The Legal Status of the Embryo

Lori B. Andrews, Chicago-Kent College of Law

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Lori B. Andrews*

The social identity of the human embryo has been described from a variety of perspectives—it has variously been called a human being, a potential life, a part of the pregnant woman, a biological program that instructs the woman’s body. Just as its social identity has been a matter of dispute, its legal identity has been in question as well. Historically, an embryo had few rights—although by statute it acquired certain property rights and some states by common law have given it rights in the torts context, with both generally contingent on live birth. However, the interests of the embryo in these contexts have usually not conflicted with the interests of the embryo’s progenitors. In fact, the awards in the cases may be seen to benefit the parents by providing money with which to raise the child.

New medical technologies to treat infertility, which involve human embryos outside of a woman’s body, are bringing to the fore questions about the legal status of the embryo. In the case of in vitro fertilization and related technologies such as cryopreservation, although the interests of the embryo and its parents are generally the same, at times they conflict. For example, a technique used to enhance the chances of the couple achieving a pregnancy—such as superovulation or cryopreservation—may lessen a particular embryo’s chance of coming to term.

Since the 1940’s, two different strains of judicial decisions have developed which together provide a basis for assessing the legal status of the embryo in relation to in vitro fertilization and related reproductive technologies. In the past four decades, the fe-

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1. Dietrich v. Inhabitants of Northampton, 138 Mass. 14, 17 (1884). See also Testimony of Barbara Katz Rothman before the Joint Hearings of the New York State Senate and the New York State Assembly Judiciary Committees on Surrogate Parenthood and New Reproductive Technology (Oct. 16, 1986) (“The fetus is part of the woman’s body, regardless of the source of the egg and sperm.”).

2. This is the viewpoint of University of Texas Law Professor John Robertson.
tus (and in some cases, the early embryo) has gained additional status in the eyes of the law.\textsuperscript{3} Harm to the conceptus is increasingly being recognized as the basis for a tort claim.\textsuperscript{4} At the same time, courts have readily acknowledged the constitutional stature of people’s decisions to procreate and protected those decisions—\textsuperscript{5} even if their personal decision resulted in harm to the embryo.\textsuperscript{6} In developing responses to \textit{in vitro} fertilization and related technologies, the law must be mindful of the tension between these two lines of precedents.

This article will address the legal status of the embryo in medically-assisted reproduction.\textsuperscript{7} To understand what legal claims, if any, may be asserted on behalf of such an embryo—against its progenitors or against third parties such as the physician facilitating the fertilization or the technician responsible for its storage—the article will describe the progenitors’ interest in autonomy in childbearing decisions and the evolving law regarding embryos and fetuses. The article will then assess the unique questions raised by the embryo created by \textit{in vitro} fertilization or related technologies.

\textbf{AUTONOMY IN CHILDBEARING DECISIONS}

Throughout this century, the Supreme Court has emphasized the protected nature of private family decisions. The Court has, through its decisions in \textit{Meyer v. Nebraska}\textsuperscript{8} and \textit{Pierce v. Society of Sisters},\textsuperscript{9} “respected the private realm of family life which the state cannot enter.”\textsuperscript{10} In \textit{Carey v. Population Services Interna-

\begin{itemize}
\item \textsuperscript{3} For example, Bonbrest v. Kotz, 65 F. Supp. 138 (D.D.C. 1946), was the first case to hold that a tort claim could be brought on behalf of a fetus.
\item \textsuperscript{4} See \textit{infra} text accompanying notes 111-63.
\item \textsuperscript{5} In 1942, the Supreme Court, in Skinner v. Oklahoma, 316 U.S. 535, 541 (1942), described procreation as one of the “basic civil rights of man.”
\item \textsuperscript{6} See, \textit{e.g.}, Roe v. Wade, 410 U.S. 113 (1973), in which a woman’s right to privacy was held to include the right to abort a pre-viable conceptus.
\item \textsuperscript{7} When using the proper medical terminology, the term “embryo” means a conceptus before eight weeks of gestation and the term “fetus” means a conceptus after eight weeks of gestation. However, courts and legislatures have not been so careful in their use of the terms. Courts and legislatures generally tend to refer to all products of conception as fetuses, even in the embryonic stage. Consequently, in its discussion of the legal precedents, this article will use the term “fetus” to include the conceptus from the moment of fertilization until birth.
\item \textsuperscript{8} 262 U.S. 390 (1923).
\item \textsuperscript{9} 268 U.S. 510 (1925).
\item \textsuperscript{10} Prince v. Massachusetts, 321 U.S. 158, 166 (1944).
\end{itemize}
tional, the Court noted that past decisions gave constitutional protection to “individual autonomy in matters of childbearing”\textsuperscript{11} and concluded that “the Constitution protects individual decisions in matters of childbearing from unjustified intrusion by the State.”\textsuperscript{12}

Procreation and child rearing are necessary conditions for individual and social well-being. Because of the central importance of childbearing decisions, individuals and couples have been granted substantial autonomy in their decisions about whether and when to bear children. The size of their families and the timings of the births are matters of personal judgment, not government mandate.\textsuperscript{13} The constitutional protection of autonomy in these matters includes the right to seek medical assistance to further a particular decision. For example, individuals are protected in seeking medical aid to obtain contraceptives\textsuperscript{14} or an abortion\textsuperscript{15} to effectuate their decisions regarding child bearing.

The Court has also indicated that “full vindication of the woman’s fundamental right necessarily requires that her physician be given ‘the room he needs to make his best medical judgment.’”\textsuperscript{16} Accordingly, in the context of procreative decisions regarding abortion, the court has held that “[t]he State’s discretion to regulate on this basis [maternal health] does not . . . permit it to adopt abortion regulations that depart from accepted medical practice.”\textsuperscript{17}

The precedents granting constitutional protection to the decision to bear a child coitally also apply to the decision to bear a child noncoitally.\textsuperscript{18} It is not the coitus itself that this right to privacy protects but rather the fundamental nature and importance of having a child.\textsuperscript{19} The decision about whether or not to procreate naturally is protected because of the importance of the biological and social experiences that bearing and rearing a child entails.

\textsuperscript{11} 431 U.S. 678, 687 (1977).
\textsuperscript{12} Id.
\textsuperscript{13} Griswold v. Connecticut, 381 U.S. 479, 497 (1965) (Goldberg, J., concurring) (Government “limitation of family size . . . is at complete variance with our constitutional concepts.”).
\textsuperscript{14} 381 U.S. 479.
\textsuperscript{15} Roe v. Wade, 410 U.S. 113 (1973).
\textsuperscript{17} 462 U.S. at 431.
\textsuperscript{18} Surrogate Parenting Assocs., Inc. v. Commonwealth ex rel. Armstrong, 704 S.W.2d 209 (Ky. 1986).
Those experiences are of such central importance to the individual and to society that the state must tread cautiously before denying people the opportunity to undergo those experiences and before forcing people to undergo those experiences over their refusals.

The constitutional protection of an individual's or couple's procreative and childrearing decisions is based on several values. It protects a person's bodily integrity by protecting her from a forced abortion or a harmful pregnancy.\textsuperscript{20} It protects a person's psychological well-being by allowing him or her to create and expand a family.\textsuperscript{21} It assures diversity in our society by allowing people to create children with their own genetic traits and raise these children according to their beliefs.\textsuperscript{22} It protects the home from governmental intrusion by refusing the state any grounds to enter to determine if an improper contraceptive method is being used.\textsuperscript{23}

These long-standing rationales for protecting private family decisions likewise serve as reasons to regard procreation using the new reproductive technologies as a fundamental right. The individual's bodily integrity is protected by allowing him or her to use or refuse an alternative reproductive technology. Diversity is enhanced since the alternative reproduction techniques are undertaken to allow one or both of the potential rearing parents to have

\textsuperscript{20} The Court in Roe v. Wade, 410 U.S. at 153, discussed the ways in which being forced to bear a child may be harmful to a woman. Particular types of harm sometimes ensue depending on the nature of the conception. When a woman is raped, she feels the pregnancy as a continuing violation of her body. Whitbeck, \textit{The Moral Implications of Regarding Women as People: New Perspectives on Pregnancy and Personhood}, in \textit{Abortion and the Status of the Fetus} 247, 264 (1983).

\textsuperscript{21} The beneficial psychological effects of being part of a family have been described in a variety of Supreme Court cases. According to the Supreme Court in Smith v. Organization of Foster Families for Equality & Reform, 431 U.S. 816, 844 (1977), part of "the importance of the familial relationship, to the individuals involved and to the society, stems from the emotional attachments that derive from the intimacy of daily association . . . ." Protecting decisions about whether and how to create a family is also a means of protecting a person from psychological and physical harms. Carey v. Population Servs. Int'l, 431 U.S. 678, 696 n.21 (1977); see also 410 U.S. at 153.

\textsuperscript{22} The Supreme Court in Skinner v. Oklahoma pointed out the harmful effects that restricting childbearing rights, in that case through governmentally-ordered sterilization, could have on variety in our culture: "In evil or reckless hands it can cause races or types which are inimical to the dominant group to wither or disappear." 316 U.S. at 541. According to the Supreme Court in Pierce v. Society of Sisters, "The fundamental theory of liberty upon which all governments in this Union repose excludes any general power of the State to standardize [education of] its children . . . ." 268 U.S. at 535.

\textsuperscript{23} In striking down a law prohibiting the use of contraceptives by married people, the Court in \textit{Griswold} asked "Would we allow the police to search the sacred precincts of marital bedrooms for telltale signs of the use of contraceptives? The very idea is repulsive to the notions of privacy surrounding the marriage relationship." 381 U.S. at 485-86.
a biological bond to the child, and thus create a child with the maximum biological link to the couple, and to rear that child according to their beliefs. Protection of the decision to use alternative reproduction also protects the home from entry by the state to determine if an alternative reproduction method, such as hormone stimulation prior to in vitro fertilization, is being used. 

The reasons for protecting childbearing decisions justify protecting decisions to use alternative reproduction. Consequently, state actions that restrict, prohibit, or mandate alternative reproduction will be subject to a strict standard of review. State actions that infringe that right will be justified only if they further a compelling state interest in the least restrictive manner possible. The burden of proof is on the government to demonstrate both the compelling need for a particular regulation and the fact that the regulation is narrowly drawn.

One rationale that the state might proffer as justification for regulating in vitro fertilization and its variants is an interest in protecting the embryo. This is the interest behind a Louisiana law that considers the embryo created through in vitro fertilization a juridical person until implantation and creates a high standard of care with respect to the embryo.

What interests does the state have which might justify the protection of embryos? Some might argue that embryos are persons and thus deserve legal protection. However, the state's interest in protecting the life of persons will not justify protection of embryos because the embryo has not tended to be recognized under the law as a person.

In Roe v. Wade, the state of Texas argued that a ban on a reproductive procedure, abortion, that harmed embryos was appro-

24. For example, in vitro fertilization with the couple's gametes allows both of them to have a genetic, and allows the woman to have a gestational, bond with the resulting child. Using a surrogate carrier to gestate their embryo allows both to have a genetic bond with the child. Use of a donated sperm allows the woman to have a genetic and gestational bond with the child. Use of a donated egg allows the man to have a genetic bond and the woman to have a gestational bond with the child. Use of a donated embryo allows the woman to have a gestational bond with the child.


26. 410 U.S. at 155; see also Robertson, Procreative Liberty and the Control of Conception, Pregnancy and Childbirth, 69 Va. L. Rev. 405, 433 (1983).


28. 410 U.S. at 163.
appropriate because life begins at conception.\textsuperscript{29} The Court noted that there were conflicting views about when life began, with strong support for the view that life does not begin until birth.\textsuperscript{30} In addition, the Court pointed out that new embryological data indicated that conception was a process.\textsuperscript{31} The Court even remarked how the implantation of embryos presented a problem for the idea that life began at the moment of conception.\textsuperscript{32} Accordingly, to some the mere existence of an embryo does not indicate the existence of a human life, since that embryo needs to be implanted in a woman’s womb to develop. In fact, the federal regulations governing research on fetuses and pregnant women specifically define a fetus as the product of conception from the time of implantation\textsuperscript{33} and define pregnancy as starting from implantation.\textsuperscript{34}

Since \textit{Roe v. Wade} held that the state’s interest in the potential life of the conceptus does not become compelling until viability\textsuperscript{35} and since procedures involving \textit{in vitro} fertilization and other reproductive technologies involving embryos all take place within the first five days of the first trimester, long before viability, it could be argued that the state may not adopt restrictive laws governing the new reproductive technologies. Nevertheless, it is likely that some states will urge legislation in this area, arguing that such legislation protecting the embryo is necessary to recognize its symbolic value, to reflect people’s moral sentiment or to avoid potential harm to any resulting child.

A state might argue that maintaining respect for human life should justify prohibiting actions which are potentially destructive of embryos. It might argue that full protection of embryos and fetuses is necessary for maintaining appropriate attitudes of respect toward persons in general and toward especially vulnerable groups of persons, such as seriously ill newborn children, comatose individuals and elderly patients.\textsuperscript{36} The underlying assumption of this

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29. \textit{Id.} at 159.
30. \textit{Id.} at 160.
31. \textit{Id.} at 161.
32. \textit{Id.}
33. 45 C.F.R. § 46.203(c) (1985).
34. \textit{Id.} § 46.203(b).
35. 410 U.S. at 163.
36. Patricia A. King argues for another ground for protecting the embryo—the psychological benefit it provides to existing people to know that they in the past had been protected.

