the term "person" in a wrongful death statute to include a fetus, the court encountered little difficulty in reaching the conclusion that "Roe v. Wade, while holding that the fetus is not a 'person' for purposes of the 14th amendment, does not mandate the conclusion that the fetus is a legal nonentity."²⁵

In fact, most juridical decisions to legalize abortion have a comparatively narrow effect.²⁶ As one commentator has noted of the position in the United States:

[I]t is important to understand that [Roe v. Wade] says very little about the legal status and rights of the fetus. The issue in Roe v. Wade was whether a state has the constitutional power to interfere with the decision of a woman, in consultation with her physician, to have an abortion performed. The Supreme Court's decision was, therefore, solely in the context of the clash of interests between the power of the state to prohibit abortion and the right of a woman to have an abortion. The interests and rights of the fetus were not directly in issue.²⁷

In any event, it is clear that the liberalization of abortion has not slowed the growth of legal protection afforded the fetus on ei-

tical grounds.

^{23.} Roe v. Wade, 410 U.S. 113, 163-64 (1973). English law is slightly more restrictive in that, irrespective of the decriminalizing effects of the Abortion Act, the still extant Infant Life (Preservation) Act prohibits postviability terminations except "for the purpose only of preserving the life of the mother." Infant Life Preservation Act, 1929, 19 & 20 Geo. 5, ch. 34, § 1-(1). In practice, of course, such late abortions are rare, which is one reason why many states have not taken up the Supreme Court's offered regulatory power.

^{24. 410} U.S. 113, 158 (1973).

^{25.} O'Grady v. Brown, 654 S.W.2d 904, 910 (Mo. 1983).

^{26.} See generally Cook & Dickens, supra note 13; Veitch & Tracey, supra note 13.

^{27.} Green, The Fetus and the Law, in Genetics and the Law 19, 20 (1976); see also Veitch & Tracey, supra note 13, at 692-95 (1974); cf. Hughes, England's Great Leap Backward—The Abortion Act, 1967, 43 Austl. L.J. 12, 18-19 (1969); Note, Constitutional Law—The "Aborted" Evolution of Fetal Rights After Roe v. Wade—Douglas v. Town of Hartford, 542 F. Supp. 1267 (D. Conn. 1982), 6 W. New Eng. L. Rev. 535 (1983). For a philosophical inquiry into the fetal rights/abortion "paradox," see Campbell & McKay, Antenatal Injury and the Rights of the Fetus, Phil Q., Jan. 1978, at 17; see also Comment, The Unborn: Common Law Consequences of Being a "Non-Person", 72/73 Law & Just. 6 (Hilary/Easter 1982).

ther side of the Atlantic.²⁸ One may speculate that in the United States this paradox has been facilitated by a ready acceptance of a functional approach to legal analysis.²⁹ In England, an apparent failure even to consider the potential for overlap between law and the protection of the fetus seems at least partly responsible for the present uncertain state of the law.

Fetal and embryo research are obviously embroiled in the abortion debate. To an extent, this is appropriate because both subjects involve similarly difficult ethical and philosophical questions, regarding both our response to the indicia of life³⁰ and our legal definition of personhood.³¹ Yet, beyond that similarity, the link between abortion and experimentation may have been promoted by a public perception that liberal abortion laws create a ready supply of fetuses for experimentation.³² Further, the question of fetal research has provided issues for the anti-abortionists, debatable in both political and legal arenas, which have not been

^{28.} See, e.g., O'Grady v. Brown, 654 S.W.2d 904, 910 (Mo. 1983) (Missouri's wrongful death statute, which applies to the death of a "person," interpreted to be applicable to death of a fetus in spite of ruling in Roe v. Wade that fetus is not a "person" for the purposes of the 14th amendment); the enactment in England of the Congenital Disabilities (Civil Liability) Act, 1976.

^{29.} Consider the seminal work of Felix Cohen discussing the manipulation of legal words and doctrines to achieve a particular result. E.g., Cohen, Transcendental Nonsense and the Functional Approach, 35 COLUM. L. REV. 809 (1935).

^{30.} For example, according to one commentator, "The fetus may not be a person in the *legal* sense, but *common* sense and common dignity elevate it above the status of a gallbladder. The potential of a gallbladder is to become an older gallbladder, whereas the fetus has the potential to become a person." Nathan, *Fetal Research: An Investigator's View*, 22 VILL. L. Rev. 384, 390 (1976-77).

^{31.} The issue of personhood arises in the context of in vitro fertilization because the group "Americans United for Life" believes that an in vitro embryo is a person, and the organization opposes embryo experimentation. See Gustatis, Genetic Engineering is Making the Fetus/Person Line Harder to See, L.A. Daily J., Mar. 24, 1983, at 4, col. 3. See generally Baron, If You Prick Us, Do We Not Bleed?: Of Shylock, Fetuses, and the Concept of Person in the Law, 11 Law, Med. & Health Care 52 (1983); Tuchler, Man-Made Man and the Law, 22 St. Louis U.L.J. 310, 320-24 (1978).

^{32.} One commentator argues that this perception is unsound. See 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) (arguing first, that there was an adequate supply of fetuses for research before Roe v. Wade and second, that a liberal ahortion law possibly decreases the supply of appropriate fetuses because it tends to encourage earlier abortions). In England, the Medical Research Council has funded the collection of fetuses for research since 1958, nine years before full decriminalization of abortion. The Peel Report, supra note 7, § 17. For the scientist's perspective on whether to use the products of natural or induced abortion, see Miller & Poland, Monitoring of Human Embryonic and Fetal Wastage, in Monitoring Birth Defects and Environment 65, 70-73 (1971).

foreclosed by the liberalization of abortion laws.³³ Just as the post-Roe v. Wade litigation concentrated on the issue of public funding for abortions,³⁴ so also may the debate over prenatal research be seen as the product of strategic ground-shifting by those opposed to abortion³⁵ to keep abortion issues before the courts and legislatures.

III. FETUSES AND FETAL MATERIALS: DISPOSAL

At common law the state's interest in cadaver disposal was limited to concerns based on public health. Thus, in a case concerning the less than orthodox burial of a premature infant that had survived for only two weeks, one court stated:

The custom of the country imposed upon appellant only the duty of decently burying his child; that is, it must be properly clothed when being taken to the place of burial, and then placed in the ground or tomb, so that it will not become offensive or injurious to the lives of others. He may not cast it into the street, or into a running stream, or into a hole in the ground, or make any disposition of it that might be regarded as creating a nuisance, be offensive to

^{33.} See Nathan, supra note 30, at 388.

^{34.} In England, according to the Report of the Committee on the Working of the ABORTION ACT CONT. 5579, § 398 (1974) (Chairperson Mrs. Justice Lane) [hereinafter cited as LANEI, the Secretary of State has a statutory duty to provide publicly funded abortion services under the National Health Service Act, 1977, ch. 49, § 3(1). In the United States the situation is far more complicated. Not only are free medical services extremely limited, they are funded by both state and federal governments. Thus, a state may have a medical assistance program providing medical funding, for example, to the "categorically needy" or "medically needy." See, e.g., Or. Rev. Stat. § 414.032 (1985). Further, such a program then may qualify that state as a participating state for partial funding of the program under subchapter XIX of 42 U.S.C. §§ 1396-1396p (1982). Litigation in the United States has concentrated on three issues: first, the extent to which a state must provide financial assistance for abortions as a condition of federal Medicaid participation; see Maher v. Roe. 432 U.S. 464 (1977); see also Beal v. Doe, 432 U.S. 438 (1977); second, the extent of the power of the federal government to curtail Medicaid funding of abortion; see Harris v. McRae, 448 U.S. 2907 (1980); see also Georgia v. Heckler, 768 F.2d 1293 (11th Cir. 1985) (Health Department cannot be compelled to reimburse state for cost of abortions during period that state was compelled by federal court injunction to fund procedures prior to Harris v. Mc-Rae); cf. National Educ. Ass'n of R.I. v. Garrahy, 598 F. Supp. 1374 (D.R.I. 1984) (statutes prohibiting private health insurers from including abortion coverage in basic medical insurance and prohibiting municipalities from providing coverage at all held unconstitutional); third, the extent to which a state may limit its own medical assistance program in the abortion context; e.g. Committee to Defend Reproductive Rights v. Myers, 29 Cal. 3d 252, 625 P.2d 779, 172 Cal. Rptr. 866 (1981); Committee to Defend Reproductive Rights v. Cory, 132 Cal. App. 3d 852, 183 Cal. Rptr. 475 (1982); Moe v. Secretary of Admin. and Fin., 382 Mass. 629, 417 N.E.2d 387 (1981); Right to Choose v. Byrne, 91 N.J. 287, 450 A.2d 925 (1982); Planned Parenthood Ass'n v. Department of Human Resources, 63 Or. App. 41, 663 P.2d 1247 (1983).

^{35.} See Nathan, supra note 30, at 387; see also Culliton, Fetal Research: The Case History of a Massachusetts Law, 187 Science 237 (1975).

the sense of decency, or be injurious to the health of the community.36

Of course, the question that arises is the extent to which the state should regulate fetal disposal beyond the public health considerations.

A. Disposal-Specific Legislation

Several American states have addressed the question of the disposal of fetal remains. In Arkansas the law places a duty on the physician-abortionist to "insure that the fetal remains and all parts thereof are disposed of in a fashion similar to that in which other tissue is disposed."³⁷ A Florida statute requires that "[f]etal remains shall be disposed of in a sanitary and appropriate manner and in accordance with standard health practices, as provided by rule of the Department of Health and Rehabilitative Services."³⁸ Finally, California law provides that following fetal experimentation³⁹ "fetal remains shall be promptly interred or disposed of by incineration."⁴⁰

In general the specific disposal requirements of these statutes

^{36.} Seaton v. Commonwealth, 149 Ky. 498, 502, 149 S.W. 871, 873 (1912).

^{37.} Ark. Stat. Ann. § 82-436 (Supp. 1985); see also N.Y. Pub. Health Law § 4162 (McKinney 1985).

^{38.} Fla. Stat. Ann. § 390.001(7) (West Supp. 1985).

^{39.} Fetal experimentation is considered infra at text accompanying notes 143-269.

^{40.} CAL. HEALTH & SAFETY CODE § 25957(a) (West 1984). Subsection (b) contains an exception for educational institutions. In 1982, 16,500 fetuses were discovered in a repossessed container in Santa Monica, California. These abortuses bad been stored, preparatory to disposal, under the terms of the California statute, by a pathology laboratory under contracts with various clinics and hospitals. Originally the Los Angeles County District Attorney had been in favor of continuing the storage of the fetuses because of their possible evidentiary value in prosecutions for illegal abortion. However, he agreed to have them buried or stored at a private cemetery, knowing that a Californian pro-life organization would hold a religious service and erect a memorial plaque there. A pro-choice group brought suit against the District Attorney and the pro-life organization. The trial court's order that the religious burial could continue was overturned by the appellate court on the basis that the District Attorney's entanglement with a particular religious preference violated the state constitution's establishment clause. Feminist Women's Health Center v. Philibosian, 157 Cal. App. 3d 1076, 203 Cal. Rptr. 918, hearing denied, 688 P.2d 160, 207 Cal. Rptr. 74 (Cal. 1984), cert. denied, 105 S. Ct. 1752 (1985). Subsequently the California Superior Court (O'Brian, J.) gave the state permission to dispose of the fetuses "without becoming involved in any religious ceremony or activity." St. Louis Post-Dispatch, July 7, 1985, at 13A, col. 6. The Superior Court subsequently reaffirmed its decision. St. Louis Post-Dispatch, Sept. 15, 1985, at 13A, col. 1. On October 6, 1985, the fetuses were given a nonreligious burial. President Ronald Reagan sent a eulogy, which was read at the funeral. He stated, "I am confident that your memorial service will touch many others as you proclaim the inviolability of liuman life at every stage of development. From these innocent dead, let us take increased devotion to the cause of restoring the rights of the unborn." St. Louis Post-Dispatch, Oct. 7, 1985, at 8A, col. 1.

do not seem to be problematic.⁴¹ In City of Akron v. Akron Center for Reproductive Health, Inc.,⁴² however, the United States Supreme Court was faced with an ordinance that provided, "Any physician who shall perform or induce an abortion upon a pregnant woman shall insure that the remains of the unborn child are disposed of in a humane and sanitary manner."⁴³ Conscious, no doubt, of the state's inherent power to regulate matters of public health,⁴⁴ the Court noted that the city had a "legitimate interest in proper disposal of fetal remains."⁴⁵ The Court, however, struck down the ordinance as impermissibly vague nonetheless because it was unclear whether the provision merely precluded "mindless dumping of aborted fetuses on garbage piles,"⁴⁶ or went so far as "to mandate some sort of 'decent burial' of an embryo at the earliest stages of formation."⁴⁷

Further, it is possible that even a nonvague fetal disposal statute could be struck down if it required state interference with the disposal process that would burden or otherwise chill a woman's constitutionally protected decision to terminate her pregnancy.⁴⁸ This was precisely the approach taken by a district court in invalidating two versions of Louisiana's fetal disposal statute. The original 1978 statute stated:

Any physician who shall perform or induce an abortion upon a pregnant woman shall insure that the remains of the unborn child are disposed of in a manner consistent with the disposal of other human remains [viz, shall be decently interred or cremated within a reasonable time after death].⁴⁹

The district court struck down the statute, finding that it imposed

^{41.} Cf. Planned Parenthood Ass'n v. Ashcroft, 462 U.S. 476, 486-90 (1983) (upholding a Missouri statute providing for the pathological examination of aborted fetal remains). Similar provisions exist in other states. See, e.g., ILL. Ann. Stat. ch. 38, § 81-32 (Smith-Hurd Supp. 1985); Utah Code Ann. § 76-7-309 (1978).

^{42. 462} U.S. 416 (1983).

^{43.} AKRON, OHIO, CODIFIED ORDINANCES ch. 1870, § 1870.16 (1978), quoted in City of Akron, 462 U.S. at 424 n.7.

^{44.} See Wyeth v. Thomas, 200 Mass. 474, 479, 86 N.E. 925, 927 (1909) ("Of [the state's] power to exercise complete control of burials of the dead, so far as is necessary for the protection of the public health and the promotion of the public safety, there is no question.").

^{45.} City of Akron, 462 U.S. at 452 n.45.

^{46.} Id. at 451 (quoting Planned Parenthood Ass'n v. Fitzpatrick, 401 F. Supp. 554, 573 (E.D. Pa. 1975), aff'd mem. sub. nom. Frankin v. Fitzpatrick, 428 U.S. 901 (1976)).

^{47.} City of Akron, 462 U.S. at 451 (quoting the Sixth Circuit's opinion in the same case, 651 F.2d 1198, 1211 (6th Cir. 1981)).

^{48.} See, e.g., Fitzpatrick, 401 F. Supp. at 573.

^{49.} LA. REV. STAT. ANN. § 40:1299.35.14 (West Supp. 1979) (incorporating by reference the burial provisions contained in La. REV. STAT. ANN. § 8:651 (West Supp. 1979)).

two impermissible psychological burdens on the pregnant woman concerning her abortion decision.⁵⁰ First, the statute equated the disposal of a fetus to that of a person.⁵¹ Second, through the statute's referential incorporation of a portion of the Louisiana burial statute, it forced the woman to consider whether her abortus should be cremated or buried.⁵²

In 1980 the Louisiana legislature responded with a new fetal disposal statute providing:

A. Each physician who performs or induces an abortion which does not result in a live birth shall insure that the remains of the child are disposed of in accordance with rules and regulations which shall be adopted by the Department of Health and Human Resources.

B. The provisions of this Section sball not apply to, and shall not preclude, instances in which the remains of the child are provided for in accordance with the provisions of [the burial statute].

C. The attending physician shall inform each woman upon whom he performs or induces an abortion of the provisions of this Section within twenty-four hours after the abortion is performed or induced.⁵³

The same district court found the revised statute to be as constitutionally defective as its predecessor.⁵⁴ Specifically, the court held that subsection (C) constituted a direct burden on a pregnant woman's abortion right because information about how the abortus would be disposed of could cause her psychological harm.⁵⁵ Further, the court viewed the duty to inform as an interference with the doctor's discretion.⁵⁶ In response to the state's contention that the statute was justified on the basis of sufficient state interest, the court stated:

[T]he Court concludes that the burdens imposed by [the statute] are not outweighed by any compelling state interest and are thus invalid. Indeed, the Court finds that the requirement embodied in paragraph (C) . . . furthers no state interest whatsoever. Women who desire the burial or cremation of fetal remains may request such disposal if they so choose. The sole purpose of this

^{50.} Margaret S. v. Edwards, 488 F. Supp. 181 (E.D. La. 1980).

^{51.} Id. at 222.

^{52.} Id.

^{53.} La. Rev. Stat. Ann. § 40:1299.35.14 (West Supp. 1986).

