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Predicting the Future of Privacy in Pregnancy: How Medical Technology Affects the Legal Rights of Pregnant Women*

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Abstract

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KEYWORDS: privacy, pregnancy, technology

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The bodies of pregnant women are the battleground on which the campaign to define the right of privacy is fought. The ultimate outcome will likely be shaped at least as much by new medical technologies as by politics or moral persuasion. This is because medical technologies do much more than change what we can do: they can radically alter the way we think about ourselves. Technologies have the power to change "not only the relation of man to nature but of man to man."¹ More than that, they can alter our very concept of what it means to be human, and thus of the "rights" we properly afford this "new human."

Advances in genetics and prenatal screening, new knowledge of fetal development, fetal monitoring and safer cesarean sections, and drug-induced abortions, are all examples of changes in technology that force us to confront decisions impossible in the recent past. This brief article examines how medical advances in pregnancy and childbirth have affected the articulation of the legal rights of pregnant women in the past, and explores how changes in technology could affect the legal rights of pregnant women in the future.

I. Conception and Early Pregnancy

Modifications in the mode of human reproduction have long been viewed as science fiction and have occasioned both fear and amaze-

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1. Piel, *Natural Philosophy in the Constitution*, 233 SCIENCE 1056, 1057 (1986).

ment. In Orwell's *1984*, for example, AID (artificial insemination by donor) was mandatory, and sexual pleasure and the family were destroyed to help maintain the tension necessary in a society dedicated to perpetual warfare.² In Huxley's *Brave New World*, destruction of the family was also critical, but it was accomplished by sexual gratification and freedom. Reproduction became the exclusive domain of the state: embryos were produced and monitored in state-run "hatcheries" in artificial uteruses.³

More recent views of our future methods of reproduction are post-nuclear war, and pessimistic. Margaret Atwood pictures most women as sterile, and surrogate wives bear children for the sterile wives of the wealthy. In her *Handmaid's Tale*, these surrogates are "two-legged wombs . . . ambulatory chalices."⁴ And in Paul Theroux's *O-Zone*, AID clinics gradually evolve to provide anonymous but "natural" sex for sperm transmission, and finally degenerate into anonymous sex parlors where sex, not reproduction, is their primary function.⁵ We may, of course, avoid all of these futures. But the centrality of the family, and its formation based on the sexual reproduction by husband and wife, assure us that major changes in modes of reproduction will not only challenge traditional assumptions about the nature of the family and kinship relations, but will likely lead to major changes in our social structure as well.⁶

The U.S. Supreme Court has yet to consider constitutional issues involved in human reproduction via the "new, noncoital reproductive technologies" that permit reproduction without sexual intercourse. Nonetheless, past cases dealing with sterilization, contraception and abortion provide significant clues as to how an individual's constitutional "right of privacy" is likely to be refined in the event of governmental prohibition or regulation of these technologies.

In general, constitutional interpretation has depended heavily on prevailing social and scientific views, and on advances in technology. For example, the sterilization cases decided prior to World War II re-

2. G. ORWELL, *1984* (1949).

3. A. HUXLEY, *BRAVE NEW WORLD* (1931).

4. M. ATWOOD, *THE HANDMAID'S TALE* (1986).

5. P. THEROUX, *O-ZONE* (1986).

6. These technologies include artificial insemination by donor (AID), in vitro fertilization (IVF), the use of frozen embryos, surrogate embryo transfer (SET), gamete intrafallopian transfer (GIFT), and more extreme possibilities such as cross-species fertilization, total extracorporeal gestation, and cloning. See Elias & Annas, *Social Policy Considerations in Non-coital Reproduction*, 255 J.A.M.A. 62 (1986).

flected the values in the "eugenics" movement of the early 1900's. Later they began to reflect newly available medical alternatives and a more sophisticated view of genetics. Likewise, abortion was made part of a pregnant woman's right of privacy only after safe abortion techniques had been developed by the medical profession, and the state's interests in regulating abortion for maternal health have been exclusively determined by the safety of the technology itself. Although it may be too sweeping to conclude that the existence of new medical technologies actually determines the outcome of these constitutional issues, it is safe to conclude that technological advances in the field of reproduction have had a prominent impact on the shape and substance of constitutional interpretation.

A. Sterilization and the "Right to Procreate"

The most notorious case involving human reproduction, *Buck v. Bell*,⁷ was decided by the U.S. Supreme Court in 1927. In it the Court upheld a Virginia statute that permitted, among other things, the involuntary sterilization of the "feeble-minded."⁸ Justice Oliver Wendell Holmes wrote for the Court:

It is better for all the world, if instead of waiting to execute degenerate offspring for crime, or let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind. . . . Three generations of imbeciles are enough.⁹

This case capped three decades of the eugenics movement in the United States and was heavily influenced by it. It suggested constitutional support for a movement to limit the right to procreate to those with sufficiently high IQs, and did not even discuss the constitutional rights of Carrie Buck.¹⁰

7. 274 U.S. 200 (1927).