Corresponding with the gratification felt by mature adults at the thought that their own wishes will be significant after they die is a gratification at the thought that
view is that the embryo, though it may not be a person, nevertheless has a special status; it is symbolic of human life or represents life in a way which makes its destruction symbolic of the destruction of persons. Persons who hold this view claim that the destruction of embryos may influence our attitudes toward and treatment of real people—that we may come to treat the symbolized no better than we have treated the symbol. In short, the notion is that proscribing procedures which are potentially harmful to embryos is a symbolic expression of our interest in human life, an expression which may be necessary for sustaining the level of respect persons deserve.

The protection of symbols is an important part of our legal culture, but its invocation is not sufficient to justify infringing upon a fundamental constitutional right. To prohibit reproductive technologies on the basis that they are potentially harmful to embryos and thus symbolically destructive of human life is to protect a symbol of life at the cost of undermining the possibilities of actual life. There is no empirical evidence that actions toward a symbolic entity influence negatively the way actual people are treated.37 Moreover, since early embryos are undifferentiated cell masses and do not resemble people, it is unlikely that actions toward in vitro embryos will shape our actions toward newborn chil-

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37. As Joel Feinberg notes, the weakness of the symbolic argument is “the difficulty of showing that the alleged coarsening effects really do transfer from primary to secondary objects.” Feinberg, The Mistreatment of Dead Bodies, HASTINGS CENTER REP., Feb. 1985, at 31, 37. He observes that “[w]e can deliberately inhibit a sentiment toward one class of objects when we believe it might otherwise motivate inappropriate conduct, yet give it free rein toward another class of objects where there is no such danger.” Id. (footnote omitted).
dren, comatose people, elderly patients or other persons. It would be unconstitutional to ban on symbolic grounds alone the use of experimental techniques on embryos, such as embryo transfer, that further procreative decisions.

Nor is the fact that some people might be offended by in vitro fertilization, or might have religious objections, sufficient to restrict couples’ use of the technique. Moral approbation is not a sufficient reason to prohibit exercises of a fundamental constitutional right. Regulation of morality is a rational, legitimate state interest but is unlikely to be considered a compelling one. Moreover, to the extent that the objections are religious, “they could not be enforced by the government.” In contrast, granting various protection to embryos in a way that does not infringe upon procreative rights (for example, by allowing suits on the embryos’ behalf against third party tortfeasors or banning experimentation such as toxicity studies that do not implicate procreative rights) would be arguably constitutional. Without a fundamental right at issue, the legislation would be considered constitutional if it was rationally related to a permissible governmental purpose, and the protection of the embryo as a symbol would likely meet that standard.

Protection of the embryo might also be urged in order to protect the child into which the embryo has the potential to develop. Yet, there needs to be some standard to measure how much safety and efficacy is required. Ideally, it would be best if each procedure had 100% safety and efficacy—all women using the techniques achieved a pregnancy, no women experienced infections, no children born after use of the technique had genetic defects or were angry or disappointed about their unique conceptions. However, a law that required that level of success from the techniques before they could be employed would make the techniques unavailable. At the same time, such a law would be anomalous since risks per-

38. In another area of fundamental constitutional rights, for example, the Supreme Court has held that “the fact that protected speech may be offensive to some does not justify its suppression.” 431 U.S. at 701.
39. Fanta, Legal Issues Raised by In Vitro Fertilization and Embryo Transfer in the United States, 2 J. IN VITRO FERTILIZATION & EMBRYO TRANSFER 65, 72 (1985). Fanta also notes that “[e]ven if the majority of the public found the procedure morally offensive, it would be done privately and out of the public eye. Clearly, the offense to public morality would not be sufficiently pervasive or extensive to justify a complete ban on the procedure.” Id.
40. Id.
vade all personal activities.

How much risk should be permitted? As an initial standard the law should examine the risks that people are allowed to take with normal reproduction. For example, if society runs the risk of a certain amount of potential harm to the resulting child by allowing couples to bear children without scrutinizing their qualifications for parenthood, it is inappropriate to place more stringent restrictions on people using in vitro fertilization. If society allows couples with recessive genetic defects to reproduce, and thus risk producing a child with a genetic disorder, it should also allow use of reproductive technologies, even if they present a similar potential physical risk to the resulting child.

When in vitro fertilization (IVF) was first proposed, there was considerable concern about the potential harm to the child that IVF might entail.42 As IVF has gone forward, the physical risks to the nearly 3000 IVF children born to date have turned out not to be greater than the risks to those conceived naturally.43 Thus, potential harm to offspring does not seem to be a sufficient reason to prohibit in vitro fertilization.

In determining the allowable risks in reproductive decisions and the appropriateness of state regulations to minimize risks, the Supreme Court has accorded great weight to the guidelines of medical associations.44 The Court, in determining whether a purported safety regulation was reasonable, has turned to medical evidence and professional guidelines for evidence of what type of regulation was appropriate. The Court has appeared to recognize that the medical profession itself plays an important role in assuring the safety of reproductive procedures, perhaps making the role of the state less important.45

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42. Ramsey, Shall We "Reproduce"? I. The Medical Ethics of In Vitro Fertilization, 220 J. A.M.A. 1346 (1972); Editorial, Genetic Engineering in Man: Ethical Considerations. Id. at 721.


44. In City of Akron v. Akron Center for Reproductive Health, 462 U.S. 416 (1983), for example, the Court held that a second trimester hospitalization requirement was unconstitutional because it placed a significant obstacle in the path of women seeking an abortion and was not a reasonable health regulation. As evidence for the holding that the regulation was unreasonable, the Court cited guidelines of the American Public Health Association and the American College of Obstetricians and Gynecologists that recommended that certain second trimester abortions could be performed in outpatient facilities. Id. at 436.

45. States themselves have relied on the medical profession to establish the standards
The constitutional backdrop against which the statutes and cases regarding embryos must be judged is one in which the actions of the progenitors toward the embryo have a different status than the actions of other individuals toward an embryo. The progenitors' exercise of their right of privacy to make procreative decisions protects even those choices that raise potential risks to their embryo. It is likely that the only restrictions on access to medically-assisted reproduction that will be upheld as constitutional are those designed to protect the child that the embryo has the potential to develop into. In the evaluation of restrictions ostensibly designed to protect the resulting child from harm, the standards of the medical professional will carry considerable weight.\textsuperscript{46}

**THE EMBRYO AND THE LAW**

To better understand the implications of granting protection to the embryo, both in situations that implicate parental childbearing decisions and those that do not, it is useful to traverse the confusing terrain of the law's handling of claims on behalf of the embryo in a variety of other contexts.

In addressing permissible governmental regulation of the new reproductive technologies, one should first inquire about the legal identity of the embryo. Is the embryo the property of the donor or is it a person? The law has generally categorized an embryo as neither, but instead has developed certain standards applicable to the treatment of embryos in various circumstances.

Some groups and commentators champion the property approach to the embryo.\textsuperscript{47} An American Fertility Society ethical statement specifically provides that "concepti are the property of the donors."\textsuperscript{48} In contrast, the Warnock Committee in England recommended legislation that would "ensure there is no right of

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\textsuperscript{48} *Ethical Statement of In Vitro Fertilization*, 41 *Fertility & Sterility* 12 (1984).
ownership in a human embryo.” 49 Similarly, the Waller Committee in Victoria, Australia said that “[t]he Committee does not regard the couple whose embryo is stored as owning or having dominion over the embryo.” 50 The practical difference between these opposing philosophical approaches is nevertheless small, since the American Fertility Society’s ethical statement and the Warnock and Waller Reports give couples control over the use of their embryos. For example, the couple may, within specified time constraints, choose to have the frozen embryos implanted in the woman, donated to a second woman, donated for research, or terminated.

The only case on point, Del Zio v. Columbia Presbyterian Medical Center, 51 has held that the IVF embryo is not the property of the couple who provide the sperm and egg. In 1973, in that case, Doris and John Del Zio became the first reported couple in the United States to attempt IVF. Their physician had tried three times to repair Mrs. Del Zio’s fallopian tubes, but she had not managed to carry a pregnancy successfully to term. Since the physician felt additional surgeries would be of no benefit, he suggested a procedure which was then only a glimmer in the eyes of researchers—in vitro fertilization. At that time, although Drs. Steptoe and Edwards had reported in the scientific literature that they had fertilized human eggs outside of the body, there apparently had been no successful reimplantations. An egg was removed by laparoscopy from Mrs. Del Zio, her husband’s sperm was added, and the mixture was put into an incubator.

When the chairman of the department in which the culture was housed, Dr. Raymond Vande Wiele, learned about the attempted IVF, he felt that it was both unethical and immoral to carry on the work with Mrs. Del Zio. 52 Vande Wiele felt that research should have been undertaken with primates before subjecting a human to the procedure 53 and that institutional permission

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52. Sweeney & Goldsmith, Test Tube Babies: Medical and Legal Considerations, 2 J. LEGAL MED. 1, 6 (1980).
53. Id.
should have been sought before the procedure was undertaken.\textsuperscript{64}

Without notice to the physician involved or the couple, Vande Wiele removed the culture from the incubator and destroyed it. A year later, the Del Zios filed suit against Columbia-Presbyterian Medical Center, Columbia University and Dr. Raymond Vande Wiele, claiming infringement of property rights in the embryo and infliction of emotional distress. After a five-week trial and thirteen hours of jury deliberations, the jury returned a verdict rejecting the property claim but awarding plaintiffs damages for emotional distress.\textsuperscript{65}

Thus, the property approach has not been accepted as a satisfactory framework within which to analyze the legal status of the embryo, but neither has the personhood approach been so accepted. In the landmark \textit{Roe v. Wade} case, the Court scanned the Constitution, looking for uses of the word “person” and found that none of the contexts “has any possible prenatal application.”\textsuperscript{66} It has been impossible for prosecutions to take place under the homicide laws for harm to an embryo because the laws criminalize the killing of a person and an embryo is not considered a person.\textsuperscript{67} Likewise, the wrongful death statutes have generally not applied to a pre-viable conceptus since wrongful death statutory language also speaks of harm to a person.\textsuperscript{68}

Neither person nor property, the legal identity of the embryo differs depending on whether the focus is criminal law, tort law, inheritance law, welfare law or tax law. Moreover, because of the strong constitutional protection for autonomy in procreative decisions, the law gives the progenitors greater discretion in their actions toward the embryo, when those actions are part of reproductive decisions, than it gives to other persons in their actions toward the embryo.

\section*{CRIMINAL LAW}

In the criminal law arena, the conflict between the evolving rights of the embryo and the procreative rights of the individuals

\begin{itemize}
\item \textsuperscript{54} \textit{Id.}
\item \textsuperscript{55} \textit{Del Zio}, No. 74-3558, slip op.
\item \textsuperscript{56} 410 U.S. at 157-58. The court also noted that the fetus had rarely been treated as a person under tort or criminal law. \textit{Id.} at 161-62.
\item \textsuperscript{57} See \textit{infra} text accompanying notes 93-105.
\item \textsuperscript{58} See \textit{infra} text accompanying notes 169-204.
\end{itemize}
and couples is clearly seen. The constitutional protection of autonomy in childbearing decisions has provided the basis for allowing abortion of a pre-viable fetus. The psychological and physical implications of pregnancy and parenthood are so serious that people cannot be forced to bear them against their will. In contrast, during the past century, outside the context of reproductive decisions, fetuses and, in rare instances, embryos have increasingly gained claims to protection from fatal criminal assaults.

At English common law, terminating an embryo or fetus was not an indictable offense. However, by the eighteenth and nineteenth centuries, English courts were willing to uphold convictions for homicide if the victim was a quick fetus, who was born alive and who survived and breathed for a brief period of time, only to die as a result of the criminally inflicted prenatal injuries.

For several reasons, some philosophical and some evidentiary, courts refrained from imposing criminal penalties if the requirements of quickening and live birth were not met. Theologians and philosophers had long debated when the human spirit was "formed" in the conceptus, i.e., when the soul infused the fetus. The English common law generally followed the doctrine of "mediate animation," a doctrine holding that an embryo had a soul or became "animated" at some point between conception and live birth. Because St. Thomas Aquinas had defined movement as one of the two first principles of life, Bracton, writing in the early thirteenth century, decided that quickening was the critical time when separability and soulhood began for the fetus. Later common law scholars adopted this view, and it came into this country as part of the common law.

On a more practical note, courts required a live birth because they feared that, otherwise, proving the exact cause of death would be an impossible task and because after birth there would clearly be a person the law could protect. It was also thought that knowing whether or not the child could exist apart from its mother—the whole idea behind the quickening concept—could not be proven.

60. Quickening, the mother's sensation of the child moving within her, occurs between the 16th and 20th week of pregnancy. International Dictionary of Medicine and Biology 2374 (1986).
61. 410 U.S. at 131-34.
until the child was born alive. Consequently, the law required that the child who was born breathe with its own lungs and that its blood circulate freely and of its own accord. If the child could not meet these demands, the law considered him still a fetus and not protected by the homicide laws. The child was required to have been able to exist independently.

In the early American cases, quickening\(^{63}\) and live birth\(^{64}\) were important points as well.\(^{65}\) One reason for the continued use of these two requirements was the sentiment that it would be hard to know whether a living child would have existed in the absence of the offender's actions unless there was proof of the fetus' "aliveness" (quickening) and an indication that it otherwise would have survived (live birth). Another reason was that the offender was entitled to notice of what action was criminal and the popular con-

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63. In the case of Evans v. People, 49 N.Y. 86, 89 (1872) (overruled on other grounds by People v. Eulo, 63 N.Y.2d 341, 472 N.E.2d 286, 482 N.Y.S.2d 436 (1984)), the court said that, in a prosecution for manslaughter by abortion, the prosecution must prove quickening and that the trial court had erred in assuming that the offense is committed by the destruction of the embryo at any time after conception. The court did not state that the embryo was not alive before quickening. Instead, it reasoned that although before quickening, "there may be embryo life in the foetus, there is no living child." 49 N.Y. at 90. The court was well aware that destruction of a "pre-quick" embryo would prevent a child from being born. But the court said that the law was not designed to protect that potential but rather to punish the killing of a living child (i.e., a post-quickening fetus). "It is not the destruction of the foetus, the interruption of that process by which the human race is propagated and continued, that is punished by the statute as manslaughter, but it is the causing the death of a living child." Id.