^{54.} Margaret S. v. Treen, 597 F. Supp. 636 (E.D. La. 1984). The court's opinion clearly suggests that the entire provision was invalid. Id. at 670-71. However, the opinion only directly addresses the constitutionality of the apparently severable subsection (C). Further, the constitutionality of subsection (A), aside from its arguably impermissible equation of "child" (human being) with fetus, would depend on the substance of the regulations adopted by the specified department; yet these were not considered by the court. Id. at 668. As to subsection (B), the court suggested an interpretation that would preserve its constitutionality. Id. at 669 n.27.

^{55.} Id. at 670-71.

^{56.} Id. at 671.

statute is to deter women from obtaining abortions by equating the fetus to a human life thereby making the abortion decision psychologically more disturbing.⁵⁷

In England the burial of a dead, post-viable fetus⁵⁸ is not permitted without notification to⁵⁹ and permission of⁶⁰ the registrar of births, deaths, and marriages, or when appropriate, the coroner.⁶¹ Neither the Abortion Act, 1967 nor any other provision of English law⁶² expressly provides for the manner of disposal of an aborted fetus. The 1974 report of the Lane Committee, however, recommended that appropriate measures be taken to minimize distress to nursing and other hospital staff.⁶³ This proposal was promoted no doubt by the Lane survey of hospital boards and hospitals on the then current practices regarding the disposal of fetuses and fetal material. The study had shown that incineration was the most commonly used disposal technique, although large fetuses often were made available for research.⁶⁴

B. Disposal—Indirect Regulation

In England the concealment of the birth of a fetus is a crime under the Offences Against the Person Act,⁶⁵ and concealment of the performance of a decriminalized abortion constitutes a breach of the Abortion Act's notification provisions.⁶⁶ In America there

^{57.} Id. (citation omitted) (emphasis added).

^{58.} Specifically, the statute refers to the burial of a still-born child as defined in § 41 of the Births and Deaths Registration Act, 1953, 1 & 2 Eliz. 2, ch. 20, § 41.

^{59.} Id. § 11. The registrar then must report to the coroner a death that he believes might have been caused by an abortion. See The Registration of Births, Death and Marriages Regulations 1968, STAT. INST. 1968 No. 2049, Reg. 51(1)(e).

^{60.} See generally the Births and Deaths Registration Act, 1926, 16 & 17 Geo. 5, ch. 48, § 5. This would seem to be the reason behind the hospital policy, as discovered by Lane, supra note 34, at app. to § K, of sending aborted, viable fetuses to the mortuary and treating them as still-births. See generally 10 Halsbury's Law of England § 1028 (4th ed. 1975 & Supp. 1984). The rules as to cremation are slightly different. Id. § 1046.

^{61.} In general terms these requirements are similar to the special fetal death registration provisions found in some United States jurisdictions. See, e.g., Fla. Stat. Ann. § 382.071 (West 1973 & Supp. 1985); Idaho Code § 39-260 (1985); Ind. Stats. Ann. §§ 16-1-17-1 to 16-1-17-5 (Burns 1983); N.Y. Pub. Health Law §§ 4160-61 (McKinney 1985); Or. Rev. Stat. § 432.333 (1985); S.D. Codified Laws Ann. § 34-23A-16 (1977).

^{62.} Cf. Gilbert v. Buzzard, 161 Eng. Rep. 1342 (Consistory Court of London 1820) (ecclesiastical law regulating manner of burial of corpse). For a historical treatment of the English commonlaw with regard to corpses, see Louisville & N.R.R. v. Wilson, 123 Ga. 62, 64, 51 S.E. 24, 25 (1905).

^{63.} LANE, supra note 34, § 319.

^{64.} Id. § K app.

^{65.} Offenses Against the Person Act, 1861, 24 & 25 Vict., ch. 100, § 60.

^{66.} Abortion Act, 1967, § 2; The Abortion Regulations 1968, STAT. INST. 1968 No. 390,

are state criminal provisions that prohibit the concealment of a death⁶⁷ or a dead body.⁶⁸ Further, if the purpose of that concealment (or destruction) is to prevent the holding of a lawful inquest, an additional English common-law crime is committed.⁶⁹ Some state laws regulate the reporting of lawful abortions.⁷⁰ These laws, in general, are constitutionally sound.⁷¹

C. Fetus Disposal and Tort Law

Particularly egregious conduct by medical staff regarding fetal disposal following an abortion may have civil law consequences in the United States. In one Tennessee case,⁷² a woman's premature baby died shortly after birth. Six weeks later, the woman was shown the child floating in a gallon jar of formaldehyde. She recovered actual damages for breach of a contract to properly dispose of the baby, as well as punitive damages for the hospital's "outrageous conduct" in so displaying the body. In a recent Georgia case, the defendant hospital had undertaken to dispose of the plaintiffs' stillborn child. One month later, a hospital employee telephoned the child's mother and informed her that she could still retrieve the child's body because it had been placed in frozen storage. The appellate court held that a jury issue was presented with regard to the plaintiffs' allegation of intentional infliction of emotional harm. Therefore, at least in the United States, there is a

^{§§ 2-5.}

^{67.} E.g., Neb. Rev. Stat. § 28-1302 (1979).

^{68.} E.g., id. § 28-1301. For the application of the Nebraska statute to the throwing away of the body of a newborn infant, see State v. Doyle, 205 Neb. 234, 287 N.W.2d 59 (1980).

^{69.} The Queen v. Price, 12 Q.B.D. 247 (1884); The Queen v. Stephenson, 13 Q.B.D. 331 (1884); The King v. Purcy, 149 L.T.R. (n.s.) 432 (1933). For the correct form following an inquest on a stillbirth, see The Corners Rules 1984, STAT. INST. 1984 No. 552, Sch. 4.

^{70.} See, e.g., Mich. Comp. Laws Ann. § 33.2835(3) (1980); see also Model Penal Code] 230.3(3) (Proposed Official Draft 1962).

^{71.} See, e.g., Planned Parenthood v. Danforth, 428 U.S. 52, 79-81 (1976) (upholding Missouri recordkeeping statute).

^{72.} Johnson v. Woman's Hosp., 527 S.W.2d 133 (Tenn. Ct. App. 1975); see also Hembree v. Hospital Bd., 293 Ala. 160, 300 So. 2d 823 (1974) (denial of recovery due to sovereign immunity of defendant).

^{73.} Johnson, 527 S.W.2d at 140. A similar position may be contended for in England because Restatement (Second) of Torts § 46(1) (1965), is loosely based on the English case of Wilkinson v. Downton, [1897] 2 Q.B. 57. Restatement Second of Torts app. § 46(1) (1965); see also Janvier v. Sweeney [1919] 2 K.B. 316 (C.A.). With regard to the possibility of recovery for negligent infliction of emotional harm, consider infra note 102.

^{74.} McCoy v. Georgia Baptist Hosp., 167 Ga. App. 495, 306 S.E.2d 746 (1983).

^{75.} Id. at 499, 306 S.E.2d at 749.

nice symmetry between tort law's liability rule for giving an abortee psychologically damaging information and constitutional law's prohibition on the mandating of such communication.

IV. Fetuses and Fetal Materials: Possessory Rights

While there seems to be little doubt that the state may intervene to regulate some aspects of the disposal of a dead fetus, the law is far from clear with regard to any possessory rights that may arise in the event of *non* disposal.

A. Common Law Possessory Interests

Although English courts consistently have denied the existence of property rights in a corpse, 76 there has been some recognition of the existence of protected possessory rights that vest in the next of kin-an inevitable recognition because the common law did not shirk from imposing correlative duties with regard to the disposal of dead bodies.⁷⁷ Thus, analogizing from the cases in the burial genre,78 it may be argued that the refusal to deliver up a dead fetus to its executrix-mother for burial would be both actionable and an offense at common law. The offense also would be committed if the fetus was otherwise disposed of, such as by sale. 79 Similarly, an action would lie in the case of nonconsensual experimentation.80 Once the mother had taken possession of the fetus, she would be under a duty to dispose of it.81 If the mother did not desire possession of the fetus, the hospital or clinic where it was delivered would have the duty of disposal.82 After burial, the fetus, like a dead body, would lack the characteristics of property. Its unauthorized disinterment, however, would be prohibited at common law.83

^{76.} See, e.g., The Queen v. Sharpe, 169 Eng. Rep. 959, 960 (1857).

^{77.} See, e.g., The Queen v. Stewart, 113 Eng. Rep. 1007 (1840) (deceased entitled to proper burial); see also Rees v. Hughes [1946] 1 K.B. 517 (estate of deceased liable for burial expenses).

^{78.} The Queen v. Vann, 169 Eng. Rep. 523 (1851); The Queen v. Hunter, [1973] 3 All E.R. 286 (C.A.).

^{79.} See, e.g., The King v. Cundick, 171 Eng. Rep. 900 (Surrey Assizes 1822).

^{80.} See, e.g., Koerber v. Patek, 123 Wis. 453, 102 N.W. 40 (1905) (recovery for emotional harm following mutilation of corpse).

^{81.} The Queen v. Vann, 164 Eng. Rep. 523 (1851).

^{82.} Cf. The Queen v. Stewart, 113 Eng. Rep. 1007 (1840) (person under whose roof a pauper dies has duty to carry properly the body to place of burial).

^{83.} See The King v. Lynn, 100 Eng. Rep. 394 (1788); 1 L.R.Q.B. 475, 485 (1866); The Queen v. Sharpe, 169 Eng. Rep. 959 (1857).

American case law is essentially to the same effect.⁸⁴ Thus, it has been stated:

There is no right of property as such in the body of a dead person although a quasi property right to its possession has been recognized for the limited purpose of determining who shall have its custody for burial. The duty to bury a corpse and to preserve its remains is a legal right [sic] which courts of law will recognize and protect; such right, in the absence of any testamentary disposition, belongs exclusively to the next of kin.⁸⁵

As is the case in English law, this quasi-property right is derived from and limited by the correlative duty of disposal imposed on the decedent's next of kin.⁸⁶ In the case of a dead fetus, the duty to bury, and hence that possessory right, would be vested in its parents.⁸⁷

B. Possessory Interests in Nonburial Situations

The special problems attendant upon the still living, nonviable fetus ex utero aside, ⁸⁸ it appears that Anglo-American property law does not consider the fetus a res nullius. To the contrary, the fetus may be the object of some entitlement allocation. ⁸⁹ Traditionally, the rough allocation of entitlements relating to the possession of a corpse has favored a close relative for two basic reasons. First, the public health requires the speedy burial of the corpse. Allocation of the possessory entitlement to the relative achieves this goal with low transaction costs ⁹⁰ because there is a high probability that the

^{84.} See generally 22 Am. Jur. 2D Dead Bodies (1965 & Supp. 1985); 25A C.J.S. Dead Bodies (1966 & Supp. 1985); H. Bernard, The Law of Death and Disposal of the Dead 13-21 (2d ed. 1979). A similar position also obtains in civil legal systems. See Meulders-Klein, The Right Over One's Own Body: Its Scope and Limits in Comparative Law, 6 B.C. Int'l & Comp. L. Rev. 29, 44-45 (1983).

^{85.} Cohen v. Groman Mortuary, 231 Cal. App. 2d 1, 4-5, 41 Cal. Rptr. 481, 483-84 (1964) (citations omitted). This use of the right/duty language is, of course, enough to make Hohfeld spin in his grave. See W. Hohfeld, Fundamental Legal Conceptions 36-38 (W. Cook ed. 1963). For criminal enforcement of the duty to bury decently, see State v. Bradbury, 136 Me. 347, 9 A.2d 657 (1939).

^{86.} Nichols v. Central Vt. Ry. Co., 94 Vt. 14, 16, 109 A. 905, 906 (1919). Some states have confirmed and elaborated on this position with legislation. See, e.g., CAL. HEALTH & SAFETY CODE § 7100 (West 1970 & Supp. 1986).

^{87.} See, e.g., Wilde v. Milwaukee Elec. Ry. & Light Co., 147 Wis. 129, 132, 132 N.W. 885, 886 (1911) (discussing parents' care and custody rights over body of their minor child); see also Przybyszewski v. Metropolitan Dade County, 363 So. 2d 388 (Fla. Dist. Ct. App. 1978).

^{88.} See the discussion infra text accompanying notes 345-53.

^{89.} See generally Calabresi & Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cathedral, 85 Harv. L. Rev. 1089 (1972) (suggestive of much of the terminology used herein).

^{90.} Transaction costs in this sense refer primarily to the general societal costs involved

relative already will have actual possession of the corpse. Further, the imposed duty to bury will not require expensive enforcement because the relative will have an emotional stake in expediting the burial. Second, distributional reasons also favor this allocation; the relatives usually will benefit from a decedent's estate, so some of this benefit should be appropriated to cover the burial expenses.⁹¹

As has been illustrated, the public health or burial rationale led the old common-law courts to evolve a quasi-property, possessory right entitlement allocation in favor of the next of kin. The doctrinal expression of this entitlement, however, was delineated before the decriminalization of abortion, the growth of fetal experimentation, and the fear of creating a fetus market. The contemporary expression of this entitlement, therefore, lacks any functional limitation requiring that the possession of a dead fetus be for the purposes of burial alone.⁹²

These doctrinal problems were highlighted by the case of *Doodeward v. Spence*, ⁹³ decided by the High Court of Australia in 1908. The subject of the dispute, a stillborn, two-headed child, had been born in New Zealand some forty years before. The child had been preserved by the mother's physician and subsequently came into the possession of the plaintiff, a showman, who exhibited it for profit. When the corpse was confiscated by the police, the plaintiff brought an action in conversion and detinue.

The court upheld the plaintiff's cause of action for interference with a possessory right even though the purpose of the disputed possession was commercial display, not burial. The Chief Justice stated:

In my opinion there is no law forbidding the mere possession of a human body, whether born alive or dead, for purposes other than immediate burial. A fortiori such possession is not unlawful if the body possesses attributes of such a nature that its preservation may afford valuable or interesting information or instruction. If the requirements of public health or public decency

in the transfer of possession. These costs are not coextensive with those identified by economists in the context of market transactions. See Coase, The Problem of Social Cost, 3 J.L. & ECON. 1 (1960). For an example of this nontechnical usage, see Cohen, Dialogue on Private Property, 9 Rutgers L. Rev. 357, 367-68 (1954).

^{91.} The practical inclusion of a *fetus* into this entitlement regime will be difficult to justify on this second ground because the fetus is unlikely, legally or factually, to possess an estate. Nevertheless, the primacy of the first rationale, together with a justice-motivated goal of treating like or roughly alike cases similarly should suffice.

^{92.} Cf. Rauhe v. Langeland Memorial Chapel, Inc., 44 Mich. App. 371, 205 N.W.2d 313 (1973) (interpreting Michigan donation statute to be limited to burial rights).

^{93. 6} C.L.R. 406 (Austl. 1908).

are infringed, quite different considerations arise.94

At common law, then, the entitlement allocation with regard to a dead fetus may extend beyond mere possession for burial and may encompass any possession that does not infringe on the requirements of public health or decency.⁹⁵

Once it has been determined that a fetus may be the subject of some entitlement allocation, a problem arises regarding how that entitlement may be protected. Traditionally, if this protection is achieved through a property rule, 96 then intentional tort law may be utilized for enforcement purposes. Likewise, it has been argued that any lesser possessory right should be enforceable in a similar manner. 97

It is unclear, however, whether the actions that have been permitted with regard to dead bodies actually do reflect recognition of any genuine property, or even possessory, interest in the corpse. Recognition may be limited to an interest in the survivors against the infliction of emotional distress. Indeed, courts seemingly have dealt with such cases under the randomly selected rubrics of breach of contract, negligence simpliciter, or negligent infliction of emotional harm. Clearly, Doodeward v. Spence applies a

^{94.} Id. at 413-14 (Griffith, C.J.).

^{95.} But see the dissenting judgment of Justice Higgins, who would restrict the entitlement to possession for burial. Id. at 417-24 (Higgins, J., dissenting).

^{96.} See Calabresi & Melamed, supra note 89, at 1106-10.

^{97.} Skegg, Liability for the Unauthorized Removal of Cadaveric Transplant Material, 14 Med. Sci. L. 53, 54 (1974); see also Wilson v. Lombank Ltd., [1963] 1 W.L.R. 1294 (Q.B. 1962) (trespass action protecting mere possessory interest); B. Dickens, Medico-Legal Aspects of Family Law 80-83 (1979).

^{98.} See generally cases cited in Prosser and Keeton on Torts § 12, at 63 (5th ed. 1984); 22 Am. Jur. 2D Dead Bodies §§ 17, 31, 43 (1965); Annots., 48 A.L.R.3d 240 and 261 (1973).

^{99.} See, e.g., Edmonds v. Armstrong Funeral Home Ltd., [1931] 1 D.L.R. 676 (Alta. Sup. Ct. 1930); see also Cohen v. Groman Mortuary, 231 Cal. App. 2d 1, 41 Cal. Rptr. 481 (Cal. Ct. App. 1964); Spiegel v. Evergreen Cemetary Co., 117 N.J.L. 90, 186 A. 585 (N.J. 1936); Koerher v. Patek, 123 Wis. 453, 102 N.W. 40 (1905).

^{100.} E.g., Chelini v. Nieri, 32 Cal. 2d 480, 196 P.2d 915 (1948) (breach of contract to preserve corpse through embalming).