8. *Id.* at 205.

9. *Id.* at 207.

10. This case was, tragically, based on a misunderstanding of science rather than an application of it, and resulted in the sterilization not only of Carrie Buck, but also of more than 3,800 residents of Virginia mental institutions from 1927 to 1972. Carrie herself left the institution after she was sterilized, and lived with her husband for 24 years until his death. She later married again. She died in a nursing home at the age of 76 in 1983. Contrary to Justice Holmes' description of her, it is reported that "through her adult life she regularly displayed intelligence and kindness . . . she was an avid reader, and even in her last weeks was able to converse lucidly, recalling events from

Fifteen years later, in *Skinner v. Oklahoma*,¹¹ the Court struck down an Oklahoma statute that provided for the compulsory sterilization of "habitual criminals." The law applied to larceny, but specifically exempted persons convicted of embezzlement.¹² The eugenics movement had fallen into disfavor, and the Court was more willing to examine the rights of the individual.

The Court ruled that the statute violated the equal protection clause of the fourteenth amendment, and affirmed the fundamental "value of reproductive autonomy over a majoritarian decision in favor of sterilization."¹³ In the Court's words:

We are dealing here with legislation which involves one of the basic civil rights of man. *Marriage and procreation are fundamental to the very existence and survival of the race.* The power to sterilize, if exercised, may have subtle, far-reaching and devastating effects. In evil or reckless hands, it can cause races or types which are inimical to the dominant group to wither and disappear.¹⁴

Buck v. Bell has never been explicitly overturned. Nonetheless, the vast majority of commentators believe it is no longer good law, and that at the very least the Court could require a high level of procedural protection before any involuntary sterilization could be permitted.¹⁵

B. Contraception, Abortion and the "Right Not to Procreate"

Contraception and abortion have both been highly regulated and outlawed altogether. The changing mores of society had a major impact on the Court's changing views of these medical technologies. But the development of an effective oral contraceptive, and of a safe and

her childhood." Her daughter, Vivian, who was used to "prove" that her mother's "defects" were "hereditary," lived only eight years. In her two years in school she at one point made the school's honor roll. Lombardo, *Three Generations, No Imbeciles: New Light on Buck v. Bell*, 60 N.Y.U. L. REV. 30 (1985).

11. 316 U.S. 535 (1942).

12. *Id.* at 536-37.

13. *Id.* at 541.

14. *Id.* (emphasis added).

15. Not the least important reason for the shift is the existence of effective medical alternatives to using sterilization for birth control, such as oral contraceptives and IUDs, neither of which existed prior to the 1960s. See, e.g., *In re Grady*, 85 N.J. 235, 426 A.2d 467 (1981); and Baron, *Involuntary Sterilization of the Mentally Retarded* in *GENETICS AND THE LAW* (A. Milunsky & G. Annas eds. 1976).

effective means of first trimester abortion (dilation and evacuation), have contributed more to the changes in the Court's views than has generally been recognized. The Supreme Court's premier decision on contraception, in which the court enunciates the right of privacy for the first time in the reproduction context, for example, was heard shortly after oral contraception (introduced in 1960) became popular in the United States.

In *Griswold v. Connecticut*,¹⁶ a Connecticut statute that forbade the use of contraceptives was struck down as an unconstitutional violation of the "zones of privacy" that surround sexual relations in marriage.¹⁷ Seven years later, in *Eisenstadt v. Baird*,¹⁸ the Court determined that it was the sexual relationship and the potential to produce a child that was critical, not the marriage itself. Accordingly, a statute that only prohibited nonmarried individuals from using contraception was unconstitutional as well:

If the right to privacy means anything, it is the right of the individual, married or single, to be free from unwarranted governmental intrusions into matters so fundamentally affecting a person as the decision whether to bear or beget a child.¹⁹

The final series of cases deal with abortion. *Roe v. Wade*,²⁰ perhaps more than any other case in history, was shaped by a series of scientific and medical determinations adopted by the Court. This was presaged in the rationale for determining that the right of privacy was broad enough to encompass abortion. To justify this conclusion, the Court relied almost exclusively on its view of the medical and psychological harm the state would impose upon a woman by denying her this choice:

Specific and direct harm *medically diagnosable* even in early pregnancy may be involved. Maternity, or additional offspring, may

16. 381 U.S. 479 (1965).

17. *Id.* at 484. The statute had been upheld as a valid exercise of the state's police powers (to "preserve and protect and the public morals") as recently as 1940. *State v. Nelson*, 126 Conn. 412, 425, 11 A.2d 856 (1940).

18. 405 U.S. 438 (1972).

19. *Id.* at 453.