Foster v. State, 182 Wis. 298, 196 N.W. 233 (1923), supported the Evans rule, declaring that the embryo of six to eight weeks old is neither popularly nor scientifically recognized as a "human being." The court held that the fetus must be quick in order to be considered a human being under a manslaughter statute. Id. at 301, 196 N.W. at 234. Destruction before quickening was viewed as the lesser offense, that of producing a miscarriage. Prosecution of harm to a "pre-quick" fetus was not viewed as recognizing a right of that fetus; rather, it was seen as protecting the morals of the community since "it is against good morals to destroy that which otherwise presumably would develop into a human being." Id. at 300, 196 N.W. at 234.

64. As early as 1797, an American case held that a live birth was necessary to support an indictment of murder. Commonwealth v. McKee, 1 Add. 1 (Pa. 1797), cited in Keeler v. Superior Court, 2 Cal. 3d 619, 627, 470 P.2d 617, 621, 87 Cal. Rptr. 481, 485 (1970) (en banc). Even though a murder charge cannot generally be brought unless there is a live birth, the offender could sometimes be charged under statutes providing that it is manslaughter to willfully kill an unborn quick child by injury to the mother which would have been murder if the mother died. See, e.g., Williams v. State, 34 Fla. 217, 15 So. 760 (1894).

65. Nevertheless, an occasional case has indicated in dicta that it was homicide to inflict what ultimately proved to be fatal injuries at any time after conception if the child is born alive and then succumbs to its prenatal injuries. See, e.g., Morgan v. State, 148 Tenn. 417, 256 S.W. 433 (1923).
ception was that a “pre-quick” fetus was not a human being.\textsuperscript{66}

The requirement that the child be born alive before a charge of murder can be leveled produces the anomalous result that it is not possible to charge with murder an offender who does the greatest harm to the fetus, i.e., killing it in utero, while it is possible to prosecute one who does less harm to the fetus, i.e., injuring it to the point that it survives birth but dies subsequently.\textsuperscript{67}

As medical technology has advanced, it has become easier to demonstrate the connection between an individual’s actions and the resulting demise of a fetus. Consequently, attempts have been made to do away with the requirement that the child be born alive in order for a murder charge to be brought, especially if the injury occurred after viability. However, the courts have acquitted defendants charged criminally with homicide to a fetus. The prosecutions generally have been based on statutes making criminal the killing of a person or human being; since the fetus is not considered a person or human being, the defendant has been acquitted. Issues have been raised about fair notice as well, since the woman may not be visibly pregnant, leading to the conviction of the defendant for murder of a fetus he did not know existed.\textsuperscript{68}

In 1970, the case of \textit{Keeler v. Superior Court},\textsuperscript{69} presented to the California Supreme Court the question of whether or not to convict a husband of the murder of a fetus between thirty-four and thirty-six weeks old. His estranged wife had become pregnant by another man. The husband stopped his wife on a mountain road, looked at her abdomen and said, “I’m going to stomp it out of you.”\textsuperscript{70} He then beat her and struck her with his knee in the abdomen. The fetus was delivered stillborn by a caesarean section. It

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  \item \textsuperscript{66} To the court in \textit{Foster} 182 Wis. at 302, 196 N.W. at 235, it did not matter that science viewed the embryo as alive from the moment of conception. The court held that the “law for obvious reasons cannot in its classifications follow the latest or ultimate declarations of science. It must for purposes of practical efficiency proceed upon more everyday and popular conceptions, especially as to definitions of crimes that are \textit{malum in se}.” \textit{Id}. To the court, this was a matter of notice since the ordinary person would operate under the popular notion that human life began with quickening. \textit{Id}.
  \item \textsuperscript{67} This strange state of the law led to a defendant trying to acquit himself on the grounds that the fetuses he harmed would have died in the womb if the physician had not delivered them by Caesarean section. \textit{State v. Anderson}, 135 N.J. Super. 423, 343 A.2d 505, 507 (1975), \textit{rev’d}, 173 N.J. Super. 75, 413 A.2d 611 (1980).
  \item \textsuperscript{68} Interview with Gowendyn Anderson, defense attorney in the first case brought under the Illinois feticide law.
  \item \textsuperscript{69} 2 Cal. 3d 619, 470 P.2d 617, 87 Cal. Rptr. 481.
  \item \textsuperscript{70} \textit{Id}. at 623, 470 P.2d at 618, 87 Cal. Rptr. at 482.
\end{itemize}
had died as a result of a cracked skull and consequent cerebral hemorrhaging. For fear of becoming judicial legislators by creating common law crimes and of unconstitutionally infringing upon the defendant’s right to notice about the criminal nature of killing a fetus, the supreme court declined to interpret the words “human being” to include a viable fetus not born alive.

Two dissenting judges considered it to be homicide when a viable fetus is killed. The dissenters noted that changes in medical technology should be seen as changing the scope of the homicide cases. Analogizing to other areas of medicine, they pointed out that it is not homicide to kill a corpse, but that new medical techniques for resuscitation continue life past the time it would previously have been considered a corpse and consequently extend the period of time when it is possible to commit murder against that being. “We commonly conceive of human existence as a spectrum stretching from birth to death,” wrote the dissenters. “However, if this court properly might expand the definition of ‘human being’ at one end of that spectrum, we may do so at the other end.” As to the notice requirement, the dissenters pointed out “the absurdity of the underlying premise that the defendant consulted Coke, Blackstone or Hale before kicking Baby Girl Vogt to death.” In addition, the dissenters said that the argument that the defendant lacked notice was weakened by dicta in an earlier California case urging the use of the viability criteria and rejecting the use of live birth.

The common law view was that the killing of an unborn child in utero was not murder, “unless so declared by statute.” Since

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71. Id.
72. Id. at 630-33, 470 P.2d at 623-26, 87 Cal. Rptr. at 487-90.
73. Id. at 633-34, 470 P.2d at 626, 87 Cal. Rptr. at 490.
74. Id. at 642-43, 470 P.2d at 632, 87 Cal. Rptr. at 496 (Burke, C.J., dissenting). The dissenters also asked,
Would this court ignore these developments and exonerate the killer of an apparently ‘drowned’ child merely because that child would have been pronounced dead in 1648 and 1850? Obviously not. Whether a homicide occurred in that case would be determined by medical testimony regarding the capability of the child to have survived prior to the defendant’s act.
75. Id. at 642, 470 P.2d at 632, 87 Cal. Rptr. at 496.
76. Id.
77. Id. at 644, 470 P.2d at 633, 87 Cal. Rptr. at 497.
78. Id. at 644-45, 470 P.2d at 633-34, 87 Cal. Rptr. at 497-98 (citing People v. Chavez, 77 Cal. App. 2d 621, 176 P.2d 92 (1947)).
79. Abrams v. Foshee, 3 Iowa 274, 278 (1856).
that view has generally prevailed—even when the fatal injury occurred after viability—some states have not attempted to criminalize feticide by adopting new statutes. Because of anger over acquittals of defendants whose actions caused the death of an older fetus and because of the trend in tort law toward recovery based on greater medical knowledge of fetal life, many state legislatures have taken action. One approach has been to extend the common law treatment of homicide, as codified in the state statute, to include the fetus. These revised homicide statutes have been enacted in some states, including New York and California. One of several statutes designed to protect the pregnant woman, New York’s statute is quite clear: “Homicide means conduct which causes the death of a person or an unborn child with which a female has been pregnant for more than twenty-four weeks . . . .”

In a reaction against the Keeler decision, the California Legislature amended the homicide statute, defining the crime as “the unlawful killing of a human being, or a fetus, with malice aforethought.” The Legislature was apparently divided about the stage of gestation at which prosecution for homicide should be possible and so, to assure passage of the bill, left the term “fetus” undefined. Although the statute did not mention viability, a court subsequently applying the law decided that the statute applies only to intentional killings of a fetus with a capability for independent life, i.e., a viable fetus. Consequently, the court affirmed the dismissal of a murder charge in a case where the victim was a twelve to fifteen-week-old fetus. It appears that the court misconstrued Roe v. Wade to mean not only that the state could not criminalize the termination of a pre-viable fetus by its mother but also that the state could not criminalize feticide before viability by a third party against the mother’s will. The better view of Roe v. Wade’s applicability is that “nothing in the decision prohibits the state’s regulation of other forms of feticide. Roe does not prevent a state from adopting a particular theory as to when

80. CAL. PENAL CODE § 187 (West Supp. 1986); N.Y. PENAL LAW § 125.00 (McKinney 1975).
81. N.Y. PENAL LAW § 125.00.
82. CAL. PENAL CODE § 187.
84. Id. at 757, 129 Cal. Rptr. at 502.
85. Id. at 759, 129 Cal. Rptr. at 504.
86. Id. at 754, 129 Cal. Rptr. at 500.
87. Id. at 757, 129 Cal. Rptr. at 502.
life begins, but rather prohibits the state from using this theory to override the rights of the pregnant woman.”

In a later California case, in 1978, a man beat his former wife who was twenty-three weeks pregnant, telling her that he intended to kill the fetus. Since the fetus was considered viable, the court found the man guilty of the murder. Arguably, the language of the statute (“the unlawful killing of . . . a fetus”) is nevertheless broad enough on its face to support a murder charge in connection with the destruction of a pre-viable fetus as well.

Louisiana is another state that specifically extended its criminal laws to protect the fetus in response to a holding that adhered to the common law rule requiring live birth. In the catalyst case, *State v. Gyles*, an eight-month-old fetus was delivered stillborn after its mother was beaten with a stick. In deciding a fetus was not a “human being” under Louisiana’s murder statute, the court noted that the authority for the common law rule was uniform with no opposing authority at the time the case was decided. The court did state that the Legislature had the power to make it a crime to kill a fetus, as long as the legislation did not violate the tenets of *Roe v. Wade*.

After *Gyles*, the Louisiana law took a peculiar course. State legislators passed a new statute that defines a “person,” for the purposes of the criminal code, as including a human being from the moment of fertilization and implantation. However, a later court did not interpret this law as actually extending the homicide law. This decision, *State v. Brown*, angered at least one commentator, as evidenced by his sarcastic title, “Feticide is Still Legal in Louisiana.” In the *Brown* case, the defendant was convicted of manslaughter of a pregnant woman and charged with the murder of her fetus. He then presented a motion to quash the indictment for double jeopardy reasons, implying that the fetus and the mother comprise the same entity. In spite of the “personhood” idea in the intervening legislation, the court refused to extend the

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90. 313 So. 2d 799 (La. 1975).
91. *Id.* at 801.
92. *Id.* at 802.
94. 375 So. 2d 916.
statement, stating that “[h]omicide is not the killing of a ‘person,’ but is the killing of a ‘human being’. . . .” The court emphasized that if the homicide laws are to be amended to encompass feticide, the amendment must be clear and must comport with the woman’s right to a voluntary abortion. Thus, all terminations of embryos and fetuses could not be designated as murder.\footnote{97}

Illinois also passed legislation in reaction to a case decided according to the common law rule. In \textit{People v. Greer},\footnote{\textit{Id.} at 918. In fact, the court noted that the legislative history of the statute indicated that it was not particularly intended to enlarge the murder category but was directed at recriminalizing abortion. \textit{Id.}} the court reversed the conviction in the murder of an eight and one-half month-old fetus. The partial dissent by Justice Moran pointed out that the relevant homicide statute\footnote{People v. Greer, 79 Ill. 2d 103, 402 N.E.2d 203 (1980).} defined murder as the unlawful killing of an “individual” and that Baby Girl Moss was clearly viable at the time of the injury and death. Justice Clark’s partial dissent recognized that “it is not necessary to plumb the depths of one’s reason to reach the conclusion that it is wrong for there to be such a sizeable gap in our criminal law that a person may destroy a viable, $8^{1/2}$-month-old fetus with impunity.”\footnote{\textit{Ill. Rev. Stat.} ch. 38, para. 9-1(a) (1961).} The Legislature then established the crime of feticide, or causing the death of a fetus through an attack on its mother if it is proved that the fetus would have been “capable, at the time of its death, of sustained life outside the mother’s womb.”\footnote{402 N.E. 2d at 213-14 (Clark, J., concurring in part, dissenting in part).}

The states that have amended their homicide laws to protect the fetus differ in whether they redefine “human being” to include fetus or list the fetus as a separate type of being. In Utah, for example, “[a] person commits criminal homicide if he intentionally, knowingly, recklessly, with criminal negligence, . . . causes the death of another human being, including an unborn child.”\footnote{\textit{Utah Code Ann.} § 76-5-201 (Supp. 1986).} The Utah language includes “unborn child” as a “human being.” In contrast, the California law separates the two: “a human being, or

\footnote{\textit{Id.}}
a fetus."\textsuperscript{103}

An alternative to amending the homicide statute is to simply enact a new statute that defines intentional harms to the fetus as a separate crime. This action has been taken, for example, in Illinois\textsuperscript{104} and Iowa.\textsuperscript{105} States using this statutory form tend to define the crime very completely and to specify the requisite intent and circumstances, including fetal age, necessary for a conviction.