^{101.} Hembree v. Hospital Bd., 293 Ala. 160, 300 So. 2d 823 (1974) (disposal by incineration of stillborn child without parent's consent considered claim sounding in tort, not contract); Przybyszewski v. Metropolitan Dade County, 363 So. 2d 388 (Fla. Dist. Ct. App. 1978) (failed on facts).

^{102.} Brooks v. South Broward Hosp. Dist., 325 So. 2d 479 (Fla. Dist. Ct. App. 1975), cert. denied, 341 So. 2d 290 (Fla. 1976) (no recovery for negligent misplacement of dead premature baby hecause parent suffered no impact). Note, though, that many United States jurisdictions now have retreated from most of these doctrinal subrules. See, e.g., Molien v. Kaiser Foundation Hosp., 27 Cal. 3d 916, 616 P.2d 813, 167 Cal. Rptr. 831 (1980); Campbell v. Animal Quarantine Station, 63 Hawaii 557, 632 P.2d 1066 (1981); see also Kohn v. United

property-type enforcement rule at common law.¹⁰³ The chief justice stated therein, "If one medical or scientific student may lawfully possess it, he may transfer the possession to another,"¹⁰⁴ and the court was prepared to endorse this property approach by permitting the utilization of intentional tort doctrine. In contrast, the jury in *Del Zio v. Presbyterian Hospital*¹⁰⁵ unwittingly reflected the law's ambivalence about any property rule when, rather than awarding damages for conversion of an embryo, the jury limited recovery to the emotional harm suffered by its parents.

Concerning criminal law enforcement of these possessory rights, it seems clear that a corpse could not be considered the subject of larceny at old common law.¹⁰⁶ Today, it is unlikely that a court would consider a fetus property within the English Theft Act¹⁰⁷ or, for example, within the Model Penal Code.¹⁰⁸ Although

States, 591 F. Supp. 568 (E.D.N.Y. 1984) (action for negligent infliction of emotional harm permitted against U.S. Army for disposal of parts of serviceman's body contrary to his family's religious beliefs); cf. Vaccaro v. Squibb Corp. 52 N.Y.2d 809, 418 N.E.2d 386, 436 N.Y.S.2d 871, (1980) (no recovery for parents' emotional and psychic harm against drug manufacturer and medical professionals following birth of deformed child).

- 103. Cf. Finley v. Atlantic Transport Co., 220 N.Y. 249, 255, 115 N.E. 715, 717 (1917) ("That there is no right of property in a dead body in the ordinary acceptation of the term is undoubtedly true when limited to a property right as understood in the commercial sense."). Notice should also be taken of two English cases that, at first sight, seem to suggest that the commercial disposition of a corpse, constitutes a criminal offense. The King v. Cundick, 171 Eng. Rep. 900 (Surrey Assizes 1822); The King v. Gilles, (Northumberland Assizes 1820), cited in The Queen v. Duffin & Marshall, 366 n.(b), 168 Eng. Rep. 847, 848 n.(b) (1818). In fact, these cases are authority only for the proposition that the sale or other disposition of a corpse either without consent or contrary to the wishes of those with a legal right to possession may involve criminal sanctions. See McCoy v. Georgia Baptist Hosp., 167 Ga. App. 495, 306 S.E.2d 746 (1983) (upholding the parental contractual release of the body of a stillborn child to a hospital).
 - 104. 6 C.L.R. at 414. This would extend to a commercial exploiter because, when a person has by the lawful exercise of work or skill so dealt with a human body or part of a human body in his lawful possession that it has acquired some attributes differentiating it from a mere corpse awaiting burial, he acquires a right to retain possession of it, at least as against any person not entitled to have it delivered to him for the purpose of burial

Id.

- 105. 74 Civ. 3588 (S.D.N.Y. 1976). For a discussion of *Del Zio*, see *infra* text accompanying note 288.
- 106. See, e.g., Doodeward v. Spence, 6 C.L.R. at 411. According to Bernard: "Because the English law from an early date regarded the larceny of 'property' (regardless of the monetary value of the thing stolen) as a felony, punishable for centuries by death, there was a reluctance to regard a corpse as a subject of larceny." H. Bernard, supra note 84, at 16.
- 107. Theft Act, 1968, ch. 60, § 1(1); cf. The Queen v. Rothery, 63 Crim. App. 231 (1976), interpreted in Mathews, Whose Body? People as Property, Current Legal Probs. 193, 224 (1983); see also Dickens, The Control of Living Body Materials, 27 U. Toronto L.J. 142 (1977); Skegg, Human Corpses, Medical Specimens and the Law of Property, 4 Anglo-Am. L. Rev. 412 (1975); Smith, Stealing the Body and its Parts, 1976 Crim. L. Rev. 622

specific body stealing statutes¹⁰⁹ seem to refer only to unlawful exhumations¹¹⁰ and would not be factually applicable, there are other more general provisions prohibiting the abuse of a corpse.¹¹¹

C. Fetal Possession—Specific Legislation

A statutory gloss has been added to this common-law position on both sides of the Atlantic. In England the Anatomy Acts of 1832 and 1871¹¹² are limited to immunizing donors and researchers from any criminal liability for the donation, receipt, or possession of a dead body. The common-law rights to possession of an unburied fetus as described above would constitute lawful possession for the purposes of that legislation.¹¹³ It is by no means clear, however, that a fetus, let alone an embryo, would fall within other qualifying phrases in those Acts: phrases like "the body of any deceased person"¹¹⁴ or "any dead human body."¹¹⁵ If the Anatomy Acts do apply, no offence is committed by the lawful possessor¹¹⁶ or recipient of a fetus, as contemplated by either those Acts¹¹⁷ or the Human Tissue Act,¹¹⁸ which contains similar provisions concerning the parts of the body.

In the United States legislation has been more specific. Arkansas law prohibits the possession of an aborted fetus or fetal remains¹¹⁹ by persons other that pathologists, educational institutions, and medical researchers.¹²⁰ California regulates the storage

(arguing that the flexible concept of property could be extended to protect, via the criminal law, possession of parts and products of unburied corpses).

- 108. Model Penal Code § 223.0(6) (Proposed Official Draft 1962).
- 109. See generally Annot., 52 A.L.R.3d 701 (1973 & Supp. 1984).
- 110. Compare the charges against four researchers discussed by Culliton, Grave-Robbing: The Charge Against Four from Boston City Hospital, 186 SCIENCE 410 (1974).
- 111. See, e.g., Model Penal Code § 250.10 (1962). The prohibition contained herein is preceded by the phrase "[e]xcept as authorized by law." See generally Annot., 81 A.L.R.3d 1071 (1977).
- 112. The Anatomy Act, 1832, 2 & 3 Will. 4, ch. 75; The Anatomy Act, 1871, 34 & 35 Vict., ch. 16. See generally W. Farndale, Law on Human Transplants and Bequests of Bodies (1970).
 - 113. See, e.g., The Queen v. Feist, 169 Eng. Rep. 1132 (Cr. Cas. Res. 1858).
 - 114. The Anatomy Act, 1832, § 7.
 - 115. Id. § 14.
 - 116. Id. § 7.
- 117. Id. § 14. For an unlawful receipt of body parts delivered for certain anatomical research, see Regina v. Lennox-Wright, 1973 CRIM. L. REV. 529.
 - 118. Human Tissue Act, 1961, 9 & 10 Eliz. 2, ch. 54, § 1.
- 119. ARK. STAT. ANN. § 82-440 (Supp. 1985). The statute is worded in terms of "a fetus born dead." Quaere, does the statute apply to the fetus born alive who subsequently dies? 120. Id. § 82-441 (Supp. 1985).

of fetal remains,¹²¹ and Indiana regulates the transportation of an aborted fetus out of the state for purposes of experimentation.¹²² It should be noted that, notwithstanding the common-law possessory rights recognized in a fetus, some American state statutes regulating fetal experimentation have refused to countenance any property market model. Instead, intent upon discouraging the growth of a fetus market, some legislatures have responded by derogating from the concept of transferability¹²³ with rules of inalienability.¹²⁴ While not necessarily interfering with possessory rights, these statutes do prevent the commercial disposition of fetuses.¹²⁵

In England, by contrast, *The Peel Report* announced no ethical or legal objections to the commercial use (and impliedly the commercial disposition) of the placenta and retroplacental blood.¹²⁶ In general, however, *Peel* considered it unacceptable for monetary consideration to exceed the "necessary costs incurred in administering these services"¹²⁷ of supplying fetuses or fetal materials.

Many of the issues concerning the possession and disposition of dead fetuses are governed by the Uniform Anatomical Gift Act (UAGA).¹²⁸ For purposes of anatomical donation, section 1(b) de-

^{121.} CAL HEALTH & SAFETY CODE § 25957 (West 1984).

^{122.} IND. CODE ANN. § 35-1-58.5-6 (Burns 1985).

^{123.} See R. Posner, Economic Analysis of Law 30-31 (2d ed. 1977).

^{124.} ARK. STAT. ANN. § 82-439 (Supp. 1985) (restricted to the product of a "legal abortion"); ILL. ANN. STAT. ch. 38, § 81-26(3) (Smith-Hurd Supp. 1985) (repealed 1984) (restricted to cases of "induced ahortion"); Ky. Rev. Stat. § 436.026 (1985) (restricted to "live or viable aborted child"); Me. Rev. Stat. Ann. tit. 22, § 1593 (1980); Mass. Gen. Laws Ann. ch. 112, § 12J(a)(IV) (West 1983) (in situations potentially involving prohibited experimentation); Mich. Comp. Laws Ann. § 333.2690 (West 1980) (in situations potentially involving some nontherapeutic experimentation); Minn. Stat. Ann. § 145.422(3) (West Supp. 1985); Neb. Rev. Stat. § 28-342 (1979) (in situations involving any sort of experimentation); N.D. Cent. Code § 14.02.2-02(3) (1981) (in situations potentially involving experimentation on dead fetus); Ohio Rev. Code Ann. § 2919.14 (Page 1982) (limited to "product of human conception which is aborted"); Okla. Stat. Ann. tit. 63, § 1-735(A) (West 1984) (limited to "resulting from an abortion"); R.I. Gen. Laws § 11-54-1(f) (Supp. 1985) (limited to experimentation situations); Tenn. Code Ann. § 39-4-208(b) (1982); Utah Code Ann. § 76-7-311 (1978); Wyo. Stat. § 35-6-115 (1977) (limited to live or viable aborted "child" for experimentation).

^{125.} See generally Note, The Sale of Human Body Parts, 72 Mich. L. Rev. 1182, 1216-37 (1974) (discussing the potential of a market system to increase the availability of human tissue for research and transplantation); see also R. Scott, The Body as Property 179-97 (1981); Carpenter, Ettenger & Strom, "Free-Market" Approach to Organ Donation, 310 New Eng. J. Med. 395 (1984) (letter to the editor).

^{126.} PEEL, supra note 7, § 40.

^{127.} Id. § 44.

^{128.} Unif. Anatomical Gift Act, 8A U.L.A. 15 (1983 & Supp. 1985) [hereinafter cited as UAGA]. See generally H. Bernard, supra note 84, at 55-60. For a critique of UAGA, see

fines "decedent" to include "a stillborn infant or fetus." Under UAGA section 2(b), the donor of such a fetus may be, in descending order of priority: "either parent, . . . an adult brother or sister, ... a guardian of the person of the decedent at the time of his death, [or] any other person authorized or under obligation to dispose of the body."129 Several difficult issues arise with regard to this donor class. First, the consent of one parent could be vetoed by the other. 130 Second, like the English Anatomy Acts, section 2(b)(6) does not elaborate on the identification of "any other person authorized or under obligation to dispose of the body," a phrase possessing the same degree of certainty as baseball's infamous "player to be named later." Therefore, such identification must be made by reference to the common-law position. In McCov v. Georgia Baptist Hospital¹³¹ the parents of the stillborn child signed a release in favor of the hospital, relinquishing their claims to the body and authorizing the hospital to dispose of the body as it deemed advisable. The Court of Appeals of Georgia held that the parents had "contracted away their 'quasi-property' rights in the body of their child,"132 apparently vesting such possessory right in the hospital.

Finally, some state abortion laws may impact on this issue of authorized possession of a fetus. For example, the Tennessee statute states that "[a]n 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"133 Presumably, upon the subsequent death of

Quay, Utilizing the Bodies of the Dead, 28 St. Louis U.L.J. 889 (1984).

^{129.} UAGA § 2(b), 8A U.L.A. 34 (1983).

^{130.} UAGA § 2(c), 8A U.L.A. 34-35 (1983), provides: "If the donee has actual notice . . . that a gift by a member of a class is opposed by a member of the same or a prior class, the donee shall not accept the gift." See infra text accompanying notes 354-74 (discussing issues of consent and veto). In the case of divorced parents, see Phillips v. Home Undertakers, 192 Okla. 597, 138 P.2d 550 (1943).

^{131. 167} Ga. App. 495, 306 S.E.2d 746 (1983).

^{132.} Id. at 498, 306 S.E.2d at 748.

^{133.} Tenn. Code Ann. § 39-4-207 (1982). English law would not permit the warding of a fetus in utero to prevent an abortion because that guardianship would upset the basic termination entitlement envisaged by the Abortion Act. Cf. Note, Wardship and Abortion Prevention—Further Observations, 96 L.Q. Rev. 29 (1980); Note, Wardship and Abortion Prevention, 95 L.Q. Rev. 332 (1979). However, it might be possible for an English court to exercise wardship jurisdiction over a live, pre-viable fetus ex utero to prevent maternal consent to experimentation. See In re B. [1981] 1 W.L.R. 1421 (C.A.) (overriding wishes of parents of mongoloid child and ordering life-extending operation); see also Note, Jefferson v. Griffin Spalding County Hospital Authority: Court-Ordered Surgery to Protect the Life of an Unborn Child, 9 Am. J.L. & Med. 83 (1984).

such a live aborted fetus, the Tennessee Department of Human Services alone would have donation powers under the UAGA.

The list of potential donees, including medical researchers and accredited medical schools, is wide enough to deal with the experimental interests considered herein. Additionally, the UAGA affects the method of donating the fetus and authorizes the donee to dispose of the fetus following experimentation.

Of considerable interest regarding the potential for common-law liability detailed above¹³⁷ is the UAGA's statement that "[a] person who acts in good faith in accord with the terms of this Act . . . is not liable for damages in any civil action or subject to prosecution in any criminal proceedings for his act." This provision has the effect of providing a donee with conditional immunity from the common-law actions and offenses. This immunity is not particularly broad because it must be read as limited to issues of possession¹³⁹ and donation¹⁴⁰ and will not extend, for example, to protect a donee from liability for the intentional infliction of emotional harm¹⁴¹ or malpractice.¹⁴²

V. FETAL EXPERIMENTATION

When considering the issues of disposal and possession discussed above, traditional legal doctrine at least provides an initial analytical framework. The same cannot be said about issues raised in the context of fetal experimentation. Although there has been considerable academic interest in human experimentation and transplantation, and specifically in fetal experimentation, ¹⁴³ it has been difficult to discover relevant general principles from which to

^{134.} UAGA § 3, 8A U.L.A. 41 (1983).

^{135.} Id. § 4(e), 8A U.L.A. 44 (1983).

^{136.} Id. § 7(a), 8A U.L.A. 59 (1983).

^{137.} See supra text accompanying notes 98-102.

^{138.} UAGA § 7(c), 8A U.L.A. 59-60 (1983).

^{139.} E.g., id. § 2, 8A U.L.A. 34 (1983) (priority ranking of donors).

^{140.} E.g., id. § 4, 8A U.L.A. 43-44 (1983) (mechanics of donation).

^{141.} See, e.g., cases discussed supra text accompanying notes 72-75.

^{142.} H. BERNARD, supra note 84, at 58-59.

^{143.} See, e.g., Hellegers, supra note 4, at 489; Baron, Fetal Research: The Question in the States, 15 Hastings Center Rep., Apr. 1985, at 12; Fletcher & Schulman, Fetal Research: The State of the Question, 15 Hastings Center Rep., Apr. 1985, at 6; Wilson, Fetal Experimentation: Legal Implications of an Ethical Conundrum, 53 Den. L.J. 581 (1976); Note, Fetal Experimentation: Moral, Legal, and Medical Implications, 26 Stan. L. Rev. 1191 (1974); Comment, Fetal Research: A View from Right to Left to Wrongful Birth, 52 Chi.-Kent L. Rev. 133 (1975); Comment, The Future of Fetal Research in California: A Proposal for Change, 15 San Diego L. Rev. 859 (1978).

deduce specific legal answers. The responses on each side of the Atlantic have been characteristic of the two countries' different approaches to difficult medico-legal issues like abortion. In England guidelines have been published, but the matter essentially has been left in the hands of the medical profession. The United States' legal regimes predictably run the familiar gamut, from detailed, often poorly drafted state laws to leading-edge, constitutional analyses.

Definitional Problems

Prior to considering the different regulatory systems that have been instigated, some problems of terminology must be confronted.144 First, both federal and state regulatory provisions purport to deal with fetal "research" or "experimentation." It is by no means clear, however, whether these provisions are broad enough to police therapeutic fetal surgery.147 Further, if the fetal surgery technique utilized involves partial or temporary removal of the fetus from the womb. 148 it is unclear whether this "experimentation" is governed by in utero or ex utero regulatory regimes.