20. 410 U.S. 113 (1973). For an excellent series of articles on the opinion see Symposium: *Justice A. Blackmun: The Supreme Court and the Limits of Medical Privacy*, 13 AM. J. LAW & MED. 152-155 (1987). And see generally on women and abortion, R. GOLDSTEIN, *MOTHER-LOVE AND ABORTION* (1988).

force upon the woman a *distressful life* and future. *Psychological harm* may be imminent. Mental and physical health may be taxed by child care All of these factors *the woman and her responsible physician* will consider in consultation.²¹

But more important was the role assigned to medicine and technology in sketching the potentially compelling state interests involved which might permit the state to limit the woman's exercise of this fundamental right. As far as the state's interest in protecting fetal life, this became compelling not at conception, implantation, quickening, or birth, but rather at "viability." According to the Court, "viability" was chosen for only one reason:

Physicians and their scientific colleagues have regarded [quickening] with less interest and *have tended to focus* either upon conception or upon live birth or *upon the interim point at which the fetus becomes 'viable'*, that is, potentially able to live outside the mother's womb, albeit it *with artificial aid*.²²

The viability standard, so hotly debated ever since, was adopted on the strength of citing no more than an entry in a medical dictionary and another in an obstetrics text. *Why* this standard should have legal significance was never explained or logically justified by the court, prompting one commentator to exclaim that the court had substituted a "definition for syllogism."²³

Most impressive in terms of bowing to the imperative of medical technology is the Court's discussion of the state's interest in protecting the health of pregnant women — a state interest with deep roots. The point in pregnancy at which the state's interest in regulating abortion to protect the woman became compelling was to be determined "in the light of present medical knowledge."²⁴ On this basis, the Court put it at

21. 410 U.S. 113, 153 (emphasis added) John Robertson has correctly noted that the Court improperly lumped together two types of harm that are clearly distinguishable: physical harms during pregnancy, and psychological harms related to child rearing. When only the latter harms are applicable, the remedy is adoption, not abortion. The opinion rests firmly only on the physical and psychological harms related to forcing a woman to continue an unwanted pregnancy. Robertson, *Gestational Burdens and Fetal Status: Justifying Roe v. Wade*, 13 AM. J. LAW & MED. 189, 192-94 (1987).

22. 410 U.S. 113, 160 (emphasis added).

23. Ely, *The Wages of Crying Wolf: A Commentary on Roe v. Wade*, 82 YALE L.J. 920, 924 (1973). See also Robertson, *supra* note 21, at 201.

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

"approximately the end of the first trimester," because until the end of the first trimester, maternity "mortality in abortion may be less than mortality in normal childbirth."²⁵ In the past, abortion had always placed the woman's life "in serious jeopardy; [but] . . . modern medical techniques have alerted this situation."²⁶ This conclusion is based on five studies from the medical literature, cited by the Court in footnote 44 of the opinion. The articles primarily focus on the development and safety record of dilation and evacuation abortions, (which quickly replaced dilation and curettage abortions in the United States in the early 1970s) performed in the first trimester. Thus, it is fair to conclude that the state's interest in regulating abortion was determined by the medical profession and its development and use of safe methods of abortions.

The Court has also indicated that the state's interest in regulation will *continue* to be decided by technology since the time period during which the woman and her physician are free to make the abortion decision will expand as the safety of existing or new abortion techniques improves.²⁷ This has in fact happened, as abortion can now be safely performed as an office procedure for the first 16 weeks of pregnancy.²⁸

The point is that medical technology itself is driving the decisions of the Court in defining the state's role in human reproduction. Justice Sandra O'Connor has criticized the Court's apparent "science court" approach in these matters, noting that *Roe v. Wade* is on a "collision course" with itself as medicine makes abortions safer,²⁹ but her point seems misplaced. *The Court's decisions must be influenced by science and technology, because the Court must deal with the real world.* The real world changes as science, technology and medicine develop and test new methods of sterilization, contraception, abortion, and procreation.

That is why the introduction of a safe and effective drug to induce an abortion early in the first trimester will radically alter both the abortion debate itself, and the role of the law in regulating abortions. A pill, such as RU 486, if taken early in pregnancy could successfully

25. *Id.*

26. *Id.* at 149.

27. See *Akron v. Akron Center for Reproductive Health*, 462 U.S. 416 (1983). On abortion techniques, see Stubblefield, *Pregnancy Termination in OBSTETRICS: NORMAL AND PROBLEM PREGNANCIES* 1051-76 (S. Gabbe, J. Niebyl & J. Simpson, eds. 1986).

28. *Id.* at 437.

29. *Id.* at 458 (O'Connor, J., dissenting).

induce an abortion in 85% or more of the women taking it.³⁰ Not only would the introduction of such a pill (already marketed in China and France)³¹ make state regulation of abortion difficult, if not impossible, it would radically alter the way we think about abortion itself. Most likely, very early, chemically-induced abortions would make abortion seem more like contraception than abortion (currently possible only by surgery in the U.S.). In addition, by removing the physician from the location of the abortion or from taking a personal, active role in it (except as a prescriber), the drug would tend to "de-medicalize" early abortions and make them almost exclusively a moral decision for the individual pregnant woman. It is likely that opposition to the introduction of such a drug in the United States will be based on the premise that women are incapable of appropriately making the abortion decision themselves (and thus need the guidance of the state and physicians),³² rather than on any concern with the drug's safety or efficacy. We should debate this issue openly and completely, because the drug technology itself will have such a profound effect on the way we view abortion. Perhaps this drug demands an "ethical impact statement," as well as trials to demonstrate safety and efficacy. Nonetheless, the burden of proof is firmly on those who would deny women the choice between a surgically-performed abortion and a drug-induced one, at least after the drug-induced method is proven as safe and effective as surgery.