The desire to prevent third parties from interfering with a woman's ability to carry her conceptus to term, as well as to protect the pregnant woman herself, motivates the trend to criminalize harm to the conceptus. In the debates on the Illinois feticide law, one of the bill's sponsors described the purpose of the bill: "What we've attempted to do with Senate Bill 192 is offer some assurances to pregnant mothers, that they can expect to carry that child full term without fear of aggravated assault . . . resulting in the loss of that child."\textsuperscript{106} The majority of the feticide laws hinge prosecution on injury to the mother. Florida's feticide statute is representative: "The willful killing of an unborn quick child, by any injury to the mother of such child which would be murder if it resulted in the death of such mother, shall be deemed manslaughter, a felony of the second degree . . . ."\textsuperscript{107} Other states whose feticide statutes follow this form include Georgia, Michigan, Mississippi, Nevada and Oklahoma.\textsuperscript{108} Under such laws, harm to an extracorporeal embryo (for example, one in a petri dish) would not be actionable.

Similarly, since some laws describe the criminal activity in terms of harm to a fetus, without defining what a fetus is, an argument could be made that these laws do not penalize harm to an embryo, since a fetus is a conceptus at a later stage of development. Only a few states’ laws might allow prosecution of persons who cause fatal harm to an embryo. These are homicide laws which

\begin{itemize}
  \item \textsuperscript{103} Cal. Penal Code § 187(a) (West Supp. 1986).
  \item \textsuperscript{104} Ill. Ann. Stat. ch. 38, para. 9-1.1.
  \item \textsuperscript{105} Iowa Code Ann. § 707.7 (West 1979).
  \item \textsuperscript{106} Parness, Crimes Against the Unborn: Protecting and Respecting the Potentiality of Human Life, 22 Harv. J. on Legis. 97, 149 (1985) (citing Ill. S., TRANSCRIPTION OF DEBATES, 82d Gen. Assembly 198 (May 19, 1981) (41st legislative day) (statement of Sen. Thomas)).
  \item \textsuperscript{107} Fla. Stat. Ann. § 782.09 (West 1976).
\end{itemize}
have been amended to include the death of a fetus or unborn child in states where that term is understood to include all products of conception.

The basis for protection of the embryo under the criminal law is thus quite modest. Only a few states have homicide laws which have been extended to include the unborn without indicating that they are referring to the unborn in utero. In those states, a physician or other individual who intentionally terminates an in vitro embryo, except in furtherance of the procreative wishes of the progenitors, could be charged with homicide. In contrast, a couple would be acting within their constitutionally protected rights if, in good faith, they choose a reproductive technology that enhances their chance at procreation but could harm the embryo.109

Even in instances where there is a live birth and subsequent death from injuries sustained as an in vitro embryo, the criminal law has little application since most murder precedents do not apply when injuries are sustained at such an early stage in gestation.110

TORT LAW

Tort law, even more than criminal law, is changing its approach to the legal status of the embryo and fetus. In 1884, Oliver Wendell Holmes in a Massachusetts case, Dietrich v. Inhabitants of Northampton,111 wrote that “[a]n unborn child has no existence as a human being separate from its mother; therefore it may not recover for the wrongful conduct of another.”112 Although it was a wrongful death case, not a tort case, the logic in that case also determined all holdings in the tort area until 1946.

The holdings against civil recovery to a child for harm inflicted in utero used several rationales. One such rationale, set forth in Dietrich, was that the fetus was part of the woman, not a separate individual. Since, in many instances, a third party would have no notice that the fetus existed, the courts felt the individual

109. See infra text accompanying notes 255-59.
110. A possible exception is Morgan, 148 Tenn. 417, 256 S.W. 433, which did not specifically mention that the injury must occur after quickening or viability.
111. Dietrich v. Inhabitants of Northampton, 138 Mass. 14 (1884). The case involved a woman who, when she was between four and five months pregnant, slipped on a highway and, consequently, spontaneously aborted the child.
112. Id. at 17.
could have no duty toward the fetus. In addition, the courts felt that there would be a problem of proof in demonstrating that the tortfeasor's actions caused the harm to the fetus. Moreover, the courts feared there would be a potential for spurious actions brought on behalf of fetuses. And, in cases where the fetus did not survive birth long enough to live on its own, the courts held that suit could not be maintained since there had never been a live person on whose behalf it could be brought.\textsuperscript{113}

The major changes in the tort law field came primarily as a result of attacking the first argument—that the fetus did not have an identity apart from the woman. By using the concept of viability, courts could justify granting damages to an individual who had been injured \textit{in utero} after viability and then survived birth long enough to be considered a legal person capable of suit.

The concept of viability, the capability of the fetus for independent and separate life, was first mentioned in \textit{Allaire v. St. Luke's Hospital}\textsuperscript{114} in a dissenting opinion\textsuperscript{115} and was first applied as a prerequisite to recovery in \textit{Bonbrest v. Kotz}.\textsuperscript{116} In \textit{Allaire}, the Illinois Supreme Court heard the case of a child born crippled because ten days before his birth, his mother had been injured in an elevator located in the hospital's maternity section where she was staying for the purpose of delivering the baby. The majority denied recovery to the infant for the injuries he sustained before his birth on the grounds that he did not have a distinct and independent existence from his mother.\textsuperscript{117}

Justice Boggs wrote a thorough, and subsequently influential, dissent, noting that medical science, skill and experience have shown that at a certain point in gestation the fetus is capable of autonomous existence.\textsuperscript{118} As to the issue of notice to the tortfeasor, Boggs noted that the hospital knew of the woman's condition, hav-

\begin{itemize}
  \item \textsuperscript{113} \textit{Id.} at 16.
  \item \textsuperscript{114} 184 Ill. 359, 56 N.E. 638 (1900) (per curiam) (overruled by Amann v. Faidy, 415 Ill. 422, 114 N.E.2d 412 (1953)).
  \item \textsuperscript{115} 56 N.E. at 641 (Boggs, J., dissenting).
  \item \textsuperscript{116} 65 F. Supp. 138 (D.D.C. 1946).
  \item \textsuperscript{117} 56 N.E. at 640. To that end, the court cited a previous decision in which a judge pointed out that an individual's age and existence are reckoned from birth, not conception. \textit{Id.} at 640.
  \item \textsuperscript{118} \textit{Id.} at 641 (Boggs, J., dissenting). Justice Boggs pointed out that "though within the body of the mother, it is not merely a part of her body, for her body may die in all of its parts and the child remain alive, and capable of maintaining life, when separated from the dead body of the mother." \textit{Id.}.
\end{itemize}
ing contracted with the expectant mother for a safe delivery. Justice Boggs also argued that since the law allows prosecution for murder if a quickened fetus is harmed and dies of the wound after birth, it should allow recovery for the prenatal injuries of a subsequently born child. According to Justice Boggs, since the injuries received during viability maimed the child, the hospital should compensate him for his handicap. His dissent recommended that the flexibility of property law should become a characteristic of tort law. Justice Boggs used the fact that the injury had occurred after viability in Allarie to distinguish it from Dietrich. His argument became law forty-six years later. In 1946, Bonbrest changed completely the course of the law of prenatal injuries by allowing recovery to a child who had been injured as a viable fetus.¹¹⁹

Bonbrest and later decisions challenged the traditional hesitations about awarding damages for prenatal injuries. These decisions held that the viable fetus is a separate entity, that it would be unfair for the child to suffer due to another individual’s wrongdoing, that the tort law should keep pace with the criminal law, and that the possibility of frivolous claims is not a valid reason for denying a cause of action.

The Bonbrest court pointed out that a viable fetus can live apart from its mother and so should not be considered to be part of her.¹²⁰ Later courts similarly pointed out that when an infant incurs injuries in utero, “it is being oblivious to reality to say that the mother alone was injured by the tortious act and not the child.”¹²¹ If the conceptus was a part of the mother, “then the mother should be able to recover for the pain, suffering and incapacity to this part of her, just as to any other part.”¹²² Since such recoveries are not allowed, the viable fetus must be a separate entity.¹²³ And since the viable fetus is a separate entity, reasoned the courts, it is unfair for the child to have to suffer through life due to injuries caused by a third party.

Courts have concluded that it is not necessary to consider the

¹²⁰ Id. at 140.
¹²³ An early Canadian case had pointed out that even when the parents are compensated for what they have suffered, “there is a residuum of injury for which compensation cannot be had save at the suit of the child.” Montreal Tramways v. Leveille, 4 D.L.R. 337, 345 (1933).
conceptus in utero a person in order to allow recovery. Biological processes that will ultimately result in a person begin at conception. "If in the meanwhile those processes can be disrupted resulting in harm to the child when born," wrote the New Jersey Supreme Court, "it is immaterial whether before birth the child is considered a person in being."¹²⁴ The courts also refuted earlier arguments that the defendant must have specific knowledge of a conceptus to have a duty towards it. They pointed out that a pharmacist, in preparing a drug today, has duties toward a child born next month who subsequently takes the medicine, even though that child was unborn and unknown to the pharmacist when he or she made the medicine.¹²⁸ Moreover, some courts finding liability for prenatal injury have cautioned that since a physically or mentally injured child "is a potential public charge[,]... fairness dictates that the financial needs of such child should be borne by the tortfeasor rather than the taxpayer."¹²⁶ Courts also held that tort law should keep pace with criminal and property law which protected the unborn child.¹²⁷

As to the assertion that recognizing a cause of action might lead to complex causation questions and spurious suits, the courts stated that difficult questions of fact or spurious claims are not foreign to tort law and that courts should not deny a right of action simply because of the complexity involved.¹²⁸ As scientific knowledge increased, courts were more willing to see that problems of proof would be no more imposing than the evidentiary problems in other personal injury cases.¹²⁹ In addition, since the burden of proof is on the plaintiff, failure to prove causation would deny re-

¹²⁴ 157 A.2d at 503.
¹²⁷  See, e.g., Bonbrest, 65 F. Supp. at 140; Delgado, 468 S.W.2d at 477.
¹²⁸  For example, Bennett, 101 N.H. at 486, 147 A.2d at 110, pointed out that complex causation issues and potential for fictitious tort claims are not peculiar to this type of action. See also 31 N.J. 353, 157 A.2d 497.
¹²⁹  The Bonbrest court stated that problems in proof or spurious actions are not valid reasons for denying a right: "The law is presumed to keep pace with the sciences and medical science certainly has made progress since 1884. We are concerned here only with the right and not its implementation." 65 F. Supp. at 143. Such logic now prevails. The Michigan Supreme Court, in Womack v. Buchhorn, 384 Mich. 718, 187 N.W.2d 218, 219-20 (1971), for example, pointed out that in 1971, "medical science has probably advanced more in one generation than in the previous one hundred years or more. Legal philosophy and precedent have moved in response to scientific and popular knowledge."
covery to the plaintiff.\textsuperscript{130}

Within twenty years of \textit{Bonbrest}, every state facing the issue allowed recovery for prenatal injuries if the child was born alive.\textsuperscript{131} Most courts allow a right of action only if the injuries were sustained after viability. But some courts have begun to ignore that requirement, allowing recovery even if the injury occurred in the early weeks of pregnancy.\textsuperscript{132}

The criticisms of the viability criteria are similar to the criticisms of the original no-recovery rule. First, courts pointed out that medical authority considers the conceptus a separate entity from the moment of conception.\textsuperscript{133} The first court to reject viability as a rule was the New York Supreme Court Appellate Division in the 1953 case of \textit{Kelly v. Gregory}.\textsuperscript{134} During the third month of pregnancy, plaintiff's mother was struck by an automobile, causing injuries to the child. The court stated that separability, the concept which had led judges first to acknowledge a right of action for prenatal injuries, begins not at viability but at conception. The court also pointed out that it was illogical to hinge recovery on the fact that the child could survive separately at viability since no case actually required that actual miscarriage coincide with the injury.\textsuperscript{135} Courts also noted the unfairness to the child of using the viability criteria because "[w]hether viable or not at the time of the injury, the child sustains the same harm after birth, and therefore should be given the same opportunity for redress."\textsuperscript{136}

Like many other commentators, Prosser criticized the viability standard, noting that the infant is not less injured if the harm oc-

\begin{itemize}
\item 130. 328 So. 2d at 562.
\item 132. In recognizing a cause of action for prenatal injuries, for example, the Michigan Supreme Court in \textit{Womack v. Buchhorn}, 384 Mich. 718, 187 N.W.2d 218, did not even mention viability. The child in that case had been injured before viability, during the fourth month of pregnancy.
\item 133. \textit{See}, e.g., \textit{Wolfe v. Isbell}, 291 Ala. 327, 330, 280 So. 2d 758, 760 (1973); \textit{Smith}, 157 A.2d at 502; \textit{Sinkler v. Kneale}, 401 Pa. 267, 273, 164 A.2d 93, 96 (1960). \textit{But see Sylvia v. Gobeille}, 101 R.I. 76, 79, 220 A.2d 222, 224 (1966), which did not rely on medical knowledge, rejecting viability "not on the authority of the biologist but because we are unable logically to conclude that a claim for injury inflicted prior to viability is any less meritorious than one sustained after."
\item 135. \textit{Id.} at 544, 125 N.Y.S.2d at 697.
\item 136. 31 N.J. at 367, 157 A.2d at 504.
\end{itemize}
curs at the embryonic stage and that medical technology and embryology have furthered the reliability of proof of causation. If viability is the test, then a child injured even one week earlier than another would endure a potentially lifetime handicap without any financial compensation, while the other would receive some recompense. Thus, viability may lead to unjust and apparently inconsistent results.\(^1\)

The viability standard is also being criticized on the grounds that it is not an objective criterion, since it depends upon many factors other than gestational age, such as health, race, weight, and even location, since a fetus who may be viable in New Orleans may not be viable in a rural Louisiana town that offers few sophisticated medical techniques.\(^2\)

Some courts have stated that the primary reason to retain the viability distinction was the difficulty of proving the cause of injuries at the early stages of pregnancy. In a comment, the Restatement (Second) of Torts in 1979 noted the difficulties in proving that harm to the early embryo caused injury to the resulting child. It stated that

in the present state of medical knowledge of embryology, as we approach the beginning of pregnancy medical testimony in proof of a causal connection becomes increasingly uncertain and tends to become mere conjecture. For that reason a court may properly require more in the way of convincing evidence of causation when the injury is claimed to have occurred during the early weeks of pregnancy than when it comes later.\(^3\)

In the time since that statement was first made, however, our knowledge of embryology has increased exponentially,\(^4\) primarily due to research and clinical practice related to \textit{in vitro} fertilization

\(^{1}\text{137. Prosser & Keeton, supra note 131, § 55, at 368-69; Comment, Torts—The Right of Recovery for the Tortious Death of the Unborn, 27 How. L.J. 1649, 1654-56 (1984). As Professor King points out, “[u]f the objective of recovery is to compensate a living person who bears injuries caused by another’s negligence, the timing of the injury is irrelevant.” King, supra note 36, at 1660 n.70.}\n
\(^{2}\text{138. See, e.g., King, supra note 36, at 1654 (“The moment when a particular fetus can survive is affected by such factors as race, medical care, nutritional health of the mother and fetus, genetic composition, and availability of neonatal facilities.”) (footnote omitted); see also 157 A.2d at 504 (pointing out that “age is not the sole measure of viability, and there is no real way of determining in a borderline case whether or not a fetus was viable at the time of the injury, unless it was immediately born.”).}\n
\(^{3}\text{139. Restatement (Second) of Torts § 869 comment d (1979).}\n
\(^{4}\text{140. See Dickey, The Medical Status of the Embryo, 32 Loy. L. Rev. 317 (1986).}\n
and other reproductive technologies. In addition, causation regarding harm to the extra-corporeal embryo may be easier to prove than when the embryo is in utero. Courts granting recovery for injuries sustained prior to viability point out that problems in proof alone should not prohibit the use of a particular cause of action.  