Although fetal surgery is still a relatively rare procedure, the same cannot be said of prenatal diagnostic techniques like amniocentesis. 149 Despite a district court description of amniocentesis as

^{144.} See generally Horan, Fetal Experimentation and Federal Regulation, 22 VILL. L. REV. 325, 327-30 (1977); Labacaz, Reflections on the Report and Recommendations of the National Commission: Research on the Fetus, 22 VILL. L. REV. 357, 361-66 (1977); Levine, supra note 32, at 377-82.

^{145. &}quot;Research" is defined as "a systematic investigation designed to develop or contribute to generalizable knowledge." 45 C.F.R. § 46.102(e) (1985).

^{146.} See, e.g., Ariz. Rev. Stat. Ann. § 36-2302A (1975-1984) (referring to "any medical experimentation or scientific or medical investigation purposes").

^{147.} Therapeutic fetal surgery techniques are detailed in Council on Scientific Affairs, Division of Scientific Analysis and Technology, American Medical Association, In Utero Fetal Surgery, 250 J. A.M.A. 1443 (1983); Henig, Saving Babies Before Birth, N.Y. Times, Feb. 28, 1982, § 6 (magazine), at 18. Also examine the treatment of fetal death syndrome in Romero, Duffy, Berkowitz, Chang & Hohbins, 310 New Eng. J. Med. 772 (1984). See also Evans, Chrousos, Mann, Larsen, Green, McClusky, Loriaux, Fletcher, Koons, Overpeck & Schulman, Pharmacologic Suppression of the Fetal Adrenal Gland in Utero, 253 J. A.M.A. 1015 (1985); Robertson, The Right to Procreate and in Utero Fetal Therapy, 3 J. Leg. Med. 333, 342-49 (1982); Ruddick & Wilcox, Operating on the Fetus, 12 Hastings Center Rep., Oct. 1982, at 10.

^{148.} See, e.g., Fetal surgery outside the womb 'offers new hope' for the unborn, Miami Herald, Mar. 11, 1982, at 23A, col. 1.

^{149.} See generally Friedman, Legal Implications of Amniocentesis, 123 U. Pa. L. Rev. 92 (1974); see also Cowart, First-trimester prenatal diagnostic method becoming available in U.S., 250 J. A.M.A. 1249 (1983); Harvey, Boice, Honeyman & Flannery, Prenatal X-Ray Exposure and Childhood Cancer in Twins, 312 New Eng. J. Med. 541 (1985).

a "test" as opposed to an "experiment,"¹⁵⁰ one state fetal experimentation statute expressly excepts testing for genetic defects.¹⁵¹ The implication is, of course, that the experimentation prohibition otherwise would be applicable. A similar issue arises in the context of fetal experimentation that "has gone beyond basic research into the field of established practice in preventive medicine."¹⁵²

Finally, a problem also arises with therapeutic experimentation, techniques permitted by both the federal¹⁵³ and many state¹⁵⁴ regulatory systems. These provisions should be interpreted as describing experimentation *intended* to benefit the fetus, rather than applying only to *successful* therapeutic procedures.¹⁵⁵ In England these issues are less pressing because an essentially self-regulating model has been initiated. In the United States, however, some of the regulatory models contain criminal sanctions. At the very least, definitional problems may give rise to constitutional challenge on the basis of vagueness.

B. Guidelines for Research in England

In 1970 the Secretary of State for Social Services appointed a committee under the chairmanship of Sir John Peel to examine the issue of fetal research. The report of this advisory group was published in 1972. ¹⁵⁶ Unlike the National Commission's Report on Research on the Fetus, ¹⁵⁷ The Peel Report was never intended to be the basis for legislation. Rather, its purpose was to produce ethical standards for the self-regulating medical profession ¹⁵⁸ and criteria for ethical committees considering research protocol. ¹⁵⁹

Because the committee was "satisfied that the benefits to be derived from the use of the whole dead fetus in the prevention and treatment of disease and deformity are such that it would be a retrogressive step to prevent it," ¹⁶⁰ Peel permitted the continuance of

^{150.} Margaret S. v. Edwards, 488 F. Supp. 181, 221 (E.D. La. 1980).

^{151.} UTAH CODE ANN. § 76-7-310 (1978).

^{152.} THE PEEL REPORT, supra note 7, § 10.

^{153.} See infra text accompanying note 179.

^{154.} See infra text accompanying note 216.

^{155.} Margaret S. v. Edwards, 488 F. Supp. 181, 219-20 (E.D. La. 1980).

^{156.} THE PEEL REPORT, supra note 7.

^{157.} See supra note 4.

^{158. &}quot;This code has no binding legal force but is the result of a careful consideration of all relevant factors in the light of the available evidence. It is hoped that it will prove acceptable to the bodies statutorily responsible for disciplinary matters in the medical and nursing professions." Recommended Code of Practice in PEEL, supra note 7, at 12.

^{159.} Id. § 4(iv)-(v).

^{160.} PEEL, supra note 7, at 38.

research on the dead fetus, subject to parental consent, 161 provided that:

"[d]issection of the dead fetus or experiments on the fetus or fetal material do not occur in the operating theatre or place of delivery; . . . [t]here is no monetary exchange for fetuses or fetal material; [and] [f]ull records are kept by the relevant institution."162

Concerning the live fetus in utero, Peel's only restriction on research was the statement that "[i]t is unethical to administer drugs or carry out any procedures during pregnancy with the deliberate intent of ascertaining the harm that they might do to the fetus." Parenthetically, it should be noted that such research would be subject to both criminal and civil liability. 165

Concerning experimentation on the live fetus ex utero, Peel distinguished between the viable and pre-viable fetus. This apparently unremarkable approach is noteworthy because the concept of viability is essentially unknown in English law. 166 Perhaps for this reason Peel established a minimum, objective standard for determining viability at twenty weeks (or approximately 400-500 grams). 167 Having set the standard, Peel prohibited experimentation on the viable fetus "inconsistent with treatment necessary to promote its life." 168

In regulating research on the pre-viable fetus ex utero, Peel differs markedly from the subsequently enacted regulatory regimes in the United States. Peel permitted nontherapeutic experimentation on the pre-viable fetus. This research, however, is conditioned on following both the guidelines for research on the dead fetus.

^{161.} See infra note 360.

^{162.} Recommended Code of Practice § 3, in PEEL, supra note 7, at 12.

^{163.} Id. § 5, in PEEL, supra note 7, at 12.

^{164.} If the harmed fetus were subsequently born alive, an offense would have been committed under Offenses Against the Person Act, 1861, 24 & 25 Vict., ch. 100, §§ 18, 20, 47. If the fetus were born alive, but subsequently died as a consequence of such research, then murder or manslaughter would have been appropriate.

^{165.} If the harmed fetus were subsequently born alive, an action would lie against the researcher under the Congenital Disabilities (Civil Liability) Act, 1976, ch. 28, § 1(1). Quaere, what is the effect of the mother's consent to the research? See id. § 1(4), (7). Consider also the abortee's possible malpractice action in the event that the experimented-upon fetus were not terminated.

^{166.} The English analog is "capable of being born alive," contained in the Infant Life (Preservation) Act, 1929, 19 & 20 Geo. 5, ch. 34, § 1(2). Presumably this was equated with viability by the draftsman of the 1967 decriminalization. See Abortion Act, ch. 87, § 5(1). But cf. Wright, Capable of Being Born Alive, 131 New L.J. 188 (1981).

^{167.} Recommended Code of Practice § 2, in PEEL, supra note 7, at 12.

^{168.} Id. § 1, in PEEL, supra note 7, at 12.

^{169.} See supra text accompanying notes 161-62.

and the following additional criteria:

(ii) Only fetuses weighing less than 300 grammes are used;

(iii) The responsibility for deciding that the fetus is in a category which may be used for this type of research rests with the medical attendants at its birth and never with the intending research worker;

(iv) Such research is only carried out in departments directly related to a

hospital and with the direct sanction of its ethical committee;

(v) Before permitting such research the ethical committee satisfies itself: (a) on the validity of the research; (b) that the required information cannot be obtained in any other way; and (c) that the investigators have the necessary facilities and skill.¹⁷⁰

Peel apparently was convinced that research into problems such as the transfer of maternally ingested drugs across the placenta would not otherwise be possible.¹⁷¹

C. Federally Funded Fetal Research

In the United States fetal research formally is subject to two regulatory regimes. First, research financially supported by the Department of Health and Human Services (Health Department) must be in compliance with specific federal regulations. Second are specific state statutory provisions, which the Health Department regulations expressly do not preempt.

The Health Department regulations were promulgated in response to the 1975 report of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research.¹⁷⁴ The regulations contain general limitations on research, such as providing a proportionality test to minimize the risks to the fetus¹⁷⁵ and creating a "Chinese Wall" between the researchers and those involved in any termination or viability determinations.¹⁷⁶ In general, the regulations leave the issue of research on a

^{170.} Recommended Code of Practice § 4, in PEEL, supra note 7, at 12.

^{171.} Peel, supra note 7, § 34; see also Beard, Justification for Fetal Research, 2 Brit. Med. J. 464, 464-65 (1973).

^{172.} Protection of Human Subjects, Subpart B—Additional Protections Pertaining to Research, Development, and Related Activities Involving Fetuses, Pregnant Women, and Human in Vitro Fertilization, 45 C.F.R. §§ 46.201-.211 (1985) [hereinafter cited as Health Department regulations]. For a summary of the regulations, see Friedman, *The Federal Fetal Experimentation Regulations: An Establishment Clause Analysis*, 61 MINN. L. Rev. 961, 970-76 (1977).

^{173. 45} C.F.R. § 46.201(b) (1985).

^{174.} RESEARCH ON THE FETUS, supra note 4, at 33, 530-31. For background leading up to the National Commission's interest in this area, see Lowe, On Legislating Fetal Research, in Genetics and the Law 351 (1975).

^{175. 45} C.F.R. § 46.206(a)(2) (1985).

^{176.} Id. § 46.206(a)(3). The regulations also prohibit offering inducements to terminate a pregnancy to afford the opportunity for research. Id. § 46.206(b).

dead fetus or fetal material to the states.¹⁷⁷ Research on the fetus ex utero is conditioned on parental consent¹⁷⁸ and is restricted to cases in which the research would benefit the particular fetus involved or the risk to the fetus would be minimal.¹⁷⁹

Concerning the difficult problem of the live fetus ex utero, the Health Department regulations, at first sight, take a similar approach to the Peel recommendation. If the fetus is viable, It is considered a premature infant, Is and research is governed by the general restrictions on human research. Research on a nonviable fetus is limited to cases in which It he purpose of the activity is the development of important biomedical knowledge which cannot be obtained by other means. The National Commission had recommended that nontherapeutic research on the fetus ex utero should be permitted only when, inter alia, no intrusion into the fetus is made which alters the duration of life. Under the regulations as originally promulgated, however, different wording was utilized:

No nonviable fetus may be involved . . . in an activity . . . unless: (1) Vital functions of the fetus will not be artificially maintained except where the purpose of the activity is to develop new methods for enabling fetuses to survive to the point of viability; (2) experimental activities which of themselves would terminate the heartbeat or respiration of the fetus will not be employed 187

Subsequently, the Health Department stated that the exception "did not adequately reflect the Department's actual intent, simply to permit artificial maintenance of vital functions only to enable the *particular* fetus 'to survive to the point of viability.'" 188

^{177.} Id. § 46.210.

^{178.} Id. § 46.208(b); see infra text accompanying notes 364-66.

^{179. 45} C.F.R. § 46.208(a) (1985).

^{180.} For a discussion of *Peel*, see *supra* text accompanying notes 169-70.

^{181.} Research is severely curtailed until the viability determination is reached. 45 C.F.R. § 46.209(a) (1985). Also note that the objective weight criterion of 500 grams differs from the English sub-300 grams requirement. See supra text accompanying note 170.

^{182. 45} C.F.R. § 46.203(d) (1985).

^{183.} E.g., id. §§ 46.401-409.

^{184.} Id. § 46.209(c).

^{185.} Id. § 46.209(b)(3).

^{186.} Research on the Fetus, supra note 4, at 33,548. Commissioner David W. Louisell dissented from even this limited position, stating that the Commission's position, departed from "society's . . . moral commitment" to "essential equality of all luman beings." Id. Louisell would reject any research that would "subject any unconsenting human being, born or unborn, to [harm], even that intended to be good for society." Id. at 33,549.

^{187. 45} C.F.R. § 46.209(b) (1975) (amended 1978) (emphasis added).

^{188. 42} Fed. Reg. 2792, 2792 (1977) (emphasis added). In addition, the National Commission had questioned the necessity for such an exception. *Id.*

As a result, in 1978 the regulation was amended to delete the exception, thus severely curtailing research in the United States compared to the position in England. As in other situations dealt with in the regulations, the preconditions for nontherapeutic research on the fetus ex utero may be waived by the Secretary of Health and Human Services. 190

D. State Regulation of Fetal Research

The federal regulations, when applicable, together with the common law, provide the only specific controls over fetal experimentation in half of the United States jurisdictions. The UAGA has been adopted in all states and may be read as impliedly approving of fetal experimentation. This Act, though, is somewhat narrow in its scope. The UAGA makes legal the donation of a dead fetus and the receipt of the same by certain researchers. Is receipt by a done is lawful, then presumably so also is the continued possession of the donated fetus. The UAGA, however, does not state expressly that fetal experimentation is lawful.

Twenty-five states have enacted specific legislation dealing with many of these issues. 195 At the outset, it should be noted that

^{189. 45} C.F.R. § 46.209(b)(1) (1985).

^{190.} Id. § 46.211. The Secretary must obtain the approval of his Ethical Advisory Board. Id.; see id. § 46.204(a); see, e.g., Ethics Advisory Board Approves Waivers for Fetoscopy Research. 1 IRB: A Review of Human Subjects Research. Apr. 1979. at 8.

^{191.} The jurisdictions are Alabama, Alaska, Colorado, Connecticut, Delaware, Georgia, Hawaii, Idaho, Iowa, Kansas, Maryland, Mississippi, Nevada, New Hampshire, New Jersey, New York, North Carolina, Oregon, South Carolina, Texas, Vermont, Virginia, Washington, West Virginia, Wisconsin, and the District of Columbia.

^{192.} UAGA §§ 2(b), 7(c), 8A U.L.A. 34, 59-60 (1983).

^{193.} Id. §§ 3, 7(c), 8A U.L.A. 41, 59-60 (1983). Specifically, § 3 lists the persons that "may become dones of gifts of bodies or parts thereof for the purpose stated."

^{194.} Cf. Baron, Fetal Research: The Question in the States, 15 Hastings Center Rep., Apr. 1985, at 12, 13.

^{195.} Ariz. Rev. Stat. Ann. § 36.2302 (Supp. 1975-1984); Ark. Stat. Ann. §§ 82-436 to -441 (Supp. 1985); Cal. Health & Safety Code §§ 25956-25957 (West 1984); Fla. Stat. Ann. § 390.001(6) (West Supp. 1985); Ill. Ann. Stat. ch. 38, §§ 81-26, -31 (Smith-Hurd Supp. 1985); Ind. Code Ann. § 35-1-58.5-6 (Burns 1985); Ky. Rev. Stat. § 436.026 (1985); La. Rev. Stat. Ann. § 40:1299.35.13 (West Supp. 1986); Me. Rev. Stat. Ann. tit. 22, § 1593 (1980); Mass. Gen. Laws Ann. ch. 112, § 12J (West 1983); Mich. Comp. Laws Ann. §§ 333.2685-.2692 (West 1980); Minn. Stat. Ann. §§ 145.421-.422 (West Supp. 1984); Mo. Ann. Stat. § 188.037 (Vernon 1983); Mont. Code Ann. §§ 50-20-108(3)-108(4) (1985); Neb. Rev. Stat. §§ 28-342 to -346 (1979); N.M. Stat. Ann. §§ 24-9A-a, -3, -5 (1981); N.D. Cent. Code §§ 14-02.2-01 to -02 (1981); Ohio Rev. Code Ann. § 2919.14 (Page 1982); 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. 1985); S.D. Codified Laws Ann. § 34-23A-17 (1977); Tenn. Code Ann. § 39-4-208 (1982); Utah Code Ann. § 76-7-310 (1978); Wyo. Stat. § 35-6-115 (1977).

some state laws, oblivious to the constitutional problems thereby caused, will apply only to the fetus who is or will be the subject of an induced abortion. A small number of state statutes, although not so limited, nevertheless discriminate between induced and natural abortions in the applicability of their regulatory provisions. 198

As is the case with the Health Department regulations, state laws have introduced special consent procedures for fetal experimentation. The states also have regulated the relationship between fetal experimentation and induced abortion. In some jurisdictions this regulation has taken the form of prohibiting or further limiting research on the abortus or potential abortus. Other state laws have sought to regulate that relationship by prohibiting the transfer of any payment or consideration from the experimenter or the abortee that might encourage the abortion, and hence fetal availability. Another simpler approach is to prohibit the experimenter from taking part in the abortion decision.