C. In Vitro Fertilization (IVF)

As RU 486 illustrates, public debate concerning rights to use a technology on the part of individuals, and ability to regulate a technology on the part of the government, do not usually arise until the technology at issue is developed and available. Although we cannot know how the Court will react to technologies not yet developed, or new technologies just becoming available, we can hazard some reasonable

30. Couzinet et al, *Termination of Early Pregnancy by the Progesterone Antagonist RU 486 (Mifepristone)*, 315 NEW ENG. J. MED. 1565 (1986).

31. Greenhouse, *Drug Maker Stops All Distribution of Abortion Pill*, N.Y. Times, Oct. 27, 1988 at 1, col. 6; and Greenhouse, *France Ordering Company to Sell Its Abortion Drug*, N.Y. Times, Oct. 29, 1988, at 1, col. 6; Greenhouse, *A New Pill: A Fierce Battle*, N.Y. Times Magazine, Feb. 12, 1989, at 23.

32. See, e.g., Kolata, *U.S. Company Denies Plans for Abortion Drug*, N.Y. Times, Sept. 29, 1988, at B11, col. 5. See also, Simons, *A Medical Outcry Greets Suspension of Abortion Pill*, N.Y. Times, Oct. 28, 1988, at 1, col. 1.

guesses based on the Court's dealings with sterilization, abortion, and procreation. A reasonable way to start is by examining how the court might react to various legislative controls over *in vitro* fertilization (IVF), including the use of frozen embryos.

Physician-philosopher Leon Kass has properly noted that in developing new ways to reproduce, we are considering:

not merely new ways of beginning individual human lives but also . . . new ways of life and new ways of viewing life and the nature of man. Man is defined partly by his origins and his lineage; to be bound up with parents, siblings, ancestors, and descendants is part of what we mean by human. By tampering with and confounding these origins and linkages, *we are involved in nothing less than creating a new conception of what it means to be human.*³³

In this regard IVF, confined to married couples using their own gametes, actually raises fewer confounding questions than any of the other new reproductive technologies.³⁴ IVF was originally developed as a method to bypass diseased fallopian tubes by surgically removing ova from the ovaries combining the ova with sperm from the woman's husband in a petri dish, and, after fertilization and a number of cell divisions, transferring the embryo into the woman's uterus for implantation.³⁵ Used within marriage, the technology presents only one major constitutional issue: can the government prohibit the use of IVF on the basis that it involves potential harm to the extracorporeal embryo?

The answer to this question seems to be no, based primarily on the *Roe v. Wade* analysis. This is because the embryo itself is not "viable" unless placed in a host uterus. It is not a person, and has no rights as such. Nor can any interests it has overcome the rights of its "parents" (the gamete sources) to decide to use or not to use it to procreate. A more difficult question is whether the parents could object to a statute requiring that any "left over" or spare embryos (ones created but not transferred to the woman) be frozen and "donated" to couples unable to produce their own embryos. The claim on the part of the state would be that this use would protect the embryos' "right to life," and the

33. L. KASS, TOWARD A MORE NATURAL SCIENCE: BIOLOGY AND HUMAN AFFAIRS 48 (1985) (emphasis added).

34. S. ELIAS & G. J. ANNAS, REPRODUCTIVE GENETICS AND THE LAW 224 (1987).

35. Annas & Elias, *In Vitro Fertilization and Embryo Transfer: Medicolegal Aspects of a New Technology to Create a Family*, 17 FAM. L.Q. 199 (1983).

state's strong interest in fetal life.³⁶ The counterclaim, which should prevail, is that such an early-stage embryo has no more "right to life" than a sperm or egg, and thus any interests the parents might have in not having their genetic child reared outside of their family would take precedence (assuming that such a result could be psychologically harmful to them). Whether the state could constitutionally forbid experimentation on spare embryos would depend upon how society views the embryo, what protections can be afforded it, and the purposes and importance of the experiment.³⁷

D. Surrogacy

Couples may want to freeze spare embryos for use in another cycle, or for other purposes. The use of frozen embryos, of course, raises many other possibilities that the state may want to control or forbid. For example, the embryo could be transferred not to the wife, but instead a "surrogate mother" could be hired to gestate the embryo for the couple. In this instance, IVF would be used not to bypass fallopian tube disease, but to permit the couple to avoid pregnancy altogether and still have a child composed of their genes. The cases previously discussed hold that a married couple (and arguably heterosexual unmarried couple) must be free from state interference in making a decision to bear or beget a child.³⁸ In addition, a pregnant woman and her physician must be in a position to make an abortion decision without state interference (at least prior to the point at which abortion becomes more dangerous than childbirth for the woman). Fetuses can be protected from their mothers by the state only after viability, and then only in ways that do not harm the mother herself.³⁹