Decisions after Roe v. Wade have had to face the argument that "if a fetus of six weeks is not a 'person' for purposes of an abortion, how can it be a 'person' for purposes of this lawsuit?"  

Those granting a cause of action for prenatal injuries before viability have correctly pointed out that the decision to abort is unique since it is within the woman's right to privacy. In addition, in the tort context, there is already a live and born child who can maintain the action.

As a result of academic debate, a growing minority of jurisdictions that have confronted the issue now allow recovery to a child born alive who is injured at any time after conception. In addition, the same logic that brought the no-recovery rule and the viability standard into disfavor has also led courts to recognize a child's right of action for pre-conception torts. The leading case is Renslow v. Mennonite Hospital, decided in 1977, in which the Illinois Supreme Court allowed an infant to maintain claims against the hospital and physician for injuries sustained as a result of the negligent transfusion of Rh-negative blood into the mother, who had Rh-positive blood. The transfusion had occurred several years prior to the infant's conception. The court reasoned that because the cases allowing recovery for pre-viable injuries have held that a defendant may be liable to a being whose existence was not apparent, the same type of negligent conduct should not escape liability simply because it occurred two weeks or two years prior to conception. According to the Renslow court, a child has a "right to be born free from prenatal injuries foreseeably caused by a breach of duty to the child's mother." In addition to negligent previous medical treatment of the mother, another pre-conception tort that

141. See, e.g., 328 So. 2d at 561.
142. Id. at 562.
143. Id.
144. Id.
147. 367 N.E.2d at 1255.
can lead to recovery on behalf of the resulting child is the negligence of the physician or laboratory in genetic counseling or genetic testing of the couple before conception.\footnote{148}{See Andrews, Legal Issues Raised by In Vitro Fertilization and Embryo Transfer, in Human In Vitro Fertilization & Embryo Transfer 11, 25 (D. Wolf & M. Quigley, eds. 1984).}

In contrast to the usual prenatal injury cases, in which it is claimed that but for the tortfeasor's negligence a healthy child would have been born, wrongful birth\footnote{149}{These causes of actions are brought by the parents of the affected child. Harberson v. Parke-Davis, Inc., 98 Wash. 2d 460, 656 P.2d 483, 491 (1983).} and wrongful life\footnote{150}{These causes of action are brought on behalf of the child himself or herself. 656 P.2d at 494.} cases allege a different type of harm. They allege that because a health care professional did not provide accurate information or accurate testing, an unhealthy fetus was conceived or brought to term. The essence of the complaint is as follows:

> When a defendant negligently fails to diagnose an hereditary ailment, he harms the potential child as well as the parents by depriving the parents of information which may be necessary to determine whether it is in the child's own interest to be born with defects or not to be born at all.\footnote{151}{Turpin v. Sortini, 31 Cal. 3d 220, 233-34, 643 P.2d 954, 962, 182 Cal. Rptr. 337, 345 (1982) (footnote omitted).}

As with liability for negligence to a conceptus generally, the wrongful life and wrongful birth suits have begun to be recognized due to advances in medical science, particularly the enhanced ability to predict whether a prospective child suffers from a genetic disorder.\footnote{152}{98 Wash. 2d 460, 656 P.2d 483.}

Although some courts think that allowing damages for wrongful life will disavow the sanctity of a less than perfect life,\footnote{153}{Berman v. Allan, 80 N.J. 421, 404 A.2d 8 (1979).} the California Supreme Court has said that

> it is hard to see how an award of damages to a severely handicapped or suffering child would "disavow" the value of life or in any way suggest that the child is not entitled to the full measure of legal and nonlegal rights and privileges accorded to all members of society.\footnote{154}{31 Cal. 3d at 233, 643 P.2d at 961-62, 182 Cal. Rptr. at 344-45.}

At least ten states have specifically allowed, or indicated that they will allow, recovery to a live-born child for his prenatal inju-
ries sustained during viability: California, Iowa, Maryland, Missouri, Nevada, North Carolina, Ohio, Oklahoma, Oregon, and Washington. At least twelve states specifically allow recovery to a live-born child for injuries sustained any time after conception. Thus, in at least a dozen states, harm to an embryo that adversely affects the resulting child can serve as the basis for a tort action. In those states, physicians and other individuals who negligently harm the in vitro embryo could be sued on a tort claim.

For couples making procreative decisions, the fact that a particular technique they choose may risk harm to the embryo does not mean that they should be subject to a tort suit. As in the criminal area, couples using medical technologies to effectuate their procreative decisions and physicians who aid them should be given the freedom to attempt the use of technologies even if they present risk to the embryo. However, physicians could be found liable for negligence if they do not inform the couples of reasonably foreseeable risks.

A California case, Curlender v. Bio-Science Laboratories, suggested that a genetically defective child could bring an action against his or her parents for wrongful life. Subsequently, California and five other states adopted statutes eliminating such a cause of action. Such statutes further the couple's autonomy in procreative decisions. As the California Supreme Court pointed

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158. Id. at 829, 165 Cal. Rptr. at 488-89.


160. Two states have enacted statutes that prohibit parents from bringing wrongful
out, the purpose of such legislation is "to eliminate any liability or other similar economic pressure which might induce potential parents to abort or decline to conceive a potentially defective child."\(^{161}\)

Just as tort law has evolved to recognize causes of action based on prenatal injuries, so too has insurance law begun to recognize coverage of the fetus. One court has recently decided that an unborn fetus might properly be considered an insured or injured "person" within the meaning of those terms in an insurance policy, at least where subsequently born alive.\(^{162}\) An Ohio court has held that an unborn, viable fetus, subsequently born alive, could recover from an insurance company for injuries sustained by him in an auto accident before his birth. This court held that a viable fetus, one capable of separate life, is a "person" as the term is used in an insurance contract.\(^{163}\)

The trend in tort law is toward recognizing a cause of action for harm to a conceptus even before viability. Consequently, it is likely that an increasing number of states will uphold suits against physicians for negligence in the handling of in vitro embryos which detrimentally affect the resulting children. Moreover, the physician may be held liable for pre-conception actions—if, for example, negligent use of ovarian hyperstimulation leads to defects in the resulting children or if the physician does not meet the professional standard of care regarding advising the couple that they were at risk for passing on a genetic defect to the child.

**WRONGFUL DEATH**

Tort law has evolved so that children who have been injured prenatally can recover for their injuries. The law has also evolved


\(^{162}\) Alabama Farm Bureau Mut. Casualty Ins. Co. v. Pigott, 393 So. 2d 1379 (Ala. 1981) (named insured's unborn grandchild was member of family of insured for purposes of being covered by uninsured motorist clause in named insured's policy).

to help such children’s parents. The cases of *Woods v. Lancet*\textsuperscript{164} in 1951 and of *Amann v. Faidy*\textsuperscript{165} in 1953 established that the parents of a fetus, injured while viable, who was born alive, but who died after birth as a result of that harm, may recover for the child’s death. There is little case law that treats the issue of whether the survivors of a live-born child may recover for his fatal injuries sustained at any time after conception, or as a result of a pre-conception injury to the mother.\textsuperscript{166} However, logic dictates that they should be able to recover because courts have allowed tort recovery to infants for both pre-conception and post-conception torts.\textsuperscript{167} Such was the result in one case which allowed recovery for wrongful death where a “pre-viable” fetus was injured but survived birth for a short period of time.\textsuperscript{168}

An entirely different issue is presented when the fetus dies *in utero*. There has been a greater reluctance on the part of courts to allow parents to maintain a wrongful death action in such a case than in a case where a child is born and subsequently dies. The decisions rest upon an interpretation of the states’ wrongful death statutes. These statutes resemble homicide statutes in that the language generally dictates that the death in question must be that of a “person.”\textsuperscript{169} The statutes allow certain relatives of the deceased to maintain an action that could have been brought by the deceased if he or she survived.\textsuperscript{170}

In 1949, *Verkennes v. Corniea*\textsuperscript{171} was the first case to allow a right of action for prenatal injuries, sustained during viability, that resulted in fetal death. The circumstances of this case easily lent themselves to a willingness to change the law to recognize an action for stillbirth. The plaintiff and his wife contracted with the defendant maternity hospital for normal care during confinement and delivery. They contemplated a normal delivery. However, during labor, the woman’s uterus ruptured, and the defendants failed

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\textsuperscript{164} 303 N.Y. 349, 102 N.E.2d 691 (1951).
\textsuperscript{165} 415 Ill. 422, 114 N.E.2d 412 (1953). The *Amann* case specifically overruled *Alaire.* *Id.* at 432, 114 N.E.2d at 418.
\textsuperscript{166} Kader, *supra* note 145, at 644.
\textsuperscript{167} *Id.*
\textsuperscript{168} Torigian v. Watertown News Co., 352 Mass. 446, 225 N.E.2d 926 (1967). In that case, the child was injured at three and one-half month’s gestation, then was born two months later, living for only two and one-half hours.
\textsuperscript{170} *Id.*
\textsuperscript{171} 229 Minn. 365, 38 N.W.2d 838 (1949).
to treat the problem. The defendants had not notified the plaintiff of the labor, calling him only hours after the emergency to tell him that his wife and child were both dead. Had the hospital properly cared for the woman and child, the baby girl would have lived to become a normal, healthy child. The court stated that even though, as of 1949, the right of recovery for prenatal injuries had been accepted by a majority of courts, a wrongful death action for the stillbirth of a viable fetus would be allowed because “[i]t seems too plain for argument that where independent existence is possible and life is destroyed through a wrongful act a cause of action arises under the statutes.”\textsuperscript{172}

A majority of states now recognize a wrongful death recovery for the fetus on the condition that in order for the parents to maintain such an action, the fetus must have been able to maintain an action for its injuries had it survived.\textsuperscript{173} Three of these states have indicated they would allow wrongful death recovery to the parents of a stillborn fetus who was injured before viability.\textsuperscript{174} Eight states do not recognize a wrongful death recovery for a fetus, even if it was viable at the time of injury.\textsuperscript{175} The main reason courts deny recovery in the case of a stillborn is because they be-

\textsuperscript{172} Id. at 370-71, 38 N.W.2d at 841.

\textsuperscript{173} As of 1985, thirty-two states allowed wrongful death actions by parents of a stillborn. See cases cited in Summerfield v. Superior Court, 144 Ariz. 467, 476 n.5, 698 P.2d 712, 721 n.5 (1985) (en banc). One older case, Porter v. Lassiter, 91 Ga. App. 712, 87 S.E.2d 100 (1955), declared that “quickening” is the standard. This case is important as one of the few that allow recovery before viability, although the “quickening” concept did not influence subsequent wrongful death decisions.