The states have considered four classes of potential experimental subjects: the pregnant woman; the dead fetus and fetal remains; the live fetus in utero; and the live, nonviable fetus ex utero.²⁰³ The types of research dealt with may be labeled therapeutic and nontherapeutic. The former is research subject specific, in that the purpose of a procedure is to benefit the particular fetus undergoing experimentation.

^{196.} See, e.g., Margaret S. v. Treen, 597 F. Supp. 636, 675-76 (E.D. La. 1984) (noting that drawing such a distinction makes the statute unconstitutionally vague, because it is impossible for a scientist to distinguish induced and naturally aborted fetal remains).

^{197.} The statutory language includes the following: Arizona ("induced abortion"); Arkansas ("legal abortion"); Florida ("either prior to or subsequent to any termination of pregnancy procedure"); Indiana ("aborted"); Kentucky ("live or viable aborted child"); Louisiana ("born as the result of an abortion"); Nebraska ("aborted"); Ohio ("which is aborted"); Oklahoma ("child resulting from an abortion"); Pennsylvania ("during the course of an abortion"); Tennessee ("aborted"); Wyoming ("aborted"). See supra note 195. The California statute refers to the "aborted product of human conception," which also may refer to a natural abortion. For an example of research on a soon-to-be aborted fetus, see Morris, Haswell & Hustead, Research in the Human Mid-Trimester Fetus, 39 Obstetrics & Gynecology 634 (1972).

^{198.} These states are Illinois, Massachusetts, Michigan, and Rhode Island.

^{199.} See infra text accompanying notes 368-71.

^{200.} See supra notes 197-98.

^{201.} E.g., Mass. Gen. Laws Ann. ch. 112, § 12J(a)III (West 1983).

^{202.} E.g., N.M. STAT. ANN. § 24-9A-5(A)(2)(a) (1981).

^{203.} Two other classes of subjects exist. First, the live and viable fetus ex utero; this subject would be considered a person and, therefore, would be protected by general human experimentation regimes. Second, the embryo, which attracts a unique regulatory regime in some states; see infra text accompanying notes 321-26.

Of the state statutes that specifically address fetal experimentation, only one regulates research on the pregnant woman.²⁰⁴ It is essentially similar to the applicable Health Department regulation²⁰⁵ because the statute permits consensual research on the woman when the risk to the fetus is minor or is necessary for therapeutic purposes.

As noted above,²⁰⁶ the Health Department standards abrogated regulation of research on the dead fetus to state law.²⁰⁷ Aside from provisions relating to disposal²⁰⁸ and registration,²⁰⁹ only a handful of states have grasped this opportunity.²¹⁰ Of these states, a few of them have statutory provisions that contain outright prohibitions on research;²¹¹ at least one statute contains an implicit approval of such procedures;²¹² and others permit research only in certain situations.²¹³ The Tennessee statute goes so far as to prohibit the photographing of an aborted fetus, absent maternal consent.²¹⁴

Of the states that generally prohibit research on the live fetus

^{204.} N.M. STAT. ANN. § 24-9A-2 (1981).

^{205. 45} C.F.R. § 46.207 (1985).

^{206.} See supra text accompanying note 173.

^{207. 45} C.F.R. § 46.210 (1985).

^{208.} See supra text accompanying notes 38-41.

^{209.} See supra text accompanying note 62.

^{210.} ARIZ. REV. STAT. ANN. § 36-2302A (Supp. 1975-1984); ARK. STAT. ANN. § 82-438 (Supp. 1985); CAL. HEALTH & SAFETY CODE § 25956(a) (West 1984); ILL. ANN. STAT. ch. 38, § 81-26(3) (Smith-Hurd Supp. 1985) (repealed 1984); IND. CODE ANN. § 35-1-58.5-6 (Burns 1985); LA. REV. STAT. § 40:1299.35.13 (West Supp. 1986); Mass. Gen. Laws Ann. ch. 112, § 12J(a)II (West 1983); Ohio Rev. Code Ann. § 2919.14 (Page 1982); 18 PA. Cons. STAT. Ann. § 3216(b) (Purdon 1983); Tenn. Code Ann. § 39-4-208 (1982).

^{211.} Illinois, Indiana, and Ohio contain the research prohibition hut limit the prohibition to the products of induced abortions.

^{212.} E.g., Cal. Health & Safety Code § 25956(a) (West 1984) (excluding a "lifeless product of conception" from the fetal experimentation regulatory regime).

^{213.} E.g., ARIZ. REV. STAT. § 36-2302A (Supp. 1975-1984) (prohibiting research on a dead, induced abortus "except as is strictly necessary to diagnose a disease or condition in the mother of the fetus or embryo and only if the abortion was performed because of such disease or condition"); see also La. Rev. Stat. § 40:1299.35.13 (West Supp. 1986); Mass. Gen. Laws Ann. ch. 112, § 12J(a)II (West 1983); Pa. Cons. Stat. Ann. § 3216(b) (Purdon 1983). The Arkansas statute, Ark. Stat. Ann. § 82-438 (Supp. 1985), conditions research on an induced fetus on maternal consent; however, it is difficult to see how such research could be carried out because § 82-440 prohibits the possession of an induced fetus. Neither provision applies, for example, to educational researchers. Id. § 82-441. Tennessee conditions research on maternal consent. Tenn. Code Ann. § 39-4-208(a) (1982).

^{214.} Tenn. Code Ann. § 39-4-208(a) (1982). The taking of photographs of dead bodies is not generally regulated at common law. See Kelley v. Post Publishing Co., 327 Mass. 275, 98 N.E.2d 286 (1951).

in utero,215 all of them exempt therapeutic experimentation.216

Concerning the live, nonviable fetus ex utero, state regulation has been extensive, as benefits such a controversial issue.²¹⁷ Aside from conditioning this research on maternal consent,²¹⁸ the most common provision found in these statutes is a therapeutic, fetus-specific exception to the general prohibition.²¹⁹ Additionally, some states make a specific exception for purely diagnostic procedures.²²⁰ A small number of states permit experimentation when it poses only a minor risk to the fetus; this may be an alternate exception to the therapeutic procedures already mentioned²²¹ or an additional criterion.²²² One statute has a general exemption for educational research scientists.²²³

^{215.} Fla. Stat. Ann. § 390.001(6) (West Supp. 1985); Ill. Ann. Stat. ch. 38, § 81-26(3) (Smith-Hurd Supp. 1985) (repealed 1984); La. Rev. Stat. Ann. § 40:1299.35.13 (West Supp. 1986); Mass. Gen. Laws Ann. ch. 112, § 12J(a)I (West 1983); Mich. Comp. Laws Ann. § 333.2685 (West 1980); Minn. Stat. Ann. § 145.422 (West Supp. 1985); N.M. Stat. Ann. § 24-9A-3 (1981); N.D. Cent. Code § 14-02.2-01 (1981); Okla. Stat. Ann. tit. 63, § 1-735A (West 1984); 18 Pa. Cons. Stat. Ann. § 3216(a) (Purdon 1983); R.I. Gen. Laws § 11-54-1 (Supp. 1985); Utah Code Ann. § 76-7-310 (1978).

^{216.} Cf. Utah Code Ann. § 76-7-310 (1978) (restricting experimentation to genetic screening).

^{217.} ARIZ. REV. STAT. ANN. § 36-2302A (Supp. 1975-1984); ARK. STAT. ANN. § 82-437 (Supp. 1985); CAL. Health & Safety Code § 25956(a) (West 1984); Fla. Stat. Ann. § 390.001(6) (West Supp. 1985); Ill. Ann. Stat. ch. 38, § 81-26(3) (Smith-Hurd Supp. 1985) (repealed 1984); Ky. Rev. Stat. § 436.026 (1985); La. Rev. Stat. Ann. § 40:1299.35.13 (West Supp. 1986); Me. Rev. Stat. Ann. tit. 22, § 1593 (1980); Mass. Laws Gen. Ann. ch. 112, § 12J(a)I (West 1983); Mich. Comp. Laws §§ 333.2685k-.2686 (West 1980); Minn. Stat. Ann. § 145.422(1) (West Supp. 1985); Mo. Ann. Stat. § 188.037 (Vernon 1983); Mont. Code Ann. § 50-20-108(3) (1985); Neb. Rev. Stat. § 28-342 (1979) (prohibiting "sale, transfer, distribution or giving away" of such a fetus); N.M. Stat. Ann. § 24-9A-4 (1981); N.D. Cent. Code § 14-01.2-01 (1981); Ohio Rev. Code Ann. § 2919.14(A) (Page 1982); Okla. Stat. Ann. tit. 63, § 1-735(A) (West 1984); 18 Pa. Cons. Stat. Ann. § 3216(a) (Purdon 1983); R.I. Gen. Laws § 11-54-1 (Supp. 1985); Wyo. Stat. § 35-6-115 (1977) (prohibiting sale, transfer, distribution or giving away of such a fetus).

^{218.} See infra text accompanying note 368.

^{219.} The following states do not have the exception: Arizona (which provides for a narrower exemption in the case of experimentation "strictly necessary to diagnose a disease or condition in the mother of the fetus or embryo"), Indiana, Kentucky, Maine, Ohio, and Wyoming. See supra note 217.

^{220.} These states include Massachusetts, Michigan, and North Dakota. See supra note 217.

^{221.} E.g., Minn. Stat. Ann. § 145.422(2) (West Supp. 1985); R.I. Gen. Laws § 11-54-1 (Supp. 1985).

^{222.} E.g., N.M. STAT. ANN. § 24-9A-4 (1981).

^{223.} ARK. STAT. ANN. § 82-441 (Supp. 1985).

E. Fetal Experimentation Regulation and Privacy Guarantees

Few of the fetal experimentation statutes have been the subject of constitutional review even though many states court danger by including experimentation provisions in their more general abortion restricting statutes.²²⁴ The specific issue was first addressed in Wynn v. Scott,²²⁵ in the context of an Illinois statute providing that "[n]o person shall use any fetus or premature infant aborted alive for any type of scientific, research, laboratory or other kind of experimentation either prior to or subsequent to any abortion procedure except as necessary to protect or preserve the life and health of such premature infant aborted alive."²²⁶ Importantly, the court noted that: "[t]he rights of medical researchers are not fundamental under the Constitution, and are not entitled to the derivative constitutional protection afforded attending physicians of pregnant women seeking abortions."²²⁷

Thus, for the district court in Wynn v. Scott²²⁸ and in the subsequent Louisiana case of Margaret S. v. Edwards,²²⁹ the appropriate standard for the purposes of fourteenth amendment review was the somewhat less demanding "rational connection" test.²³⁰ Because of the deferential standard of review, the plaintiffs in those early cases were unsuccessful. Yet, the most recent version of the Louisiana statute has failed to satisfy even the rational connection test, for in Margaret S. v. Treen, the district court could find no legitimate state interest in according more protection to a dead fetus than to a deceased person.²³¹

As a general proposition, the use of the less rigorous rational connection test for reviewing experimentation regulation seems

^{224.} See Wolfe v. Schroering, 388 F. Supp. 631, 638 (W.D. Ky. 1974), aff'd in part and rev'd in part, 541 F.2d 523 (6th Cir. 1976) (held invalid many of the provisions of the Kentucky abortion statute, yet upheld the validity of a viable fetus experimentation prohibition). But cf. Doe v. Rampton, 366 F. Supp. 189 (D. Utah 1973) (striking down the entire Utah abortion statute, including the fetal experimentation provision). Utah's revised fetal experimentation prohibition is found at UTAH CODE ANN. § 76-7-310 (1978).

^{225. 449} F. Supp. 1302, 1322 (N.D. Ill.), appeal dismissed for want of jurisdiction sub. nom. Carey v. Wynn, 439 U.S. 8 (1978), aff'ing, 599 F.2d 193 (7th Cir. 1979).

^{226.} The current, slightly modified Illinois provision is found at ILL. ANN. STAT. ch. 38, § 81-26(3) (Smith-Hurd Supp. 1985).

^{227. 449} F. Supp. at 1322.

^{228.} Id.

^{229. 488} F. Supp. 181, 221 (E.D. La. 1980).

^{230.} The rational connection test examines the rational relationship between the means and ends necessary to satisfy equal protection and substantive due process requirements. See Massachusetts Bd. of Retirement v. Murgia, 427 U.S. 307, 314-17 (1976).

^{231. 597} F. Supp. 636, 674-75 (E.D. La. 1984).

supportable. As Justice Blackmun stated in *Planned Parenthood* v. Danforth, ²³² however, "[t]he decision to abort . . . is an important, and often a stressful one, and it is desirable and imperative that it be made with full knowledge of its nature and consequences." ²³³ Some research on the pregnant women or on the fetus in utero may be necessary to provide the women with full information prior to making her abortion decision. If a state ban on fetal research has the effect of denying the woman access to that information, then the regulation will detract from her constitutionally protected reproductive autonomy and will be contrary to the fourteenth amendment.

The difficult problem that arises is determining exactly what research is necessary to protect and, as such, will benefit parasitically from the woman's recognized fundamental right. In Margaret S. v. Treen²³⁴ the district court struck down a Louisiana statute that provided: "No person shall experiment on an unborn child or a child born as the result of an abortion, whether the unborn child or child is alive or dead "235 In striking down this provision, the court did not limit the woman's additional, constitutional information-gathering protection to the particular pregnancy during which experimentation was performed (what could be termed a pregnancy-specific rule). Rather, the court was of the opinion that "[t]his statute unduly limits the medical information concerning the likelihood of fetal deformity in their future pregnancies."236 Further, the court was of the opinion that "[t]he prohibition on experimentation involving aborted fetal tissue is likely to impede the thorough, complete pathological examination of such tissue. thereby potentially endangering the health of women who choose abortion."237

One could argue that this reasoning limits parasitic protection of fetal experimentation to situations that will aid a particular woman's informed reproductive choice (a woman-specific rule). Research on any fetus, however, is as capable of benefiting any woman's choice. Therefore, considering the court's extension of the scope of the woman's privacy right beyond pregnancy-specific experimentation, it would be illogical not to protect all fetal research

^{232, 428} U.S. 52 (1976).

^{233.} Id. at 67.

^{234. 597} F. Supp. at 673-74.

^{235.} La. Rev. Stat. Ann. § 40:1299.35.13 (West Supp. 1981).

^{236. 597} F. Supp. at 673 (emphasis added).

^{237.} Id. (footnote omitted).

similarly.

Finally, although some state interference with fetal experimentation may run afoul of the Constitution, the same is probably not true of the federal regulatory system, based, as it is, only on the funding power, 238 and given that parallels may be drawn to the iurisprudence upholding restrictive government funding for abortions.239

F. Fetal Experimentation as Protected Speech

While it may be conceded that the fetal researcher seldom will benefit directly from any fourteenth amendment privacy/fundamental rights²⁴⁰ protection,²⁴¹ the same cannot be said for the possible impact of the first amendment free speech²⁴² and establishment²⁴³ clauses. Although some concern has been voiced that the Supreme Court might adopt a conclusory characterization²⁴⁴ of scientific research as "conduct" rather than speech,245 most academic comment has postulated that research will be covered by the free speech clause of the first amendment.246

Of course, the determination that fetal experimentation is constitutionally protected does not answer the question of the standard of constitutional review that the Supreme Court would utilize. For example, a prohibition on research involving a live, previable fetus would interfere with a necessary incident to free

^{238.} See, e.g., Favre & McKinnon, The New Prometheus: Will Scientific Inquiry be Bound by the Chains of Government Regulations?, 19 Duq. L. Rev. 651, 696 (1981); Ferguson, Scientific Inquiry and the First Amendment, 64 Cornell L. Rev. 639, 654 n.58 (1979); Robertson, The Scientist's Right to Research: A Constitutional Analysis, 51 S. Cal. L. Rev. 1203, 1267-77 (1977) [bereinafter cited as Robertson, The Scientist's Right to Research]; Robertson, The Law of Institutional Review Boards, 26 UCLA L. Rev. 484, 506-10 (1979).

See cases cited supra note 34.

^{240.} But cf. Margaret S. v. Treen, 597 F. Supp. 636, 674 (E.D. La. 1984) (noting that the researcher "is entitled under the Constitution to protection from arbitrary infringement").

^{241.} See, e.g., Delgado & Millen, God, Galileo, and Government: Toward Constitutional Protection for Scientific Inquiry, 53 Wash. L. Rev. 349, 392-95 (1978); Favre & Mc-Kinnon, supra note 238, at 707-27 (1981) (arguing that scientific research is, of itself, covered by "fundamental right" protection); Robertson, The Scientist's Right to Research, supra note 238, at 1213.

^{242. &}quot;Congress shall make no law . . . abridging the freedom of speech" U.S. Const. amend. I.

^{243. &}quot;Congress shall make no law respecting an establishment of religion" Id.

^{244.} See generally L. Tribe, American Constitutional Law § 12-17 (1978).

^{245.} See, e.g., Ferguson, supra note 238, at 649-54.