Use of a surrogate mother, however, introduces a third, unrelated, party into the process of procreation. The state might have a stronger interest in protecting this person from possible exploitation. For example, it has been suggested (I believe correctly) that the constitution would probably prohibit a woman from irrevocably waiving or alienating her right to abort the fetus by promising never to have an abortion,

36. Robertson, *Embryos, Families and Procreative Liberty: The Legal Structure of the New Reproduction*, 59 S. CAL. L. REV. 939, 977 (1986).

37. *Id.*; Annas, *The Ethics of Embryo Research: Not as Easy as It Sounds*, 14 LAW MED. & HEALTH CARE 138 (1986).

38. *See, e.g., Eisenstadt v. Baird*, 405 U.S. 438 (1972).

39. *See Roe*, 410 U.S. at 160.

because specific enforcement of this contract would be so highly intrusive to the personhood of the woman.⁴⁰

One unanswered critical question is whether it should make any difference if the surrogate mother is carrying a fetus that was produced using her own egg and is thus her genetic child, as opposed to a fetus that is not genetically related to her at all. Although it would seem that in the latter circumstances one could view the woman simply as an "incubator" for the embryo, one cannot do this without dehumanizing her.⁴¹ As the Court noted in *Planned Parenthood of Missouri v. Danforth*,⁴² the pregnant woman has much more at stake in her pregnancy than does her husband — even if, as Justice White argued in dissent, she is carrying the *only* child her husband may ever have.⁴³ This is because it is her body (not an inert incubator) we are talking about, and she is the one who is undergoing *all* the physical risks, and at least

40. Note, *Rumpelstiltskin Revisited: The Inalienable Rights of Surrogate Mothers*, 99 HARV. L. REV. 1936 (1986), even the lower court judge in the *Baby M* case recognized that a woman could not irrevocably waive her right to terminate her pregnancy under the United States Constitution because judicial enforcement of such an agreement would be an intolerable burden on the pregnant woman, 217 N.J. Super. 313, 525 A.2d 1128 (1987). And see generally, *Forum on Surrogate Motherhood: Politics and Privacy*, 16 LAW, MED. & HEALTH CARE 5-137 (1988). Surrogacy involves the degradation of the pregnant woman by proclaiming that the most important concern is not her welfare, but that of the fetus she is carrying. This is what makes surrogacy so offensive and so potentially important symbolically for women. The lower court judge in the *Baby M* case, for example, termed surrogacy a "viable vehicle" to help deliver a baby to the Sterns; and the Sterns' expert witness termed Mrs. Whitehead simply a "surrogate uterus." The contract Noel Keen drafted for Mary Beth Whitehead, and which she signed, gave rights over her activities and body during pregnancy to the father (William Stern), who could not only require that she undergo amniocentesis but also that she abort a handicapped child at his demand. If she refused, his contract obligations ended. It is this untenable proposition — that a pregnant woman's life is not her own but, rather, that others should be able to determine her activities based on what they think is in the best interests of the fetus she is carrying — that underlies surrogacy. The contract attempts to get the mother to fantasize that she is simply a container carrying a precious cargo that she dare not injure. Annas, *Fairy Tales Surrogate Mothers Tell*, 15 LAW, MED. & HEALTH CARE 27, 31 (1988). See also B. ROTHMAN, *RECREATING MOTHERHOOD* (1989). This view has been adopted by some lawyers and judge and applied to all pregnant women in the forced cesarean cases discussed *infra*.

41. The issue of "dehumanization" or reification is discussed in more detail in Radin, *Market-Inalienability*, 100 HARV. L. REV. 1849 (1987), and Annas, *supra* note 40.

42. 428 U.S. 52 (1976).

43. *Id.* at 93 (White, J., dissenting).

as many psychological risks as the genetic father. Accordingly, because she has more at stake, more personally and more immediately, than anyone else, only she should have the right to decide about an abortion.

In Justice Blackmun's words, "[i]nasmuch as it is the woman who physically bears the child and who is the more directly and immediately affected by the pregnancy, as between the two, the balance weighs in her favor."⁴⁴ Moreover, even she should not be able to alienate that right — because to do so puts her in the position of an "incubator"; at best a slave, at worse a simple container. Such dehumanization, even if done "voluntarily," cannot be constitutionally enforced by the state because of the intense impact of pregnancy on the personhood of the pregnant woman.⁴⁵ An analogous argument suggests that between the genetic and gestational mother, the gestational mother has a higher claim to be considered the presumptive rearing mother, irrespective of any prior contractual agreement to waive or alienate her right to rear the child.