\textsuperscript{174} See 91 Ga. App. 712, 87 S.E.2d 100 (allowing cause of action for injury to woman one and one-half months pregnant which resulted, after quickening, in a stillborn infant at four and one-half months); Amadio v. Levin, 501 A.2d 1085 (Pa. 1985) (allowing recovery for stillbirth of full-term infant, but stating that pre-viable injuries could be basis for wrongful death action); Presley v. Newport Hosp., 117 R.I. 177, 188-89, 365 A.2d 748, 753 (1976) (dictum stating that recovery would be allowed for pre-viable injury resulting in subsequent stillbirth). In addition, some cases, although dealing with an apparently viable fetus, have not used language that would suggest a limitation to that situation. See, e.g., Danos v. St. Pierre, 402 So. 2d 633 (La. 1981). Other cases do not make viability a requirement but expressly reserve judgment on that issue. See, e.g., O’Grady v. Brown, 654 S.W.2d 904, 911 (Mo. 1983) (en banc).

lieve it is not a person within the meaning of the statute. Some courts also find it significant that, at the time legislatures adopted the wrongful death statutes (generally, in the late 1800's), they did not intend to create a cause of action for the survivors of a negligently injured stillborn fetus.\textsuperscript{176} Since the cause of action is inherently statutory, some courts interpret legislative inaction as satisfaction with prior decisions denying recovery and strictly construe the statute according to the common law, which does not grant the fetus many rights.\textsuperscript{177} Courts denying recovery indicated that legislative action is necessary to change this legislatively-created cause of action.\textsuperscript{178}

Some courts have raised the problem of estimating damages with respect to the stillborn.\textsuperscript{179} One aspect of pecuniary damages in a wrongful death suit is compensation for lost future earnings of the deceased. The ease of estimating such damages increases as the child ages, but even in the case of a young child, information about its physical and mental condition can be used to estimate future earnings. When the child is stillborn, say the courts, there is no specific evidence of his or her capabilities.\textsuperscript{180} In addition, some courts specifically state that on public policy grounds such pecuniary damages should not be recoverable by the parents.\textsuperscript{181}

Other courts, denying recovery, take the position that the harm of the stillbirth is to the parents and that they can be compensated for their distress and for medical and funeral expenses in their own actions.\textsuperscript{182} They also point out that there is a greater need for compensation if a child is born disabled rather than stillborn, since the parents will have additional responsibilities and the child could become a public charge.\textsuperscript{183} Under this analysis, it is not inconsistent to allow recovery to the child born alive but not on behalf of the stillborn for the same type of injury. A related argument is that the parents of a fetus have only a vague sense of the fetus, while the parents of a live-born have begun interaction with

\textsuperscript{177} See Egbert, 260 N.W.2d at 482 (1977).
\textsuperscript{179} See, e.g., 43 N.J. at 310, 204 A.2d at 144.
\textsuperscript{180} Id. at 311, 204 A.2d at 145.
\textsuperscript{181} 24 N.Y.2d at 486, 248 N.E.2d at 905, 301 N.Y.S.2d at 71.
\textsuperscript{182} Id.
\textsuperscript{183} See, e.g., 43 N.J. at 312, 204 A.2d at 146 (1964).
him.\textsuperscript{184}

The courts allowing recovery do so on a number of grounds. Many hold that a viable fetus is a person within the meaning of the wrongful death statute\textsuperscript{185} because it is capable of an independent existence.\textsuperscript{186} In Louisiana, such a holding was relatively easy to make due to the legislation defining a “person” as a human being from the moment of fertilization and implantation.\textsuperscript{187}

One court focused attention away from the personhood issue by noting that “the term ‘person’ is used in many disparate senses in common speech, in philosophy, psychology, and in the law; it has no ‘plain and ordinary meaning’ which we can apply.”\textsuperscript{188} Consequently, the court changed the inquiry from whether the fetus was a person to “whether the death of a human fetus is the type of loss for which the legislature intended to establish a remedy.”\textsuperscript{189}

In addition, some courts allowing recovery dispute the proposition that wrongful death actions are totally a creation of the legislature,\textsuperscript{190} suggesting that there is no evidence that the legislature intended to occupy the field to the exclusion of future judicial action.\textsuperscript{191} Unlike the courts in the homicide cases, for example, the Louisiana Supreme Court in \textit{State v. Brown},\textsuperscript{192} which put the burden on the legislature to explicitly indicate whether the term “person” or “human being” in the homicide law includes a fetus, some courts granting recovery in the case of a stillbirth have held that the word “person” in the wrongful death statutes encompasses a stillborn viable child “absent a clear and definitive demonstration of legislative intent to the contrary.”\textsuperscript{193}

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186. 402 So. 2d 633.


188. 654 S.W.2d at 909.

189. Id.

190. See, e.g., 144 Ariz. at 471, 698 P.2d at 716.

191. Id. at 472, 698 P.2d at 717.

192. 378 So. 2d 916, 917-18 (La. 1979).

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In addition, since the wrongful death statutes were designed to
give relatives the right to bring an action the deceased could have
brought if he or she had survived, some courts find that wrongful
death recovery follows naturally in jurisdictions where an action
could be maintained on behalf of a child who had been injured
prenatally.\footnote{194} Courts granting a wrongful death cause of action on
behalf of a stillborn also pointed to the arbitrariness of having the
cause of action turn on whether the child lived outside the
mother's body for a few minutes.\footnote{198} In \textit{Wolfe v. Isbell}, for example,
the court allowed recovery for prenatal injuries when the child was
born and died fifty minutes later.\footnote{196} It seems illogical to eliminate
recovery if the child had died a mere hour earlier. After all, the
loss to the parents would be virtually the same.\footnote{197} An early Ohio
case allowed recovery for harm to a viable stillborn infant, saying
the following:

Suppose . . . viable unborn twins suffered simultaneously the same
prenatal injury of which one died before and the other after birth.
Shall there be a cause of action for the death of the one and not for
that of the other? Surely logic requires recognition of causes of ac-
tion for the deaths of both, or for neither.\footnote{198}

The courts allowing recovery also counter the assertion that
the parents can recover for all the damages in their own actions. A
1985 Pennsylvania Supreme Court decision, for example, points
out that pain and suffering for the fetus' negligent death is not
recoverable by the parent unless there is an independent physical
injury to the parent.\footnote{199}

Also, as in the criminal area, not recognizing a cause of action
for a stillborn child would benefit tortfeasors who caused the most
serious injuries, since a tortfeasor would be liable if he caused a
harm to a fetus such that the resulting action killed the fetus \textit{in utero}.\footnote{200} As one commentator pointed out, this difference causes an
inequity since "one who injures a fetus only enough to cause dam-

\footnotesize{\begin{itemize}
\item \textit{See also} Fowler v. Woodward, 244 S.C. 608, 138 S.E.2d 42 (1964).
\item \textit{See, e.g.,} Danos, 402 So. 2d at 638 (on rehearing); Mone v. Greyhound Lines, Inc.,
368 Mass. 354, 361, 331 N.E.2d 916, 920 (1975); Werling v. Sandy, 17 Ohio St. 3d 45, 476
\item \textit{Wolfe}, 291 Ala. 327, 280 So. 2d 758.
\item 402 So. 2d at 638 (on rehearing).
\item 402 So. 2d at 638; \textit{see also} Werling, 476 N.E.2d at 1055; Amadio, 501 A.2d at
1088.
\end{itemize}}
ages must pay for his actions, while one who injures the fetus severely enough to kill it does not."^{201} One judge in particular was concerned with how this inequity would affect physicians’ decisions: “A rule which permits a physician to escape liability to an unborn child by preventing that child from reaching birth is intolerable.”^{202}

The courts granting recovery have also pointed out that proving causation is no longer a problem given modern knowledge about fetal development.^{203} Another medical development has also helped convince courts that birth is an arbitrary requirement. The Arizona Supreme Court remarked that “[t]he advances of science have given the doctor, armed with drugs and scalpel, the power to determine just when ‘birth’ shall occur.”^{204}

The current precedents indicate that only a few states are likely to recognize a wrongful death action for negligent harm to an *in vitro* embryo. The strongest case for a wrongful death action will be in the instance in which an *in vitro* embryo is harmed, subsequently gestated, born alive and then succumbs to the injuries. However, those jurisdictions that allow actions for the stillbirth of a pre-viable fetus will likely also recognize an action for harm to an *in vitro* embryo that results in its failure to develop, even if there is no subsequent birth. In states such as Louisiana, which have specific statutes providing that a conceptus is a person from the moment of fertilization, courts may be more willing to find that the IVF embryo is a person within the meaning of the wrongful death statute.

INHERITANCE

At ancient common law, there was no taking of property under a deed or will because the law required that something tangible, such as a handful of earth or a twig, be transferred to the new owner of the property; both parties had to be present on the land.^{205} Additionally, someone had to be in control of the property in order to render the feudal duties.^{206} However, in the sixteenth

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202. 501 A.2d at 1100 (Zappala, J., concurring).
203. 654 S.W.2d at 911.
204. 144 Ariz. at 477, 698 P.2d at 722.
206. Id.
century, statutes were passed to resolve these problems. The Statute of Uses, in 1536, created new methods of creating and transferring estates, and the Statute of Wills, in 1540, gave tenants a limited power to devise their lands by a will. As a consequence of these changes, a person can designate a conceptus in utero to take part of his estate. As long as that conceptus is later born alive, its rights to the property are held to have been in effect since the time of its conception.207

In inheritance law, the embryo’s interests and those of its progenitors have generally been considered identical. When the father dies unaware that he has created an embryo, it is assumed that he would want the resulting child to benefit from his estate. This assumption generally does not conflict with the interests of the other progenitor, the mother, since, as guardian of the child, she will have control of the money that is awarded the infant and can use that money to fulfill her family responsibilities.

Granting legal rights to a posthumously born child generally did not unduly burden estates because it was assumed at common law that a child would be born within ten lunar months (280 days) after conception.208 Where a longer period passed between the alleged father’s death and the birth of the child, it was assumed the child was not his, but that presumption was rebuttable with evidence of the deceased’s paternity of the child. In one case, for example, the North Carolina Supreme Court held that a widow was entitled to have submitted to the jury the issue of whether a child born 322 days after her husband’s death was his.209

Whether an embryo in a petri dish or freezer will be entitled to inherit if it is subsequently gestated and born will depend, in part, on the specific statutory provisions in a given state. In California, for example, the statute provides that a child conceived before but born after a testator’s death can inherit in the absence of a contrary provision in the will.210 The statute could allow a person who had been frozen as an embryo to make a claim of inheritance rights years or decades after the death of an individual. In contrast, in Louisiana, the probate law requires that the embryo be in utero at the time of the testator’s death in order for the result-

209. Id.
ing child to inherit. The probate law provides that "[c]hildren in the mother's womb are considered, in whatever relates to themselves, as if they were already born." However, the new law governing IVF embryos would apparently allow people who had been frozen as embryos to inherit for an unlimited time. The law provides that the IVF embryo inherits if it develops into a live born child, apparently even if it was not in utero at the death of the testator.

The possibility that a child born after being frozen as an embryo could inherit creates enormous practical difficulties in the administration of estates. It is likely that statutes will be proposed to amend the probate laws to address those problems, although the problems created by the recent Louisiana IVF embryo law does not bode well for legislators' ability to handle the question.

A question might be raised as to whether an extra-corporeal embryo itself should be treated as property to be distributed as part of the progenitor's estate. While various commissions and legislators have made recommendations for the disposition of a frozen embryo in case of the death of its genetic parents, none has suggested it should be part of the estate. It is unlikely that the embryo will be considered the property of the estate to be sold or distributed according to the executor's plan—after all, the executor has no procreative right to the embryo. Rather, in keeping with the high value placed on autonomy in childbearing decisions, it is likely that the fate of the embryo upon the death of its progenitors will be decided by the advance directives made by its progenitors before it is frozen. This solution is the approach taken by the Waller Report and a proposed Michigan law.

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211. LA. CIV. CODE ANN art. 29 (West 1952).
212. Similar legal issues with respect to the child conceived posthumously with donor sperm have been raised in Thies, A Look to the Future: Property Rights and the Posthumously Conceived Child, 110 TRUSTS & ESTATES 922 (1971).
213. The Probate Committee of the Chicago Bar Association, for example, is drafting such a statute.
214. In a French case, a woman wanted to conceive a child with sperm her husband had frozen before his death. A lawyer for the sperm bank maintained that the sperm was an indivisible part of the husband, not subject to inheritance. Dionne, Jr., A French Widow Sues Over Sperm, N.Y. Times, July 2, 1984, at A7, col. 1. A French court ruled that the woman should be allowed to be inseminated with her husband's sperm. Widow Wins Right to Dead Mate's Sperm, Chicago Sun-Times, Aug. 2, 1984, at 5.
215. See, e.g., Waller Report, supra note 50, § 2.17.
When the entity potentially providing funds is not a testator but the government, court cases have refused to recognize the embryo's existence since this result is in keeping with the intent of the government as expressed in statutes. Income tax exemptions for children accrue only at the birth of a child and no credit is given for the period in utero.\textsuperscript{219} Additionally, an expectant mother cannot receive Aid to Families with Dependent Children (AFDC) payments until the birth of her child. According to the Supreme Court in 1975, the term "dependent child" does not include the unborn.\textsuperscript{220} The Court noted the absence of indications that Congress specifically intended to provide for pregnant women under that particular program. The Court came to that conclusion despite the fact that five of six federal appellate courts considering the issue had held that a conceptus was a dependent child;\textsuperscript{221} the lower courts were influenced by the need for money during the pregnancy to assure proper nutrition and care for the conceptus. A subsequent district court case of the same year, \textit{Poole v. Endsley},\textsuperscript{222} held that a fetus is not a "person" under the Civil Rights Act, and that, therefore, the state's refusal to grant AFDC payments did not constitute a violation of the fetus' civil rights. The federal AFDC statute, while still providing that the term "dependent child" does not include the unborn, has subsequently been amended to allow states to provide AFDC funds to a pregnant woman in the third trimester if she would be eligible for such aid if such child had been born and was living with her in the month of payment.\textsuperscript{223}

A frozen unwanted embryo is in some sense "dependent" since finances are needed to continue to pay the costs of its cryopreservation or the search for a recipient if the embryo is to be gestated. However, even if the IVF embryo is declared a juridical person as in Louisiana, it will not be eligible for AFDC benefits since it is not considered a "child" for those purposes until its birth. Also, a couple who has multiple embryos frozen cannot declare them to be dependents on their federal income tax return.

\begin{footnotesize}
\begin{enumerate}
\item I.R.C. \textsection\ 152 (1984).
\item \textit{Burns v. Aleola}, 420 U.S. 575 (1975).
\item \textit{Id.} at 587-88 (Marshall, J., dissenting).
\item 42 U.S.C. \textsection\ 606(b) (West Supp. 1986).
\end{enumerate}
\end{footnotesize}
APPLICATION OF THE PRECEDENTS TO REPRODUCTIVE TECHNOLOGY

Given the diverse ways in which the embryo may be viewed legally, what is its likely legal status in the context of the reproductive technologies? Answering that question involves assessing the interests of the embryo in light of the interests of the couple in furthering their childbearing decisions.