^{246.} See, e.g., authorities cited supra notes 238, 241; Davidson, First Amendment Protection for Biomedical Research, 19 Ariz. L. Rev. 893, 895-912 (1977).

speech.²⁴⁷ This prohibition, acting as an indirect restraint on constitutionally protected speech, would attract a balancing-approach standard of review.²⁴⁸ A statute like this could not meet this standard because the state would have difficulty in showing either that it had a substantial interest in protecting the bodily integrity of a pre-viable fetus *ex utero*²⁴⁹ or that societal distaste for such research would be a sufficiently important state interest.²⁵⁰ The contrary would be true if the scope of the state's regulatory system were limited to certain preconditions for research, such as parental consent or health and safety considerations.²⁵¹ Similarly, a nonvague²⁵² research prohibition on the products of induced abortions²⁶³ would be valid because the same research could be performed on naturally aborted materials.

A different first amendment attack on the regulation of fetal research has been made on the basis of the establishment clause.²⁵⁴ Specifically, it has been argued that the federal regulations "are the product of an essentially religious dispute concerning fetal status."²⁵⁵ While it may be correct that the establishment clause prohibits Congress from "choosing religion over science,"²⁵⁶ the common law's long, pre-abortion-debate history of concern over the proper treatment of the dead and dying,²⁵⁷ however, will tend to

^{247.} Favre & McKinnon, supra note 238, at 671-83. The authors also explore the "speech plus" approach, which affords a lesser degree of protection to an activity that includes both speech and conduct. Id. at 683-84; cf. Davidson, supra note 246, at 915-16.

^{248.} L. TRIBE, supra note 244, § 12-20; Favre & McKinnon, supra note 238, at 692. One scientist has phrased the appropriate test as follows:

To test for the ultimate decision, whether to permit or to ban a particular line of inquiry, I would urge the criterion of a real and present danger. Note that the conjunction is "and" and not "or." It must be real and, besides that, it must be present. It must be, in other words, of such a quality that you and I would willingly forego freedom of speech or of the press, were these the freedoms involved. We surely would not consent to being muzzled merely to avoid difficulties. By the same token, we should not close off a research activity because possible eventualities may be difficult to handle. Stetten, Freedom of Enquiry, 81 Genetics 415, 419 (1975).

^{249.} Favre & McKinnon, supra note 238, at 695-701.

^{250.} See Robertson, The Scientist's Right to Research, supra note 238, at 1248-53.

^{251.} Id. at 1253-59.

^{252.} See discussion supra note 196.

^{253.} See, e.g., supra notes 197-98.

^{254.} See Friedman, The Federal Fetal Experimentation Regulations: An Establishment Clause Analysis, 61 MINN. L. REV. 961 (1977).

^{255.} Id. at 963.

^{256.} Goldbert, The Constitutional Status of American Science, 1979 U. Ll. LF. 1, 11.

^{257.} This approach derives support from McRae v. Califano, 491 F. Supp. 630, 741 (E.D.N.Y.), rev'd sub. nom. Harris v. McRae, 448 U.S. 297 (1980). While discussing the Hyde Amendment limiting federal funding of abortions, Judge Dooling stated, "On its face such legislation, marking explicit disapproval of abortion in most cases, reflects a general

support the finding of a sufficient secular purpose²⁵⁸ lurking behind the federal regulations. Further, in upholding the analogous federal limitation on abortion funding, the Supreme Court has already concluded, "[W]e are convinced that the fact that the funding restrictions in the Hyde Amendment may coincide with the religious tenets of the Roman Catholic Church does not, without more, contravene the Establishment Clause."

G. Fetal Research and Tort Law

In addition to the public law regulation of fetal experimentation, a narrow range of circumstances may give rise to civil liability. As noted above, the researcher may face an intentional tort action for experimentation without consent²⁶⁰ or for insensitive hehavior directed at a fetal relative.²⁶¹ Additionally, the fetus itself may possess a cause of action.

Four hypotheticals may be suggested. First, research is performed on a live fetus in utero (or even a live embryo, prior to reimplantation); the fetus is injured through the negligence of the researcher and suhsequently is born alive, but impaired. Depending upon the jurisdiction, the child should be able to maintain a malpractice action for its prenatal²⁶² (or preconception)²⁶³ injuries. Second, the same situation arises, but the fetus is stillborn. In this case, recovery would be dependent upon whether the jurisdiction's wrongful death statute applies to a fetus.²⁶⁴ Third, the researcher

and long held social view" Id. at 741.

^{258.} See generally L. TRIBE, supra note 244, §§ 14-8, 14-9.

^{259.} Harris v. McRae, 448 U.S. 297, 319-20 (1980). In Margaret S. v. Edwards, 488 F. Supp. 181 (E.D. La. 1980), the district court struct down many provisions in the Louisiana abortion statute on traditional *Roe v. Wade* grounds. The court, however, found no merit in plaintiffs' establishment clause attack on the legislation. *Id.* at 224-25.

^{260.} See supra note 80.

^{261.} See supra text accompanying notes 73-75.

^{262.} See, e.g., Congenital Disabilities (Civil Liability) Act, 1976, ch. 28, § 1(2)(b); Hornbuckle v. Plantation Pipe Line Co., 212 Ga. 504, 93 S.E.2d 727 (1956).

^{263.} See, e.g., Congenital Disabilities (Civil Liability) Act, 1976, ch. 28, § 1(2)(a); Bergstreser v. Mitchell, 577 F.2d 22 (8th Cir. 1978) (Missouri law); Jorgensen v. Meade Johnson Laboratories, Inc., 483 F.2d 237 (10th Cir. 1973) (Oklahoma law); Renslow v. Mennonite Hosp., 367 N.E.2d 1250 (Ill. 1977); cf. Albala v. City of New York, 54 N.Y.2d 269, 429 N.E.2d 786, 445 N.Y.S.2d 108 (1981).

^{264.} See O'Grady v. Brown, 654 S.W.2d 906 (Mo. 1983); cf. Justus v. Atchison, 19 Cal. 3d 564, 565 P.2d 122, 139 Cal. Rptr. 97 (1977), overruled, Ochoa v. Superior Court, 39 Cal. 3d 159, 703 P.2d 1, 216 Cal. Rptr. 661 (1985). See generally Annot., 84 A.L.R.3d 411 (1978). In England a survival-type wrongful death action under the Law Reform (Miscellaneous Provisions) Act, 1934, 24 & 15 Geo. 5, ch. 41, could be maintained only if the fetus were born alive and lived for at least 48 hours. See Congenital Disabilities (Civil Liability) Act,

undertakes a consented to, possibly even fetus-specific, therapeutic procedure. The risks to the fetus, however, are not adequately explained to its agent-mother. One of those risks occurs (without any negligence on the part of the researcher) and the fetus subsequently is born alive, but impaired. A strong argument could be made for permitting the child to bring an action for lack of informed consent.²⁶⁵

The fourth hypothetical for consideration would be when the researcher performs a diagnostic fetus-specific procedure. The researcher negligently fails to diagnose the existence of a hereditary defect and subsequently, the child is born alive, but impaired. Anglo-American courts traditionally have applied the unfortunate and inaccurate "wrongful life" label to the child's cause of action. Moreover, those courts have interpreted the child's claim as a complaint against allowing it to be born at all. Replete with the ideological baggage surrounding the abortion issue, compounded by an inability to reconcile tort ("wrong") with life ("good"), most courts have taken refuge in an obfuscating metaphysical debate over the difficulty of comparing "existence" to "nonexistence" and have denied the child's cause of action.²⁶⁶

If any unique label is required to describe the infant's cause of action, the "impaired life" is a somewhat more accurate reflection of this complaint. Far more important, however, is the need to conceptualize the child's complaint as based on a lack of information about the consequences of not agreeing to a particular medical procedure; in casu, eugenic abortion. In reality, the mother is

^{1976,} ch. 28, § 4. There is no English authority on whether the death of a fetus could lead to a (nonsurvival-type) wrongful death action in favor of a relative, for example, under the Fetal Accidents and Sudden Deaths Inquiry (Scotland) Act of 1976, ch. 14, as amended by the Administration of Justice Act, 1982, ch. 53, § 3.

^{265.} The only reported decision to this effect is Shack v. Holland, 89 Misc. 2d 78, 389 N.Y.S.2d 988 (N.Y. Sup. Ct. 1976). For the action to be successful in England, the word "occurrence" in the Congenital Disabilities (Civil Liability) Act, 1976, ch. 28, § 1(2), would have to be interpreted as including inadequate disclosure of risk. On informed consent to genetic screening, see generally Waltz, The Liability of Physicians and Associated Personnel for Malpractice in Genetic Screening, in Genetics and the Law 139, 146-49 (1976).

^{266.} See, e.g., McKay v. Essex Area Health Auth., [1982] 2 W.L.R. 890 (C.A.); Alquijay v. St. Luke's-Roosevelt Hosp. Center, 63 N.Y.2d 978, 473 N.E.2d 244, 483 N.Y.S.2d 994 (1984); Speck v. Finegold, 439 A.2d 110 (Pa. 1981).

^{267.} See Truman v. Thomas, 27 Cal. 3d 285, 611 P.2d 902, 27 165 Cal. Rptr. 308 (1980) (extending the concept of "informed consent" beyond the paradigm case of "failure to inform of the risks attendant upon the performance of a medical procedure" to a "failure to inform of the risks attendant upon the non-performance of some procedure"); see also Sidaway v. Bethlem Royal Hosp., [1984] 1 All E.R. 1018 (C.A.); Canterbury v. Spence, 464 F.2d 772 (D.C. Cir.), cert. denied, 409 U.S. 1064 (1972).

the child's agent for receipt of information in matters concerning its future health and integrity. The few courts that have begun to grasp this concept have permitted the child's recovery, albeit limited, 268 for its "impaired life." 269

VI. Embryos: Possessory Rights

Most of the recent medico-legal comment concerning embryology has focused on the capacity of *in vitro* fertilization techniques to alleviate infertility and the corresponding legal problems.²⁷⁰ Yet, the scientist's involvement with the embryo goes beyond assisting its parents with procreation. There is considerable interest in embryo research, and, for the most part, this research has taken place in something of a legal vacuum. Indeed, some of the important regulatory regimes, such as the UAGA and the Health Department regulations, apply only to fetuses and not to embryos.

A. Use, Disposal, and Possession

The existence of possessory rights over embryos²⁷¹ has been of practical importance only since the perfection of freezing tech-

^{268.} Typically, recovery has been limited to the special damages attendant upon the child's extraordinary medical expenses rather than any general damages. There is general agreement that the child's parents have an action for impaired (wrongful) birth in such cases. See Becker v. Schwartz, 46 N.Y.2d 401, 386 N.E.2d 807, 413 N.Y.S.2d 895 (1978). Crucially, however, the parents' claim cannot include recovery for the child's pain and suffering. A "backdoor" approach to such recovery would be to permit the parents to bring an action for their emotional harm. Generally this claim has been denied. See Howard v. Lecher, 42 N.Y.2d 109, 113, 366 N.E.2d 64, 66, 397 N.Y.S.2d 363, 366 (1977); cf. Speck v. Finegold, 439 A.2d 110, 116-17 (Pa. 1981).

^{269.} See, e.g., Turpin v. Sortini, 31 Cal. 3d 220, 643 P.2d 954, 182 Cal. Rptr. 337 (1982); Procanik v. Cillo, 97 N.J. 339, 478 A.2d 755 (1984); Harbeson v. Parke-Davis, Inc., 98 Wash. 2d 460, 656 P.2d 483 (1983); see also Andalon v. Superior Ct., 162 Cal. App. 3d 600, 208 Cal. Rptr. 899 (1984).

^{270.} Louise Joy Brown, who was born in England on July 25, 1978, was the first recorded "test-tube" baby, as the media persist in describing in vitro children. For a summary of some of the issues that confront English law, see Davies, Close Encounters in a Test Tube, 133 New L.J. 107 (1983). For a suggested blueprint for a United States response to these new technologies, see Capron, The New Reproductive Possibilities: Seeking a Moral Basis for Concerted Action in a Pluralistic Society, 12 Law, Med. & Health Care 192 (1984). For a statistically based account of the United States practice, see Curie-Cohen, Luttrell & Shapiro, Current Practice of Artificial Insemination by Donor in the United States, 300 New Eng. J. Med. 585 (1979); see also Cohen, The "Brave New Baby" and the Law: Fashioning Remedies for the Victims of In Vitro Fertilization, 4 Am. J.L. & Med. 319 (1978); Lorio, In Vitro Fertilization and Embryo Transfer: Fertile Areas for Litigation, 35 Sw. L.J. 973 (1982); Comment, In Vitro Fertilization: New Territory for the Preconception Tort, 5 Geo. Mason U.L. Rev. 169 (1982).

^{271.} See generally Krentel, "Ownership" of the Fertilized Ovum in vitro: A Hypothetical Case in Louisiana, 32 La. Bar J. 284 (1985).

niques (cryostorage) has made embryo storage more widespread.²⁷² As a matter of practice, the leading *in vitro* group in England requests both parents' agreement for storage of up to two years and gives the parents the option of donation for research in the event of nonreimplantation.²⁷³

In July 1982 the British government established a committee, under the chairmanship of Dame Mary Warnock, to examine some aspects of the developments in "human assisted" reproduction. Questions concerning embryo possession and disposal also were placed on the agenda. In its 1984 report, the Warnock Committee (Warnock) recommended that frozen human embryos be stored for a maximum of ten years²⁷⁴ and that within that period the couple who stored the embryo should have the use and disposal rights.²⁷⁵ After that ten year period, those rights of use or disposal would pass to the storage agency.²⁷⁶

Warnock seems to have realized that one of the incidents of a property rule is the right of alienability, thus raising the spectre of a frozen human embryo market. Warnock, therefore, opted for the quasi-property rights of use and disposal, expressly recommending legislation to prohibit any right of ownership in an embryo.²⁷⁷ Warnock, however, did not go as far as recommending an inalienability regime because the Committee was forced to recognize that "the supply of human gametes or embryos might reasonably involve some commercial transaction."²⁷⁸ Warnock's solution was to propose that any sales be subject to control by a statutory licensing body.²⁷⁹

A difficulty arises, however, concerning exactly how the parents' rights of use and disposal are to be protected. Warnock left open the difficult questions whether criminal sanctions would lie in

^{272.} Embryos are cooled to -80 centigrade with liquid nitrogen. See Henahan, Fertilization, Embryo Transfer Procedures Raise Many Questions, 252 J. A.M.A. 877 (1984) (reporting the presentation of an Australian scientist). On frozen embryo technology, see generally L. Andrews, New Conceptions 256-58 (1984).

^{273.} Henahan, supra note 272, at 879 (reporting the comments of Patrick Steptoe at the 1984 Helsinki Conference).

^{274.} Report of the Committee of Inquiry into Human Fertilisation and Embryology, Cmd. 9314, § 10.10 (1984) [hereinafter cited as Warnock].

^{275.} Id. § 10.11; cf. Dickins, The Ectogenetic Human Being: A Problem Child of Our Time, 18 U.W. Ont. L. Rev. 241, 253-57 (1980).

^{276.} Id.

^{277.} Id. § 10.11.

^{278.} Id. § 13.13.

^{279.} Id. The committee recommended the creation of the licensing body in § 13.3 of the report. Id. § 13.3.

the event of theft of or criminal damage to stored embryos. Indeed, both the Theft Act and the Criminal Damage Act apply only to property.²⁸⁰

A simplistic reaction to the inapplicability of property crime laws would be to apply those criminal laws that protect "persons." One then could argue that the destruction of a human embryo would constitute the criminal offense of murder²⁸¹ or abortion. No prosecution, however, could lie for abortion under the English Offences Against the Person Act. 282 because the prohibition contained therein is phrased in terms of procuring a "miscarriage." An embryo could not be "carried" until after reimplantation. As for the murder charge, the common law on both sides of the Atlantic protects only "the reasonable creature in being."283 Specifically, the victim's body must be completely ex utero284 and must have been "born alive." 285 At first sight these doctrinal preconditions are met by the embryo in vitro. The courts, however, have elaborated on this "born alive" concept to include first, displaying the usual signs of life²⁸⁶ and second, no longer being "fetus-like."²⁸⁷ For the purposes of the criminal law, therefore, the live embryo in vitro lacks any nominate legal protection, fitting within neither "property" nor "persons" regimes. The role of the criminal law will be limited at best to enforcing some statutory licensing system con-

^{280.} See generally Theft Act, 1968, ch. 60, § 1(1); Criminal Damage Act, 1971, ch. 48, § 1; Matthews, Whose Body? People as Property, in 1983 Current Legal Problems 193 (1983); text accompanying notes 96-105.

^{281.} See G. WILLIAMS, TEXTBOOK OF CRIMINAL LAW 290 n.6 (2d ed. 1983); see also Abel, The Legal Implications of Ectogenetic Research, 10 Tulsa L.J. 243, 243-44 (1974) (recounting the demands for a murder charge against an Italian researcher following the death of a two month old embryo ex utero).

^{282.} English Offences Against the Person Act, 1861, 25 & 26 Vict., cb. 100, § 58.

^{283.} See infra sources cited notes 284-85.