It should be emphasized that the new medical technology of embryo transfer (ET), the ability to transfer an embryo to the uterus of a woman not genetically related to it, has forced us to confront a question unique in legal history: as between the genetic and gestational mother, who is the mother of the child? More precisely, does the child's gestational (birth) mother or the genetic mother have the legal rights and responsibilities to rear the child? Society has not yet answered this question, but it would seem that based on the comparative contributions and risks taken, and to insure that the child has a protector who can be unequivocally and immediately identified at birth, and who will definitely be present at birth, the traditional legal rule should continue in force: the gestational mother should be considered the child's legal mother for all purposes, and this presumption should be irrebuttable and unalterable by prior contract.⁴⁶

Whether one adopts a protective family law model for surrogacy, or a free market commercial model, it should be noted that the state

44. *Id.* at 71.

45. See *supra* note 41. On the centrality of birth to motherhood see K. RABUZZI, *MOTHERSELF: A MYTHIC ANALYSIS OF MOTHERHOOD* (1988).

46. Of course, the child's mother would have the right to give the child up for adoption, or to relinquish parental rights in the child, but only when this is done voluntarily *after* birth and consistently with existing statutes on adoption and relinquishment of parental rights. See *In the Matter of Baby M*, 537 A.2d 1227 (N.J. 1988); Annas, *Making Babies Without Sex: The Law and the Profits*, 74 AM. J. PUB. HEALTH 1415, 1415 (1984); and S. ELIAS & G.J. ANNAS, *supra* note 34, at 238-39.

also has a much stronger interest in regulating commerce than it has in regulating human reproduction. Thus it is likely that while a general ban on the use of surrogacy might be constitutionally challenged (as interfering with a couple's right to procreate for no compelling state interest), a ban on commercial surrogacy or the buying and selling of human embryos would likely survive constitutional challenge. This ban would not only be based on society's general distaste for the selling of children, involuntary servitude, and/or embryo selling, but also on the potential harms such practices have to all of the participants, including the surrogate and the resulting child, and the harms to society as a whole from sanctioning such a practice.⁴⁷ On the other hand, it has been persuasively argued that *all* surrogacy, paid and unpaid, should be banned because it is ironically self-deceptive, in that it appears to empower women, but actually "reinforces oppressive gender roles."⁴⁸ As to selling human embryos, how this issue is ultimately decided will depend upon whether we come to view the human embryo as a commodity, and thus properly an article of commerce; or whether we afford it a higher value and thus protect it from abuse and exploitation similar to the way we now protect human organs, national parks, and certain species of wildlife.⁴⁹

II. Maternal-Fetal Conflicts

A. Fetal Surgery

One of the major consequences of antenatal diagnosis of the fetus has been to view the fetus as a patient, often termed the doctor's "second patient." The ability to intervene to actually treat the fetus, however, is very limited. In fact, most current methods can only diagnose specific diseases or defects, and the only "treatment" is the termination of the pregnancy. Obviously this is usually done not for the sake of the fetus (unless the condition is so devastating that the fetus would be better off not existing), but for the family. Because of a woman's right

47. *Id.*

48. Radin, *supra* note 41, at 1930. Radin goes on to note that would-be fathers can also be seen as oppressors of their wives, who, believing it is their duty to mother their husband's genetic child, "could be caught in the same kind of false consciousness and relative powerlessness as surrogates who feel called upon to produce children for others," *id.* at 1931. See also G. COREA, *THE MOTHER MACHINE* (1985) at 221-24; E. KANE, *BIRTHMOTHER* (1988); and M. WHITEHEAD, *A MOTHER'S STORY* (1989).

49. See Annas, *supra* note 37, at 139-40.

to abortion, she has the constitutional right to terminate the pregnancy because her fetus is abnormal.

In the future, it will likely be possible to treat the affected fetus for many conditions. Treatment of the fetus will involve the cooperation of the pregnant woman, and might even put her own life or health in danger. How should courts deal with the competing rights of the fetus and the pregnant woman when treatment could lead to a normal birth, but the pregnant woman prefers to terminate the pregnancy, or to carry the affected fetus to term untreated?

The current state of the art is medically very primitive and highly experimental. Fewer than 100 cases of hydrocephalus have been treated by surgical decompression, with results that have been described as "not encouraging." Even fewer have had surgery for urinary tract obstruction, with somewhat better results. Other potential areas for the development of fetal surgery include diaphragmatic hernia, spina bifida, gastroschisis, and allogenic bone transplants.⁵⁰

The fact that these procedures are currently highly invasive and experimental means that they *cannot* be performed without the woman's informed consent, and that she is under no obligation to give such consent. But assume the procedures are perfected; and assume not only that they not only become "standard medical procedures" but also that they can be performed with no or minimal risk to the pregnant woman. Under such circumstances, will the pregnant woman be afforded the same constitutional right to refuse to have her fetus operated on while it is still inside her? And what if surgery is not required, but only a medication? Assume, for example, that deafness could be diagnosed prenatally, and cured by the injection of a drug. Should a pregnant woman be able to refuse a drug on the basis that she preferred to have a deaf child?⁵¹