Because the constitutional protection for childbearing decisions encompasses a right to use alternative reproduction, a law granting the embryo rights that restrict the availability of a reproductive technology—for example, by forbidding embryo transfer or in vitro fertilization—would be constitutional only if it furthered a compelling state interest in the least restrictive manner possible.

LAWS AFFECTING PHYSICIANS’ CONDUCT OF IN VITRO FERTILIZATION AND RELATED TECHNOLOGIES

After the birth of Louise Brown, the first child conceived through in vitro fertilization,224 the Pennsylvania Legislature passed a law for the monitoring in vitro fertilization.225 This law provides that anyone conducting IVF must file quarterly reports with the Department of Health describing the names of everyone assisting in the process, the location where the fertilization takes place, names and addresses of the individuals or institutions sponsoring the procedures (except the names of donors or recipients of the gametes), the number of ova fertilized, the number of embryos destroyed or discarded, and the number of women in whom embryos are implanted.

This law does not interfere with an individual’s or a couple’s right to autonomy in childbearing decisions because it is not likely to deter physicians from offering the procedure. However, other existing and proposed laws aimed at protecting embryos would infringe upon the progenitors’ constitutional rights without advancing a compelling state interest and thus are likely to be struck down as unconstitutional.

In twenty-five states there are fetal research laws.226 Since a

225. 18 PA. CONS. STAT. ANN. § 3213(e) (Purdon 1983).
226. ARIZ. REV. STAT. ANN. § 36-2302 (1986); ARK. STAT. ANN. §§ 82-436 to -441 (Supp. 1985); CAL. HEALTH & SAFETY CODE § 25956 (West 1984); FLA. STAT. ANN. § 390.001(6), (7)
majority of these laws prohibit nontherapeutic research with fetuses and embryos, they might be used to prohibit the use of experimental reproductive technologies which are intended to enhance a couple’s procreative options at the risk of embryo loss. At least six states’ fetal research laws include provisions prohibiting research involving living pre-implantation embryos;\footnote{227} these statutes might be used to prohibit an evolving technique such as embryo cryopreservation or embryo donation after \textit{in vivo} fertilization.

In eighteen states, embryo research is prohibited when done in connection with an abortion.\footnote{228} Experimental techniques such as cryopreservation of embryos created through \textit{in vitro} fertilization are not banned by these laws since no abortion is done in connection with the procedure. However, embryo transfer after \textit{in vitro} fertilization might be banned since the definition of abortion is broad enough to encompass the flushing technique used in uterine lavage.

In addition to state fetal research laws, existing and proposed

\footnotesize{(West 1986); ILL. ANN. STAT. ch. 38, paras. 81-32, -32.1 (Smith-Hurd Supp. 1986); IND. CODE ANN. § 35-1-58.5-6 (Burns 1985); KY. REV. STAT. ANN. § 436.026 (Bobbs-Merrill 1985); LA. REV. STAT. ANN. §§ 14:87.2, 40:1299.35.13 (West 1986 & Supp. 1986); ME. REV. STAT. ANN. tit. 22, § 1593 (1980); MASS. ANN. LAWS ch. 112, § 12J (Michie/Law. Co-op. 1985); MIC. COMP. LAWS ANN. §§ 333.2685-.2692 (West 1980); MINN. STAT. ANN. § 145.421-.422 (West Supp. 1986); MO. ANN. STAT. § 188.037 (Vernon 1983); MONT. CODE ANN. § 50-20-108(3) (1985); NEB. REV. STAT. § 28-342 to -346 (1979); N.M. STAT. ANN. § 24-9A-1 to -9A-7 (1986); N.D. CENT. CODE § 14-02.2-01 to -02 (1981); OHIO REV. CODE ANN. § 2919.14 (Baldwin 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 (1986); TENN. CODE ANN. § 39-4-208 (1982); UTAH CODE ANN. § 76-7-310 (1978); WYO. STAT. § 35-6-115 (1977)).

\footnote{227} ME. REV. STAT. ANN. tit. 22, § 1593 (1980); MASS. ANN. LAWS ch. 112, § 12J (Michie/Law Co-op. 1985); MIC. COMP. LAWS ANN. §§ 333.2685-.2692 (West 1980); N.D. CENT. CODE § 14-02.2-01 to -02 (1981); R.I. GEN LAWS § 11-54-1 (Supp. 1985); UTAH CODE ANN. § 76-7-310 (1978).

\footnote{228} ARIZ. REV. STAT. ANN. § 36-2302 (1986); ARK. STAT. ANN. §§ 82-436 to -441 (Supp. 1985); FLA. STAT. ANN. § 390.001(6), (7) (West 1986); IND. CODE ANN. § 35-1-58.5-6 (Burns 1985); LA. REV. STAT. ANN. § 14:87.2 (West 1986); ME. REV. STAT. ANN. tit. 22, § 1593 (1980); MASS. ANN. LAWS ch. 112, § 12J (Michie/Law Co-op. 1985); MIC. COMP. LAWS ANN. §§ 333.2685-.2692 (West 1980); MO. ANN. STAT. § 188.037 (Vernon 1983); MONT. CODE ANN. § 50-20-108(3) (1985); NEB. REV. STAT. § 28-342, -346 (1979); N.D. CENT. CODE § 14-02.2-01 to -02 (1981); OHIO REV. CODE ANN. § 2919.14 (Baldwin 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); UTAH CODE ANN. § 76-7-310 (1978); WYO. STAT. § 35-6-115 (1977). This list includes both statutes that specifically apply to embryos and statutes which neglect to define \textit{fetus} or the term used to refer to the subject of research and thus might be interpreted to include pre-implantation embryos.)
statutes offer special protections to embryos created through *in vitro* fertilization. A year after the birth of the first IVF infant, the Illinois Legislature in 1979 enacted an IVF law providing that the physician who fertilized a woman’s egg outside her body “shall, with regard to the human being thereby produced, be deemed to have the care and custody of a child” for purposes of an 1877 child abuse act. The latter act, in turn, made it unlawful for any person having the care or custody of any child to cause or permit the child to be endangered.

This law, equating embryos to children, made physicians reluctant to offer IVF because they were unsure about what conduct violated the law. When lawmakers in the late 1800’s designed the child protection law, they expected it to mean that a parent or guardian would provide sufficient food, clothing, and shelter so that a child would remain healthy. But physicians had no idea how judges would interpret this law to cover IVF. They wondered what a physician must do to provide adequate care to a two-cell, four-cell or eight-cell embryo. Could a physician be prosecuted for child abuse if the district attorney believed the physician should have provided different nutrients in the embryo’s medium or should have stored the petri dish with the embryo at a different temperature? Would the physician commit a crime if he or she discarded an embryo that was not dividing properly?

The Illinois law also made it a crime for the physician to permit anyone else to endanger the individual created by *in vitro* fertilization. Physicians wondered if this meant that they had to police the conduct of the woman in whom they implanted the IVF embryo to see that she did not harm the embryo.

The possibility that an Illinois physician could have widespread liability in every action he or she undertook, or permitted anyone else to undertake, with respect to the embryo impeded the availability of IVF. To clarify the physician’s responsibilities, an Illinois couple and their physician brought suit against the Illinois Attorney General and the prosecuting attorney to prevent them from enforcing the Illinois IVF law.

In response to the suit, the defendants indicated that they

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would not prosecute physicians for all potential risks to the embryo. Instead, they stated that the physician would violate the law only if he or she willfully harmed the embryo through abuse, mutilation, extermination or destructive laboratory experimentation. But even this limitation put a serious chill on IVF programs. For example, it was unclear whether it was permissible to use embryo freezing. If more than three of an IVF patient’s eggs successfully fertilized, she might not want them all implanted because of the risks to her and to potential offspring that multiple pregnancies and multiple births entail. The woman may wish to have some of the embryos frozen. Yet embryo freezing is experimental, and many embryos will not survive the freeze/thaw process. This result might lead to the physician being prosecuted for harming embryos.

In 1985, the Illinois law was amended and now forbids embryo experimentation with an exception for in vitro fertilization. Yet even that simpler law, with no statement about the embryo being considered a person or a child, could limit an individual’s reproductive choices. It could be used to prosecute physicians and their patients who engage in embryo lavage after in vivo fertilization. Likewise, unless embryo freezing is considered to be part of IVF, the law may criminalize embryo freezing.

The provision of the new Louisiana law similarly creates various responsibilities toward IVF embryos. The law makes the IVF embryo a “juridical person” until implantation. One provision recreates the problems of the original Illinois law by providing that “[a]ny physician or medical facility who causes in vitro fertilization of a human ovum in vitro will be directly responsible for the in vitro safekeeping of the fertilized ovum.” Under the Louisiana law, all IVF embryos must be “given an identification by the medical facility for use within the medical facility.” Upon motion of any party, a court may appoint a curator to protect the embryo’s rights, which include the right to sue and be sued.

Laws that create vague duties for physicians or establish ex-

tremely high standards of care for physicians may make it unlikely that physicians will offer the techniques and thus will significantly burden a couple’s access to the techniques. The Louisiana law, for example, may deter physicians from offering even basic in vitro fertilization by imposing a high standard of care with respect to the embryo and creating the cumbersome procedure of requiring registration of each embryo and presumably requiring death certificates as well.

The Louisiana law would be constitutional only if it furthered a compelling state interest in the least restrictive manner possible. While holding physicians liable for negligence in connection with their actions toward the in vitro embryo is in keeping with the trend toward greater recognition of prenatal duties, the law’s statement that physicians should be held to “the highest standard of care” could be read to establish a strict liability standard. If physicians could be prosecuted under a theory of strict liability each time an embryo does not develop, no physician would be willing to perform in vitro fertilization. Since people have a fundamental constitutional right to reproductive technology even at the risk of embryo loss, a law which in essence criminalizes physicians’ attempts to help them would be unconstitutional. There is no way for reproduction to proceed without some embryo loss. Even in natural procreation, only 31% of embryos created develop into live births. Moreover, giving the physician an independent duty to the embryo unconstitutionally prohibits the physician from complying with the couple’s decision to terminate the embryo. This result also arises from the section of the Louisiana law that provides that it is unlawful to terminate intentionally a viable in vitro embryo.

The recordkeeping requirement of registering embryos itself may be unconstitutionally infirm. With superovulation, women

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239. See supra text accompanying notes 155-56.
240. See supra text accompanying notes 21-27.
242. No. 964, 1986 La. Sess. Law Serv. 346. In an analogous area, Planned Parenthood v. Danforth, 428 U.S. 52 (1976), the Supreme Court struck down a law specifying the standard of care physicians doing abortions must exercise with respect to the fetus because the provision “impermissibly require[d] the physician to preserve the life and health of the fetus, whatever the stage of pregnancy.” Id. at 83.
have provided as many as seventeen eggs per laparoscopy.\textsuperscript{244} If all eggs fertilized, the physician would have seventeen embryos to register from just one surgical procedure. Multiplying that number by the number of laparoscopies done daily in an \textit{in vitro} fertilization clinic indicates that this recordkeeping could become a burdensome requirement. At the same time, the state has a lesser interest in such records than, say, birth records. Birth certificates are of use in determining citizenship, obtaining passports, proving age for voting and a variety of other legitimate state functions. In contrast, records of \textit{in vitro} conceptions in themselves do not have such uses. In \textit{Planned Parenthood v. Danforth},\textsuperscript{245} the Supreme Court upheld a limited recordkeeping requirement regarding abortions. It did so on the basis of the provision’s value in connection with maternal health.\textsuperscript{246} The Louisiana law has no such connection. Moreover, the Court indicated that not all record-keeping requirements would be upheld. The Court said that even with its important purpose, the abortion reporting requirements were approaching “impermissible limits.”\textsuperscript{247} The Court also indicated that the state cannot “accomplish . . . through the sheer burden of record-keeping detail, what we have held to be an otherwise unconstitutional restriction.”\textsuperscript{248} It is likely that the Louisiana provision for registering embryos would fall within the impermissible range due to its burdensome nature and lack of a valid connection with a health purpose.

\textbf{LAWS AFFECTING THE PROGENITOR’S DECISION-MAKING WITH RESPECT TO EMBRYOS}

The policies developed by a state regarding disposition of embryos need to demonstrate concern for autonomy regarding reproductive decisions as well. Some states are considering enacting laws regarding who has dispositional control over gametes and embryos, particularly extra-corporeal gametes and embryos.\textsuperscript{249} The state may argue for giving control to the state, the physicians, the health care institution or the progenitors.

\textsuperscript{245} 428 U.S. 52 (1976).
\textsuperscript{246} \textit{Id.} at 80.
\textsuperscript{247} \textit{Id.} at 81.
\textsuperscript{248} \textit{Id.}
\textsuperscript{249} See, \textit{e.g.}, Mich. H.B. 4554 (1985).
In keeping with the individual's right to privacy to make procreative decisions, it is appropriate to give the individual the right to control the destiny of his or her reproductive materials. A person should not be forced to donate sperm, eggs or embryos, nor should these genetic materials be taken from an individual without his knowledge. Some commentators raise serious questions about whether doctors have obtained eggs from women without their consent. Gena Corea points out, in an extensive review, for example, that in the published studies on research using women's eggs, "there is, in almost every case, no indication that the women consented to the extraction of their eggs or even knew that their eggs had been taken." In some cases, researchers collected fertilized eggs from women undergoing hysterectomies who did not realize that they were pregnant at the time of surgery.