^{284.} See, e.g., The Queen v. Sellis, [1837] 7 Car. & P. 850, 173 Eng. Rep. 370; The Queen v. Poulton, [1832] 5 Car. & P. 329, 330, 172 Eng. Rep. 997, 998 (Littledate, J.). See generally Atkinson, Life, Birth and Live-Birth, 20 L.Q. Rev. 134 (1904); Winfield, The Unborn Child, 8 CAMBRIDGE L.J. 76, 79-80 (1944).

^{285.} People v. Bolar, 109 Ill. App. 3d 384, 440 N.E.2d 639 (1982); cf. People v. Guthrie, 417 Mich. 1006, 334 N.W.2d 616 (1983). Concerning proof of "live birth", see Annot., 65 A.L.R.3d 413 (1975).

^{286.} See, e.g., The Queen v. Poulton, [1832] 5 Car. & P. 329, 172 Eng. Rep. 997; Commonwealth v. Edelin, 371 Mass. 497, 359 N.E.2d 4 (1976), overruled sub nom., Commonwealth v. Cass, 392 Mass. 799, 467 N.E.2d 1324 (1984); Cordes v. States, 112 S.W.2d 943 (Tex. Crim. App. 1908); cf. The Queen v. Brain, [1834] 6 Car. & P. 349, 350 172 Eng. Rep. 1272, 1272.

^{287.} See, e.g., The Queen v. Wright, [1841] 9 Car. & P. 754, 173 Eng. Rep. 1039; Regina v. Enoch & Pulley, [1833] 5 Car. & P. 539, 172 Eng. Rep. 1089; State v. Winthrop, 43 Iowa 519 (1876).

cerning embryo use and disposal.

Because criminal law is insufficient to protect the parents' possessory interest, a viable alternative may be to bring suit under intentional tort doctrine. In Del Zio v. Presbyterian Hospital²⁸⁸ a medical facility working on an attempted in vitro procedure decided to terminate its involvement and destroyed the blastocyst. The putative parents brought an action alleging intentional infliction of emotional harm²⁸⁹ and conversion. The jury was instructed on both causes of action, but found for plaintiffs only on the former. The judge specifically instructed the jury that they should not consider the higher expectation of successful in vitro reimplantation and birth that had occurred for the first time between the destruction of the Del Zio embryo in 1973 and the trial date.280 The jury may well have decided that the lower expectation of successful reimplantation in 1973 had broken the causal chain of the Del Zio's claim for unlawful conversion of their potential child.²⁹¹ A different result could be expected today.

B. Inheritance Implications

Warnock recommended that, upon the death of one of the parents of a stored embryo, the use and disposal rights should vest in the remaining parent.²⁹² This proposal has important ramifications on the legitimacy of a subsequently thawed and reimplanted embryo and on its inheritance rights. At common law,²⁹³ a child's legitimacy depended on his parents being married at the time of the child's birth or conception.²⁹⁴ Therefore, an embryo reimplanted after its father's death would be legitimate. The *in vitro* child, however, may not benefit from the usual presumption of paternity, based, as it is, on birth within the normal gestation period

^{288. 74} Civ. 3588 (S.D.N.Y. 1976). The case is described at length in Sweeney & Goldsmith, Test Tube Babies: Medical and Legal Considerations, 2 J. Leg. Med., Apr. 1980, at 1, and also is referred to in Note, In Vitro Fertilization: Hope for Childless Couples Breeds Legal Exposure for Physicians, 17 U. Rich. L. Rev. 311, 321-23 (1983).

^{289.} See Restatement (Second) of Torts § 46(1) (1965).

^{290.} See supra note 270 (describing Louise Brown's birth). Louise Brown's birth during the Del Zio trial added complexity to the case.

^{291.} See L. Andrews, supra note 272, at 157 (theorizing that the jury permitted recovery because of a belief that in vitro fertilization was possible); see also Cohen, supra note 270, at 331-32 (suggesting a negligence action for "wrongful destruction").

^{292.} WARNOCK, supra note 274, § 10.12.

^{293.} The many statutory modifications to the English common-law position are not relevant to the issue herein discussed.

^{294.} See Knowles v. Knowles, 1962 P. 161 (P. Div'l Ct. 1961).

following conception.²⁹⁵ Warnock also suggested that the date of birth and not of fertilization determined the primogeniture issue.²⁹⁶ Therefore, any embryo not yet *in utero* at the date of its father's death should *not* be considered the father's legal heir.²⁹⁷

If the Warnock recommendations are given statutory force, English law will have a ready answer to the recently reported Australian problem concerning the disposal of embryos. An American couple had left two frozen embryos with a Melbourne hospital. Both parents²⁹⁸ died in a plane crash before implantation could take place, leaving no instructions about the disposal of the embryos. Following protests from anti-abortion groups, the Victoria Parliament blocked the destruction of the embryos and made them available for implantation in a surrogate, with adoption to follow successful gestation. The Warnock approach would have left the decision about the use or disposal in the hands of the hospital.299 Further, under Warnock, the English position would be to deny inheritance rights to any child who survived thawing and pregnancy, an issue of considerable importance in the Australian case because the American couple left an estate valued in excess of one million dollars.300

VII. EMBRYOS: REGULATION OF RESEARCH

Warnock recognized that not all embryos produced through *in vitro* fertilization eventually would be transferred to a uterus. Therefore, the question then would arise whether research should be permitted on nonimplanted (spare) embryos.³⁰¹ Specifically, it has been argued that the human embryo is a unique experimental subject, particularly in the context of human fertilization, genetic disorders.³⁰² and cancer research.³⁰³

^{295.} See Preston-Jones v. Preston-Jones, 1951 A.C. 391 (H.L. 1950).

^{296.} WARNOCK, supra note 274, § 10.14.

^{297.} Id. § 10.15. See generally Schuyler, The New Biology and the Rule Against Perpetuities, 15 UCLA L. Rev. 420 (1968); Thies, A Look to the Future: Property Rights and the Posthumously Conceived Child, 110 Trusts & Estates 922 (1971).

^{298.} In fact, the sperm had been from an anonymous third-party donor.

^{299.} WARNOCK, supra note 274, § 10.12.

^{300.} N.Y. Times, Oct. 24, 1984, at 9, col. 1; St. Louis Post-Dispatch, Oct. 25, 1984, sec. A, at 2, col. 5.

^{301.} The Peel Report had defined "a fetus" for the purposes of its experimentation guidelines as "the human embryo from conception to delivery (and therefore including what is normally termed the embryonic state)." Peel, supra note 7, at 2. Given that Peel was issued in 1972, it seems unlikely that he meant to deal with research on nonimplanted embryos.

^{302.} WARNOCK, supra note 274, § 11.15.

A. Proposed Regulation in England

Over strong dissents,³⁰⁴ the Warnock majority recommended that embryo research be permitted to continue.³⁰⁵ However, Warnock did believe that the *in vitro* human embryo should be granted some legal protection, even if not coextensive with that granted an embryo *in vivo*.³⁰⁶ Embryo research therefore would be conditioned upon the experimenters' licensure³⁰⁷ by the regulatory agency.³⁰⁸ This experimentation would be prohibited beyond fourteen days after embryo fertilization³⁰⁹ and could not include the implantation of a human embryo into a different species.³¹⁰ All the conditions would be backed by criminal sanctions. Finally, Warnock suggested that no embryo that had been used for research should later be reimplanted.³¹¹

Nontherapeutic embryo research became an issue when in vitro fertilization superovulation techniques led to the production of "spare" subjects. A decision to permit research on these embryos may not raise the ethical issues about embryo "farming" that accompany research on embryos specifically generated for research purposes. The Warnock majority took the position that no distinction between embryo classes was necessary;³¹² in neither case would there be reimplantation, and hence, the potential for life.³¹³ Clearly, however, the debate has not ended. At least one English Member of Parliament has stated that he will introduce a bill before Parliament banning all human embryo research.³¹⁴

^{303.} See Henahan, supra note 272, at 882 (reporting on the proceedings of the 1984 Helsinki Conference).

^{304.} WARNOCK, supra note 274, at 90-94.

^{305.} Id. § 11.18. For some of the submissions made to Warnock on this issue, see Brahams, The Legal and Social Problems of In Vitro Fertilisation: Why Parliament Must Legislate. 51 Medico-Legal J. 236 (Fall 1983).

^{306.} WARNOCK, supra note 274, § 11.17.

^{307.} Id. § 11.18.

^{308.} Id. §§ 13.1-13.14.

^{309.} Id. § 11.22.

^{310.} Id. § 12.9.

^{311.} Id. § 11.22.

^{312.} Id. § 11.30.

^{313.} Id. § 11.28.

^{314.} Fletcher, 'Horrors' at Embryo Experiment, Time, Aug. 6, 1984, at 44; The Daily Telegraph, July 21, 1984, at 7, col. 6. The only legislation that has resulted from Warnock so far is the Surogacy Arrangements Act, 1985, ch. 49, prohibiting certain commercial aspects of surrogate motherhood arrangements. Two bills dealing with embryo possession (and both entitled the Unborn Children (Protection) Bill) were introduced into the House of Commons in 1985. The general effects of the bills would have been to prohibit the *in vitro* fertilization of an ovum or the *in vitro* possession of an embryo other than for reimplantation.

B. Specific Regulation in the United States

In contrast to the policing of fetal experimentation, the federal regulatory system does not extend to embryo research.³¹⁵ At first, it appears that a number of state statutes do attempt to regulate such research. In fact, however, most of these statutes provide for regulation only after the state of reimplantation.³¹⁶ This interpretation stems from the use of qualifying terminology limiting the regulations' applicability to "aborted" embryos,³¹⁷ embryos "in utero,"³¹⁸ or "live born" embryos.³¹⁹ Some state statutes, however, do apply to embryo research as it is commonly understood but do not employ that specific term.³²⁰

Neither bill resulted in legislation.

- 316. See generally Blumberg, Legal Issues in Nonsurgical Human Ovum Transfer, 251 J. A.M.A. 1178, 1178-79 (1984).
- 317. E.g., ARIZ. REV. STAT. ANN. § 36-2302A (Supp. 1975-1980). The statute provides: "A person shall not knowingly use any . . . embryo, living or dead, or any parts, organs or fiuids of any such . . . embryo resulting from an induced abortion in any manner for any medical experimentation . . . except . . . " Id. (emphasis added). The "induced abortion" phrase should be read as qualifying both clauses in which "embryo" is mentioned. The California statute prohibits most research on any live "aborted product of human conception." CAL. HEALTH & SAFETY CODE § 25956(a) (West 1984). The Ohio statute prohibits research on "the product of human conception which is aborted." Ohio Rev. Code Ann. § 2919.14(A) (Baldwin 1974).
- 318. For example, the Louisiana statute prohibits "human experimentation," defined in part as "the conduct, on a human embryo or fetus in utero, of any experimentation or study except to preserve the life or to improve the health of said human embryo or fetus." LA. REV. STAT. ANN. § 14:87.2 (West 1974) (emphasis added). If "in utero" is read as qualifying "embryo" as well as "fetus" the prohibition extends only to post-implantation research.
- 319. The Maine statute prohibits, in part, using "any live human fetus, whether intrauterine or extrauterine, or any product of conception considered live born for scientific experimentation." Me. Rev. Stat. Ann. tit. 22, § 1593 (1980). Even if "live born" (defined in § 1595) qualifies only "product of conception," the only prohibition on "embryo" research would be in the case of the extrauterine embryo that has developed into a fetus without implantation.
- 320. For example, the Minnesota statute refers to "human conceptus," defined as "any human organism, conceived either in the human body or produced in an artificial environment other than the human body, from fertilization through the first 265 days thereafter." Minn. Rev. Stat. Ann. § 145.421(2) (West Supp. 1985); see also id. § 145.421(3) (definition of "living"). The New Mexico statute defines "fetus" as "the product of conception from the time of conception." N.M. Stat. Ann. § 24-9A-1G (1981). The statute's definition of clinical

^{315.} The regulations define "fetus"—the subject of most of the regulations—as a post-implantation entity. 45 C.F.R. § 46.203(c) (1985). Embryos are covered only to the extent that funded in vitro fertilization research requires Ethical Advisory Board sanction. Id. § 46.204(d); see Lorio, supra note 270, at 977-78. The Ethical Advisory Board has recommended that embryos that would not be reimplanted should not be sustained for more than 14 days. Id. at 985; see Abramowitz, A Stalemate on Test-Tube Baby Research, 14 Hastings Center Rep., Feb. 5, 1984; Flannery, Weisman, Lipsett & Braverman, Test Tube Babies: Legal Issues Raised by In Vitro Fertilization, 67 Geo. L.J. 1295, 1296-98, 1311-18 (1979).

Of the states that expressly regulate embryo research,³²¹ some concentrate on controlling the supply and distribution of embryos,³²² while others have implemented a full regulatory regime³²³ similar to that used for fetal experimentation.³²⁴ Pennsylvania has chosen to emphasize the disclosure of research rather than its substantive regulation.³²⁵ By far the most interesting state law affecting embryo research is contained in a 1981 amendment to an Illinois statute. It provides:

Any person who intentionally causes the fertilization of a human ovum by a human sperm outside the body of a living human female shall, with regard to the human being thereby produced, be deemed to have the care and custody of a child for the purposes of [the Illinois child abuse statute].³²⁶

A district court examined this provision in *Smith v. Hartigan.*³²⁷ Plaintiffs contended that the statute constituted a prohibition of *in vitro* fertilization and was violative of several federal constitutional guarantees.³²⁸

The court, however, did not reach the merits of the case. It decided that there was no justiciable controversy because the defendant Attorney General interpreted the statute not to prohibit in vitro fertilization. In fact, the defendants even seemed to concede that there was a "fundamental right" to in vitro fertilization³²⁹ and that the only role of the statute was to protect "the

research, § 24-9A-1D, refers expressly to "research involving human in vitro fertilization," which is defined in § 24-9A-1K.

^{321.} See generally Andrews, The Stork Market: The Law of the New Reproduction Technologies, 70 A.B.A. J. 50, Aug. 1984.

^{322.} Both the Massachusetts statute and the identical North Dakota statute provide: "No person shall knowingly sell, transfer, distribute or give away any fetus for a use which is in violation of the provisions of this section [experimentation with some therapeutic, fetus-specific exceptions]. For purposes of this section, the word "fetus" shall include also an embryo or neonate." Mass. Ann. Laws ch. 112, § 12J(a)(iv) (Michie/Law. Co-op. 1983). The Rhode Island statute is almost identical. R.I. Gen. Laws § 11-54-1(f) (Supp. 1985).

^{323.} E.g., Mich. Comp. Laws Ann. §\$ 333.2685-.2692 (West 1980); Minn. Stat. Ann. § 145.422 (West Supp. 1985); N.M. Stat. Ann. § 24-9A-5c (1981).

^{324.} See supra text accompanying notes 195-202.

^{325.} The Pennsylvania statute does not prohibit experimentation on embryos, but does set up a complex disclosure scheme for *in vitro* fertilization researchers. 18 Pa. Cons. Stat. Ann. § 3213(e) (Purdon 1983).

^{326.} ILL. Ann. Stat. ch. 38, § 81-26(7) (Smith-Hurd Supp. 1985).

^{327. 556} F. Supp. 157 (N.D. Ill. 1983).

^{328.} Specifically, plaintiffs alleged violations of the first, fourth, ninth, and fourteenth amendments. *Id.* at 160.

^{329.} Id. at 161. Presumably, the "fundamental right" was a fourteenth amendment privacy right. A well-supported argument to this effect had been made by Flannery, Weisman, Lipsett & Braverman, supra note 315, at 1300-11. See Smith & Iraola, Sexuality, Privacy and the New Biology, 67 Marq. L. Rev. 263, 279-89 (1984); see also Robertson, The Right to Procreate and In Utero Fetal Therapy, 3 J. Leg. Med. 33 (1982).

State's interest in human life by prohibiting wilful exposure of embryos to harm [such] as by destructive laboratory experimentation."³³⁰ This interpretation, tacitly approved of by the court, suggests that whereas regulation of procreation-oriented in vitro fertilization procedures will be subject to strict scrutiny, embryo research regulation, like most fetal research regulation, ³³¹ will attract only "rational connection" scrutiny. It may be argued that state regulation of embryo research is valid if limited to the regulation of procedural issues such as parental consent or to considerations of public health.³³² Beyond that, state regulation of embryo research will be valid if it does not afford an embryo greater protection than a fetus or live-born viable child³³³ and is not impermissibly vague.³³⁴

Of course, some circumstances may be identified when the regulation of *in vitro* fertilization research will interfere with a woman's reproductive autonomy and thus attract the strict scrutiny review otherwise avoided. The Illinois statute specifically permitted the lawful termination of a *reimplanted* embryo.³³⁵ A problem arises, however, when an *in vitro* fertilization embryo is destroyed rather than reimplanted. The defendants in *Smith v. Hartigan* argued that this nonreimplantation, and hence destruction, would constitute a lawful pregnancy termination also covered by the Illinois exception.³³⁶

This characterization of embryo destruction as abortion creates something of a dilemma. The researcher attempting to use an embryo for procreation purposes may utilize the woman's fundamental right of privacy if he does not proceed with reimplantation. The researcher who never intends to implant a particular embryo, however, is not so protected³³⁷ because, by definition, no procrea-

^{330. 556} F. Supp. at 161.