50. S. ELIAS & G.J. ANNAS, *supra* note 34, at 243-50.

51. Related questions involve use of the fetus as a potential source of tissue for transplant, such as use of fetal brain tissue for transplant to the brains of individuals suffering from Parkinson's disease, and the abortion of fetuses based not on genetic disease, but solely on their sex. The use of aborted fetuses as "spare parts" could change the nature of abortion decision itself, since it implies that the decision, although always tragic, could benefit someone else, and thus could also be seen as altruistic. See *Parkinson Patient gets Fetal Tissue*, N.Y. Times, Nov. 12, 1988, at 32, col. 6; and Robertson, *Fetal Tissue Transplants*, 66 WASH. U. L.Q. 443 (1988). The abortion of fetuses solely based on their sex could pervert the medical nature of fetal diagnosis; since sex is not a genetic disease or defect, convert it into a consumer good which is available on demand for any reason, and undermine society's commitment to sexual

B. "Forced Cesarean-Section" Cases

There have been approximately two dozen court-ordered "forced" cesarean section cases decided by judges in the U.S. in the past five years.⁵² Most have involved racial minorities and foreign-born women, and only two of these cases have reached an appellate court level.

The first appellate case, *Jefferson v. Griffin Spalding County Hospital Authority*,⁵³ involved a Georgia woman who was due to deliver her child in about four days and had previously notified the hospital that it was her religious belief that the Lord had healed her body and that whatever happened to the child was the Lord's will. Both the hospital and a public agency sought an order requiring her to submit to a cesarean section. The odds that the unborn child would die if a vaginal birth was attempted were put at 99% to 100% by the physician. The court granted the petition, on the basis that the

[s]tate has an interest in the life of this unborn, living human being [and] the intrusion involved . . . is outweighed by the duty of the [s]tate to protect a living, unborn human being from meeting his or her death before being given the opportunity to live.⁵⁴

The parents immediately petitioned the Georgia Supreme Court to stay the order. On the evening of the same day as the hearing, the court denied their motion, with a two-sentence conclusory opinion.⁵⁵ A few days later, the woman uneventfully delivered a healthy baby without surgical intervention.

The other appellate case, *In re A.C.*,⁵⁶ is from Washington, D.C. Angela C. was a 28 year old terminally ill married woman. Her physicians determined that she would die very soon, but she and they agreed to a course of chemotherapy and radiation treatment to try to get her

equality. See, e.g., Fletcher, *What are Society's Interests in Human Genetics and Reproductive Technologies?* (Book Review), 16 LAW, MED. & HEALTH CARE 131, 135-36 (1988) (reviewing S. ELIAS & G.J. ANNAS, *REPRODUCTIVE GENETICS AND THE LAW* (1987) and A. MILUNSKY & G.J. ANNAS, *GENETICS AND THE LAW III* (1985)).

52. Kolder, Gallagher & Parsons, *Court-Ordered Obstetric Interventions*, 316 NEW ENG. J. MED. 1192, 1192 (1987). See also Rhoden, *The Judge in the Delivery Room: The Emergence of Court-Ordered Cesareans*, 74 CAL. L. REV. 1951 (1986).

53. 247 Ga. 86, 274 S.E.2d 457 (1981). See G.J. ANNAS, *JUDGING MEDICINE* (1988) at 119-125.

54. *Id.* at 89, 247 S.E.2d 460.

55. *Id.*

56. 533 A.2d 611 (D.C. App. 1987), *vacated*, 539 A.2d 203 (D.C. App. 1988).

to 28 weeks gestation, when the fetus would have a much better chance to be born healthy. Hospital lawyers, however, called in a superior court judge and asked him to determine what action to take. At an emergency hearing held at the hospital, it was determined that the patient had not consented to the immediate removal of her fetus by cesarean section, but that this would be best for the fetus, even though it might accelerate the patient's own demise. The judge ordered the cesarean section performed to try to save the fetus.⁵⁷ A telephone appeal was unsuccessful. The fetus was delivered, but died shortly thereafter. The mother died two days later. About six months later, in November 1987, the appeals court explained its refusal to grant a stay in writing.⁵⁸

The opinion reads more like a sympathy card than a judicial pronouncement. Its first paragraph, for example, ends with the following sentence: "Condolences are extended to those who lost the mother and child."⁵⁹ The court acknowledged that its opinion might "reasonably" be seen as "self-justifying" and then went on to rationalize the denial of the stay.⁶⁰ The opinion rests on a number of false assumptions. The most serious error is the statement that "as a matter of law, the right of a woman to an abortion is different and distinct from her obligations to the fetus once she has decided not to timely terminate her pregnancy."⁶¹ This is incorrect as both a factual and legal matter. Ms. C never "decided not to timely terminate her pregnancy," and because of her fetus's affect on her health, under *Roe v. Wade* she could have authorized her pregnancy to be terminated to protect her health at any

57. Judge Sullivan concluded his order as follows:

The family of Angela, I appreciate this is a very emotional time in your life, filled with tragedy. My only hope, my only concern is that if this fetus is born, that you learn to love the fetus as you did Angela. I have an obligation to give that fetus an opportunity to live. I have ruled.