The progenitors should have a right to use their sperm, eggs, and embryos to conceive a child of their own, to donate them to other people or to dispose of them. These rights should be protected even if the material is outside of their bodies, such as when an embryo is in a petri dish or freezer. If sperm, eggs, or embryos are donated to another party to create a child that the second party will then raise, the second party should have the same rights to control that the original progenitor had.

If couples decide to freeze embryos, some authorities advocate limiting the storage period. The Warnock Committee in England has recommended that embryos should not be frozen for more than ten years, after which time the right to use or dispose of the embryos should pass to the storage authority. Similarly, the policies of certain institutions set limits on how long embryos should be stored. For example, at one IVF clinic, embryos may be stored for no more than two years.

One concern is about the disruption that freezing may cause across generations. Gestating an embryo after twenty-five years of cryopreservation may deprive the embryo of a chance to meet his or her parents; it may also lead to unusual situations such as a woman gestating an embryo that was her own sibling. Hans Tiefel

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250. The effect of the Louisiana law would be to force people to donate embryos by not giving them the right to terminate the embryos. See infra text accompanying notes 256-59.
252. Id. at 102.
argues that “prolonged freezing may rob a thawed and growing life of its genetic progenitors, of its roots and support.”

However, a statute limiting the length of time of storage of embryos would unduly infringe the procreative rights of couples. Just as people are allowed to time pregnancies to their choosing in coital reproduction, they should be allowed to use freezing to have the possibility of timing pregnancies with alternative reproduction. Men can produce children through coitus their entire lifespans. Alternative reproduction gives that same possibility to women; hormonal stimulation of post-menopausal women allows their uterus to accept an embryo. Since, up until death, both men and women are capable of producing children, a state law forcing them to stop before that time would unduly limit their procreative choices.

The most difficult policy issues engendered by giving progenitors control over the use of their embryos involve the decision to terminate the embryos and the assessment of what should be done with an embryo if the progenitors disagree about its fate.

The question of termination of embryos arises in two instances. When in vitro fertilization is used, multiple embryos are generally created. In that case, the woman may not wish to have all the embryos reimplanted because of the risks to her and to the potential offspring of multiple gestation. She may request that the embryo in the petri dish be allowed to expire.

Alternatively, in some clinics, the excess embryos may be frozen. Then, if the woman does not become pregnant in that initial attempt at in vitro fertilization, she can have one or more of her frozen embryos implanted in her uterus in a later cycle. However, if the woman does achieve a pregnancy or otherwise decides not to continue her attempts at in vitro fertilization, she may subsequently request that the cryopreserved embryos be terminated.

Should individuals have a right to terminate extra-corporeal embryos, in a petri dish or freezer, or should such embryos be taken into the custody of the clinic or the state? An Illinois IVF law, since repealed, gave the woman the same right to terminate an IVF embryo that she has to terminate an embryo conceived naturally. In contrast, Louisiana law makes the physician the tempo-

rary guardian of an unwanted IVF embryo.\textsuperscript{256} The Louisiana law provides that “[a] viable in vitro fertilized ovum is a juridical person which shall not be intentionally destroyed by any natural or other juridical person or through the actions of any other such person.”\textsuperscript{257} This provision takes from a woman a substantial degree of control over the fate of her embryos. If a woman does not want to have all her fertilized eggs reimplanted due to the risks of multiple gestation, she does not have the right to terminate any excess embryos. Her choice is limited to running the risk of reimplanting all the embryos or renouncing parental rights so that the embryo is available for adoptive implantation in a second woman.

The Warnock Committee’s recommendations would give the facility in which the embryos are located the right to control the embryo’s fate in certain circumstances. The Warnock Committee recommends that if the couple does not use the embryo within a ten year period, the storage authority would have decision-making authority over it.\textsuperscript{258} The Committee also recommends that if both members of the couple die, the right to use or terminate the embryo should pass to the storage authority.\textsuperscript{259}

Couples should be allowed to maintain decision-making control over their embryos. In actual practice, this is likely to lead to only a small number of terminated embryos. Unlike women undergoing abortions, the goal of the couples undertaking medically-assisted reproduction is to have a child. The vast majority of embryos created will doubtlessly be put to that use. In the rare instances where the couple’s reproductive plans are completed with embryos still remaining, some couples will agree to donate the embryos to other couples. For those couples who do not wish to donate embryos, their wishes to terminate the embryos should be honored.

A strong argument can be made that it is unconstitutional to prevent the progenitors from exercising decision-making control over their embryos. The Supreme Court has consistently recognized the progenitor’s right to make procreative decisions even at the risk of embryo loss. That protection has been granted because of the significance of procreation and child-rearing in people’s

\textsuperscript{256} No. 964, § 126, 1986 La. Sess. Law Serv. at 347.
\textsuperscript{257} No. 964, § 129, 1986 La. Sess. Law Serv. at 348.
\textsuperscript{258} M. Warnock, supra note 49, para. 10.10.
\textsuperscript{259} Id. para. 10.12.
lives. The progenitor's autonomy in procreative decisions is protected because it is important to the progenitor's psychological and physical well-being and because it facilitates people raising children with a biological connection to them. Allowing the couple to decide whether or not to terminate an embryo to further their reproductive plans is consistent with these goals.

To allow the state or clinic to give the embryos to another couple, over the protests of the progenitors, would cause progenitors, who did not desire donation of their embryos, the psychological harm of knowing that their genetic children will exist in the world without any connection to them. If embryos could be given away without the couple's permission and the couple did not want to bear the psychological burden of knowing their child was being raised by someone else, the couple would have to undertake actions that would infringe upon their chances of procreating or would cause them psychological or physical harm. Some couples might be deterred from undergoing in vitro fertilization altogether, thus being pressured into not exercising their fundamental right to procreate. Others might ask the physician only to attempt to fertilize a few eggs, so that there will not be excess embryos that could be taken away from them against their wishes. However, since the fertilization process is fickle, it is hard to predict on how many egg fertilizations should be attempted in order to obtain the number of embryos that can safely be implanted in the woman's womb. If the physicians and couple attempt fertilization of a limited number of eggs, perhaps none will fertilize, causing them to have to subject the woman to the risk and expense of a subsequent laparoscopy in a later cycle. Alternatively, if fertilization of all the eggs occurred, the woman might put herself and her potential offspring through the physical risk of a multiple gestation beyond that which is medically advisable in order to prohibit the state or clinic from giving the embryos away. When a couple has an embryo frozen and the clinic or state will not honor their wishes to terminate it, the woman will be forced to go through the risk and expense of an im-

260. The traumatic nature of such a situation has been emphasized in the adoption literature. A study of birth parents who had given up children for adoption found that “[e]ven if the birth parents had become comfortable with the decision because there were no viable alternatives they nevertheless felt loss, pain, mourning, and a continuing sense of caring for that long vanished child.” A. SoroSky, A. Baran & R. Pannor, The Adoption Triangle 72 (1978). The authors characterized relinquishment as a “psychological amputation.” Id. at 56. See Kilbanoff, Genealogical Information in Adoption, 11 Fam. L.Q. 185, 195 (1977); Regan, Rewriting Roe v. Wade, 77 Mich. L. Rev. 1569, 1589 (1979).
plantation so that she can subsequently abort the embryo as is her right under *Roe v. Wade* to avert the psychological harm of someone else raising their child.

The burdens on the couple of overriding their decision-making control over the embryo are great. In contrast, few claims of harm can be made on behalf of the embryo. It is not viable and has no right to life. There is no evidence that an embryo at this stage can feel pain, so there is no claim that there is a duty to avoid pain.

Giving the progenitors decision-making control over the embryos leads to additional policy considerations which are raised when the progenitors disagree about the fate of the embryo—for example, in a divorce when each progenitor wants custody of the embryo. The Warnock Committee recommends that if there is no agreement between the couple, the right to control the fate of the embryo should pass to the storage authority.261

There are several forms which a disagreement between progenitors could take. The woman may want the embryo to be brought to term, and the man may want the embryo terminated. In that case, it would seem appropriate for the woman to be allowed to gestate the embryo. The Supreme Court’s abortion and contraception decisions have indicated that the right of procreation is the right of an individual262 which does not require the agreement of the individual’s partner. In particular, the woman has been held to have a right to abort without the husband’s consent and the right not to abort over the wish of the husband that she abort.263

But what if the positions were reversed and the woman wished to terminate the embryo and her male partner wished to have it brought to term? When an embryo conceived naturally is developing within a woman during the first two trimesters, it is clear that the woman’s decision whether or not to terminate it takes precedence over the desires of the man who provided the sperm. The Illinois Attorney General and the District Attorney for Cook County, in their briefs in an Illinois case regarding *in vitro* fertilization, assumed that the woman’s desires will likewise guide the

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262. For example, the Court in *Eisenstadt v. Baird* wrote that “[t]he right of privacy means anything, it is the right of the individual, married or single, to be free from unwarranted governmental intrusion into matters so fundamentally affecting a person as the decision whether to bear or beget a child.” 405 U.S. 438, 453 (1972).

course of the extra-corporeal embryo. But it is at least arguable that the man's wishes should be honored when the embryo's continued existence need not be balanced against the physical and psychological needs of the woman carrying it. The man clearly would not have the right to force the female progenitor to gestate the embryo, but there seems to be no reason not to give him custody of the embryo for gestation in a surrogate mother.

Another possible conflict would arise when the couple separates, but both want to have the embryo brought to term and raise the resulting child. The woman would gestate the embryo herself, while the man would have a surrogate gestate the embryo for him. This result, again, is unlike the abortion decision since honoring the man's wishes will not impose a physical burden on the woman and thus there is reason to give equal weight to his desires. If the woman's desires and the man's desires were given equal weight, the state would have to create a mechanism for awarding custody of the embryo to one or both parents, such as a hearing to determine which placement would be in the best interests of the child-to-be.

The state might not wish to create such a burdensome procedure. In such case, the state might make an argument that in cases where both the woman and the man want the embryo, the woman's wishes should govern because of a presumption that it is better to have an embryo gestated by its biological parent and because the man cannot himself gestate. Alternatively, the state could enact a law that requires that the couple indicate in writing prior to freezing what should happen if they die, divorce, lose interest in the embryo or disagree about how the embryo should be used. The Australian Rios case points out the problems that can occur when this is not done. The Waller Report recommends that the couple's consent document indicate what should happen to the embryo in case of the death of one or both of its parents or the dissolution of their marriage. If such an indication has not been made, the embryo should be removed from storage and allowed to expire. A proposed Michigan law similarly would require couples to

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265. In that situation, there was a question about what should be done with two frozen embryos after the deaths of the woman who conceived them and her husband. Tessler, Embryos Breed New Problems, The Detroit News, June 19, 1984, at 1A.
266. Waller Report, supra note 50, § 2.17.
indicate in advance of freezing the embryo what its fate should be given various contingencies.  

CONCLUSION

At ancient common law, the embryo had no legal personality. As property law developed, statutes provided that children born after a person’s death could inherit from that person as if they had been alive from the moment of conception.

Tort law and criminal law were slower to deal with the conceptus, although eventually they began to protect the interests of children to be free from injuries resulting from harm at the fetal stage. As the law evolved, it took a developmental approach to the conceptus, offering greater protections as the conceptus developed through various stages of gestation. The initial criminal law in the United States, for example, recognized that a murder charge could be brought if a live-born child died as a result of injuries that he or she had suffered in utero after quickening. A similar, though later, development occurred in tort law. Beginning in 1946, courts began to grant injured children a right to sue when their injuries were a result of harm to them in utero after viability.

Further evolution of the law, though not as widely accepted, has extended legal protection to the early stages of development, before quickening and viability. Such developments provide the foundation in some states for legal actions to be brought based on harm to an in vitro embryo that results in injury or death of the resulting child.

A further dramatic change has been the recognition of legal actions in instances where a fetus has died in utero. Most states now allow the progenitors to bring wrongful death suits based on negligent harm to a viable fetus that leads to a stillbirth. A few states indicate a willingness to entertain suits based on injury to a pre-viable fetus that results in stillbirth. Those states might also allow wrongful death suits for negligence leading to the demise of an embryo in vitro.

Under the criminal law, the ability to prosecute for injuries causing fetal death required statutory amendments to include the fetus within the reach of the homicide laws or to create special

feticide laws. Most of these changes are addressed to viable fetuses or to fetuses in utero and thus generally do not provide a basis for criminal prosecution based on termination of in vitro embryos against the progenitor's wishes.

The growing legal protection for the conceptus has culminated in attempts, such as one Louisiana law, to grant full personhood rights to the in vitro embryo. However, the constitutional protection accorded to childbearing decisions requires that such a statute be subject to strict scrutiny based on the progenitors' constitutional right to make procreative decisions even at the risk of harm to embryos. Because of its potential interference with couples' right to privacy to make procreative decisions, the new Louisiana law is constitutionally infirm.

The revolutionary legal changes that have led to enhanced recognition of the interests of a conceptus were justified by courts and legislatures as a reflection of the increase in medical knowledge. The processes of in vitro fertilization and other forms of medically-assisted reproduction now raise questions about how the legal trends should be applied to the physicians and couples who participate in alternative reproduction. In such situations, the law must recognize the vast difference between the couples who use alternative reproduction to further their procreative decisions, as well as the physicians who aid them, and individuals who harm an embryo in violation of the progenitors' wishes. Because of the fundamental importance of procreative decisions, the use of medical technologies to bear a child should be at least as well protected by the law as the use of medical technologies not to bear one.