^{331.} See, for example, the Wynn and Margaret S. cases discussed supra text accompanying notes 225-30 and the first amendment discussion, supra text accompanying notes 242-59.

^{332.} Id.

^{333.} Id.

^{334.} See the plaintiffs' and defendants' arguments in Smith v. Hartigan, 556 F. Supp. 157, 160-61 (N.D. Ill. 1983).

^{335. &}quot;[E]xcept that nothing in [the child abuse statute] shall be construed to attach any penalty to participation in the performance of a lawful preguancy termination." ILL. ANN. STAT. ch. 38, § 81-26(7) (Smith-Hurd Supp. 1985).

^{336. 556} F. Supp. at 163.

^{337.} This dilemma will concern not only the "pure" researcher, but also situations in which a "procreating" researcher has fertilized several embryos, yet knows that not all of them will be reimplanted. The Smith v. Hartigan court did not consider this issue because

tion is being contemplated. The destruction decision probably would not be at the behest of its "mother" and thus would not be protected by *Roe v. Wade*. This raises the spectre of prosecution for performing an illegal abortion when an embryo is destroyed. The appropriate response to this problem would be to interpret abortion laws as applying only after implantation and not immediately following fertilization.³³⁸

Aside from the threat of applying the general abortion laws to aspects of embryo research and in vitro fertilization, recall that some states specifically regulate these matters.³³⁹ In these cases, problems arise when a researcher experiments on an embryo to determine, for example, whether it will be born healthy. Whether the research is performed on the specific embryo to be reimplanted (pregnancy-specific),³⁴⁰ or on a sibling embryo (woman-specific),³⁴¹ this research may be afforded fundamental right protection. Absent this pregnancy-termination connection, however, the researcher must construct a first amendment or fundamental privacy protection for the research itself.³⁴²

If the fourteenth amendment has the effect of protecting some

the plaintiffs were not contemplating any "superovulation" technique. 556 F. Supp. at 163. According to Lori Andrews, the Boston District Attorney had considered that the Massachusetts abortion statute would not be violated if all the fertilized ova were reimplanted. See Andrews, supra note 321, at 50, 52. Yet the argument could be made that because the superovulation technique may be necessary to promote successful procreation, then all aspects of that technique, including destruction of unused embryos, should receive fundamental right protection. See Lorio, supra note 270, at 973, 981.

338. The problem is similar to, and arguably the solution should be the same as, that suggested by the debate as to whether some forms of contraception are in fact abortifacients. For English law, see Tunkel, Modern Anti-Pregnancy Techniques and the Criminal Law, 1974 CRIM. L. REV. 461. For the situation in the United States, see Model Penal Code § 230.3(7) (Proposed Official Draft 1962); Meloy, Pre-Implantation Fertility Control and the Abortion Law, 41 Chi.-Kent L. Rev. 183 (1964); Note, Criminal Law—Abortion—The "Morning-After Pill" and Other Pre-Implantation Birth-Control Methods and the Law, 46 Or. L. Rev. 211 (1967). Compare New Zealand Crimes Act, 1961, § 182A (1977 amendment). See generally Potts, Postconceptive Control of Fertility, 8 Int'l J. Gynaecology & Obstetrics 957 (1970).

Obviously, the issue is not merely a legal-semantic one, but involves each individual's psycho-philosophical responses to the indicia of life. See the continuum of views related by Lorio, supra note 270, at 980. For both the value and limitations of the modern bio-sciences, consider Milby, The New Biology and the Question of Personhood: Implications for Abortion, 9 Am. J.L. & Med. 31 (1983-84).

- 339. See supra text accompanying notes 321-25.
- 340. See supra text accompanying notes 235-36.
- 341. See supra text accompanying notes 236-37.

^{342.} See supra text accompanying notes 240-59. The specific question of first amendment protection for embryo research is considered by Flannery, Weisman, Lipsett & Braverman, supra note 315, at 1325-29.

forms of embryo research, the question arises whether other fundamental legal rights may have a contrary effect. English law,343 since before the abolition of colonial slavery,344 has recognized "no right of dominion over a living person as belonging to another."345 In the United States an application of the analogous thirteenth amendment³⁴⁶ to curtail fetal or embryo possession or even experimentation is doubtful.347 First, the Supreme Court generally has been cautious about its own,348 as opposed to congressional,349 utilization of the thirteenth amendment. Second, because state statutes have not mandated embryo or fetal experimentation, there is no question of state action here and the Supreme Court has been somewhat conservative in its application of the thirteenth amendment to private action.350 Finally, the ban on slavery may be viewed as a narrow precursor to the protection granted by the fourteenth amendment;351 and yet a fetus, and presumably an embryo, is not a person for the purposes of that latter, broader amendment.³⁵² Unlike the fourteenth, the thirteenth amendment does not use the word person; nevertheless, its purpose may be seen as limited to the protection of personhood, 353 and thus irrelevant to embryo and fetal experimentation.

^{343.} See, e.g., Somerset v. Stewart, Lofft. 1, 98 Eng. Rep. 499 (K.B.D. 1772).

^{344. 3 &}amp; 4 Will. 4, ch. 73 (1833).

^{345.} Mathews, Whose Body? People as Property, 1983 Current Legal Probs. 193, 223.

^{346. &}quot;Neither slavery nor involuntary servitude . . . shall exist within the United States." U.S. Const., amend. XIII.

^{347.} See, e.g., Harman v. Daniels, 525 F. Supp. 798, 802 (W.D. Va. 1981) (holding that injured fetus, subsequently born alive, had no cause of action under the Civil Rights Act or the federal Constitution).

^{348.} See, e.g., Palmer v. Thompson, 403 U.S. 217, 227 (1970) (Burger, J., concurring).

^{349.} The Court seems to take an expansive view of Congress' power under § 2 of the thirteenth amendment. See, e.g., Griffin v. Breckenridge, 403 U.S. 88 (1970); see also Calhoun, The Thirteenth and Fourteenth Amendments: Constitutional Authority for Federal Legislation Against Private Sex Discrimination, 61 Minn. L. Rev. 313, 349-62 (1977); Note, The "New" Thirteenth Amendment: A Preliminary Analysis, 82 Harv. L. Rev. 1294 (1969).

^{350.} See, e.g., Plessy v. Ferguson, 163 U.S. 537 (1895).

^{351.} tenBroek, Thirteenth Amendment to the Constitution of the United States: Consummation to Abolition and Key to the Fourteenth Amendment, 39 CALIF. L. Rev. 171, 172-73, 200-03 (1951).

^{352.} Roe v. Wade, 410 U.S. 113, 158 (1973).

^{353.} Of course, this does not dispose of the normative question of whether a fetus should be considered a person under the thirteenth or fourteenth amendments. See Baron, supra note 31, at 53-55.

VIII. ISSUES OF CONSENT AND VETO

Roe v. Wade and the English Abortion Act may have determined the basic allocation of rights between an abortee and an abortus. Neither of those basic documents of liberalized abortion, however, expressly dealt with the potential involvement of the other parties interested in the termination decision. On both sides of the Atlantic, the courts have had to determine whether the competing interests of fathers³⁵⁴ and grandparents³⁵⁵ deserve recognition. Legislative bodies have tended to deal primarily with conscientious objection by medical staff.³⁵⁶

Fetal and embryo experimentation creates similar problems.³⁵⁷ The legislative response, at least in the United States, has been to create a confusing, multilayered series of consent provisions. In England, broad next-of-kin consent clearly may be derived from existing common-law rights of possession.³⁵⁸ If the Anatomy Acts (whole bodies) and the Human Tissue Act (body parts) apply to the possession of pre-viable cadavers, then they provide for a parental veto.³⁵⁹ In addition, *The Peel Report* recommends that in

^{354.} See Paton v. British Pregnancy Advisory Servs. Trustees, [1978] 3 W.L.R. 687; Planned Parenthood v. Danforth, 428 U.S. 52 (1976); see also Kennedy, Husband Denied a Say in Abortion Decision, 42 Mod. L. Rev. 324 (1979); Lyon & Benett, Abortion—The Female, the Foetus and the Father, 32 Current Legal Probs. 217 (1979); Note, Third Party Consent to Abortions Before and After Danforth: A Theoretical Analysis, 15 J. Fam. L. 508 (1976-77).

^{355.} See Gillick v. West Norfolk and Wisbech Area Health Auth., [1985] 3 All E.R. 402, previous proceedings at [1983] 3 W.L.R. 859; Planned Parenthood Ass'n v. Ashcroft, 462 U.S. 476 (1983); City of Akron v. Akron Center for Reproductive Health, 462 U.S. 416 (1983); H.L. v. Matheson 450 U.S. 398 (1981); Bellotti v. Baird, 443 U.S. 622 (1979); Planned Parenthood v. Danforth, 428 U.S. 52 (1976). See generally Buchanan, The Constitution and the Anomaly of the Pregnant Teenager, 24 ARIZ. L. REV. 553 (1982); Note, Not While You Live in My House: The Supreme Court Upholds Mandatory Parental Notification of the Dependent Minor's Abortion Decision in H.L. v. Matheson, 13 Toledo L. Rev. 115 (1981-82); Recent Cases, Right to Abortion Limited: The Supreme Court Upholds the Constitutionality of Parental Notification Statutes, 28 Lov. L. Rev. 281 (1982).

^{356.} E.g., The Abortion Act, 1967, ch. 87, § 4; Fla. Stat. Ann. § 390.001(8) (West Supp. 1985); Ill. Ann. Stat. ch. 38, § 81-33 (Smith-Hurd 1977); Mass. Ann. Laws ch. 112, § 12I (Michie/Law. Co-op. 1983); Neb. Rev. Stat. § 28-338 (1979); Utah Code Ann. § 76-7-306 (1978); Wyo. Stat. § 35-6-106 (1977). For conscientious objection to fetal experimentation, see The Peel Report, supra note 7, § 43.

^{357.} See generally G. Annas, L. Glantz & B. Katz, supra note 4, at 204-06; Horan, Fetal Experimentation and Federal Regulation, 22 Vill. L. Rev. 325, 333-38 (1976-77); Quay, Utilizing the Bodies of the Dead, 28 St. Louis ULJ. 889, 895-96 (1984); Wilson, Fetal Experimentation: Rights of the Father and Questions of Personhood, 22 Vill. L. Rev. 403, 409-12 (1976-77); Comment, The Future of Fetal Research in California: A Proposal for Change, 15 San Diego L. Rev. 859, 881-84 (1978).

^{358.} See cases cited supra text accompanying notes 77-83.

^{359.} The Anatomy Acts, 1984, ch. 14, § 4(3)(b) gives a veto to "any surviving relative";

the case of fetal experimentation, a "parent" should have veto power on any research.³⁶⁰ As to embryo research, the Warnock report stopped short of recommending legislation but instead stated that "as a matter of good practice no research should be carried out on a spare embryo without the informed consent of the couple for whom that embryo was generated, whenever this is possible."³⁶¹

In the United States a similar common-law position obtains. Moreover, the UAGA has been adopted in all states. Although the UAGA does not expressly apply to experimentation, it does affect donations for the purposes of experimentation. Thus, compliance with its donation and consent provisions will imply consent to experimentation. The UAGA's provisions, however, are somewhat idiosyncratic. Notwithstanding consent by the donor,³⁶² the donee may not accept the donation if he has actual notice of the contrary wishes of another member of the relevant donor class.³⁶³

Possession and donation aside, consent to fetal experimentation is regulated at both the federal and state levels. In the case of federally funded experimentation, the Health Department regulations³⁶⁴ require that consent for *in utero* research be obtained on an informed basis from both legally competent parents. The father's consent, however, may be excused if: (1) his identity or whereabouts cannot reasonably be ascertained; (2) he is not reasonably available; or (3) the pregnancy was the product of rape.³⁶⁵ For fetuses *ex utero* but still living, the requirements of consent are the same.³⁶⁶

When the fetus is not living or when fetal material rather than an actual fetus is involved, the federal regulations defer to state law.³⁶⁷ Only ten of the twenty-five states regulating fetal research, however, even mention consent requirements. Of those ten, seven require some type of consent by the mother but do not detail any provisions for a writing or an informed judgment.³⁶⁸ Of the remain-

The Human Tissue Act, 9 & 10 Eliz. 2, ch. 54, § 1(2)(b) gives a veto to "any surviving relative."

^{360.} See Recommended Code of Practice § 3, in PEEL, supra note 7.

^{361.} WARNOCK, supra note 274, § 11.24.

^{362.} UAGA § 2(b).

^{363.} Id. § 2(c).

^{364.} See supra note 172.

^{365. 45} C.F.R. § 46.208 (1985).

^{366.} Id. § 46.209.

^{367.} Id. § 46.210.

^{368.} Ark. Stat. Ann. § 82-438 (Supp. 1985); Mass. Ann. Laws ch. 112, § 12J(a)(II) (Michie/Law. Co-op. 1983); Mich. Comp. Laws Ann. § 333.2688 (1980); N.D. Cent. Code § 14-02.2-02 (1981); 18 Pa. Cons. Stat. Ann. § 3216(b) (Purdon 1983) (written consent spec-

ing three, South Dakota requires the written consent of the "woman" and may apply to live as well as to dead fetuses.³⁶⁹ The New Mexico statute mimics the federal rules in mandating a legally competent mother's informed consent. It also defines in depth the meaning of "informed consent."³⁷⁰ Finally, the Illinois statute alone allows permission for experimentation to be granted in writing by either parent.³⁷¹

Such consent provisions raise serious concerns in the context of *induced* abortions. On the one hand, it may be argued that a woman who has terminated her pregnancy, presumably with a view to terminating the fetus, should be the last person permitted to determine its future.³⁷² Indeed, from the pro-life perspective such a rule presumably would be akin to permitting a murderer to donate his victim's corpse for anatomical study. On the other hand, permitting any one other than the abortee to determine such an issue would be both a factually and legally³⁷³ impermissible burden on the abortion decision. The same also could be said of any statutory provision that not only permitted the woman to decide the future of the abortus, but in fact *insisted* that she decide its fate.³⁷⁴

IX. Conclusion

One of the eternal verities of comparative research is that, despite differences in jurisprudential approaches and the availability of doctrinal structures, countries with similar socioeconomic structures and values will evolve similar answers to legal problems. Concerning the issues surrounding fetal and embryo disposal and experimentation, not only are there great similarities between the practical effects of regulation in England and the United States, but further, each country has displayed dubious internal consistency by modeling their disposal and experimentation rules after their abortion laws. Thus, in England difficult questions generally are left to the medical profession; there are published guidelines but a minimum of detailed statutory regulation. In the United

ified); R.I. Gen. Laws § 11-54-1(d) (Supp. 1985); Tenn. Code Ann. § 39-4-208 (1982).

^{369.} S.D. Codified Laws Ann. § 34-23A-17 (1977).

^{370.} N.M. STAT. ANN. § 24-9A-5c (1981).

^{371.} ILL. ANN. STAT. ch. 38, § 81-32.1 (Smith-Hurd Supp. 1985).

^{372.} This presumably is one of the rationales helind the Tennessee statute. See supra text accompanying note 133.

^{373.} See, e.g., Planned Parenthood Ass'n v. Fitzpatrick, 401 F. Supp. 554, 573 (E.D. Pa. 1975), aff'd sub. nom. Franklin v. Fitzpatrick, 428 U.S. 901 (1976).

^{374.} See Margaret S. v. Treen, 597 F. Supp. 636 at 669 n.27 (E.D. La. 1984); Margaret S. v. Edwards, 488 F. Supp. 181, at 222-23 (E.D. La. 1980).

States, multilayered, detailed regulation once again is illustrative of a legal system bent on supplying a definitive answer to any and all contentious issues that arise.

The differences between the two systems raise an important question. Since many of the moral and legal issues involved probably never will be satisfactorily resolved in our pluralistic societies, is it not preferable to recognize, as Glanville Williams did forty years ago, that the real question that should concern us is "one of the proper limits of the criminal law." In the United States, the detailed regulatory regimes that have emerged may not be immune from constitutional challenge, yet cannot fail to chill the interest of researchers. For some, such a prophylactic reaction to the perceived changes lurking in our future may be reassuring. The English approach, avoiding as it does any categorical assertion of "rights," does not please the antagonists on either side of the abortion or experimentation debates. Rather, it involves the taking of a calculated risk; daring to increase our scientific knowledge before we regulate our new world be too timid.

^{375.} G. Williams, The Sanctity of Life and the Criminal Law 223 (1957).

^{376.} For the impact of one regulatory regime, see Culliton, Fetal Research (II): The Nature of a Massachusetts Law, 187 Science 411 (1975); Fetal Research (III): The Impact of a Massachusetts Law, 187 Science 1175 (1975); Stetten, Freedom of Inquiry, 81 Generics 415, 419-20 (1975).

^{377.} For the difficulties involved in determining what risks to run *prior* to undertaking research, see Stetten, *supra* note 376, at 418.