In re Carder transcript, June 18, 1987, at 85.

Judge Sullivan here refers to Angela in the past tense, assuming she is already dead. As Robert Burt has insightfully noted, "Judge Sullivan believed that his decision would hasten Angela's death, and it is therefore not surprising that, having made his decision, he would imagine that she was already dead . . . He [also] transformed the fetus into a lifeless abstraction, an embodiment of [l]ife rather than a living, breathing human being." Burt, *Uncertainty and Medical Authority in the World of Jay Katz*, 16 *LAW, MED. & HEALTH CARE*, 190, 194 (1988).

58. 533 A.2d 611 (D.C. App. 1987), *vacated* 539 A.2d 203 (D.C. App. 1988).

59. *Id.* at 611.

60. *Id.* at 613.

61. *Id.* at 614.

time prior to her death. Nothing in *Roe v. Wade* requires a woman to put her own life or health in jeopardy to protect her fetus, even her viable fetus. And since the fetus itself was not viable, what actually happened is that the court forced Ms. C. to have an abortion prior to her death, doing so on the false premise that a terminal diagnosis strips a pregnant woman of her constitutional rights.

The second basis on which the opinion rests is that a parent cannot refuse treatment to save the life of a child (true), and therefore a pregnant woman cannot refuse treatment necessary to save the life of her fetus (false).⁶² The child must be treated because parents have obligations to act in the "best interests" of their children (as defined by child neglect laws), and treatment in no way compromises the bodily integrity of the parents.⁶³ Fetuses, however, are not independent persons, and cannot be treated without invading the mother's body. There are no "fetal neglect" statutes, and it is unlikely that any could withstand constitutional scrutiny. Treating the fetus against the will of the mother requires us to degrade and dehumanize the mother and treat her as an inert container. This may be acceptable once the mother is dead, but is never acceptable when the mother is alive. The court seems to understand this intellectually, and thus ultimately justified its opinion on the basis that Ms. C. was as good as dead, and had no "good health" to be "sacrificed." "The cesarean section would not significantly affect A.C.'s condition because she had, at best, two days left of sedated life. . . ." ⁶⁴

But this reasoning will not do. It would, for example, permit the involuntary removal of vital organs prior to death when they were needed to "save a life." But if the child had already been born, it is unlikely that any court would require its mother to undergo major surgery for its sake (e.g., a kidney "donation") no matter how dire the potential consequences of refusal to the child. And no court would ever require the father of a child to undergo surgery, even to save the child's life. The ultimate rationale may be purely sexist: cesarean sections cannot be done on males, and these male judges are simply unable to identify with pregnant women.⁶⁵

Jefferson is not much better. In addition to wrongly relying on *Roe*

62. *Id.* at 616-17.

63. See S. ELIAS & G.J. ANNAS, *supra* note 34, at 168-94.

64. 533 A.2d at 617, and see also *supra* note 57.

65. Annas, *She's Going to Die: The Case of Angela C.*, 18 HASTINGS CENTER REP. 23, 25 (Feb. 1988).

v. *Wade*, it also relied on *Raleigh Fitkin-Paul Morgan Memorial Hospital v. Anderson*⁶⁶ which involved a woman who was approximately eight months pregnant. Physicians believed that some time before giving birth, she would hemorrhage severely and that both she and her fetus would die if she did not submit to blood transfusions. She refused blood transfusions because she was a Jehovah's Witness. The trial court upheld her refusal, and the hospital appealed to the New Jersey Supreme Court. In the meantime, the woman had left the hospital against medical advice, and the case was moot. Nevertheless, the court proceeded to determine that the fetus was "entitled to the law's protection" and that blood transfusions could be administered to the woman "if necessary to save her life or the life of her child, as the physician in charge at the time may determine."⁶⁷

Raleigh is of limited value. First, no one was forced to do anything as a result of the opinion: no transfusion was actually performed, and no police were dispatched to apprehend the woman and return her to the hospital. Second, it was a one-page opinion, with little public policy or legal discussion. Third, the extent of bodily invasion involved in a blood transfusion is much less than that involved in a cesarean section, which is major abdominal surgery. Fourth, the case was decided twelve years before the same New Jersey court decided the case of *Karen Ann Quinlan*,⁶⁸ which applied the right of privacy to medical treatment refusals.⁶⁹

Griswold and *Roe* represent situations in which medical advances were used by the Court to enhance the liberty rights of women. The forced-cesarean cases, on the other hand, illustrate the potential "dark side" of technology. Here medical advances, including neonatal intensive care units, fetal monitoring, and safer cesarean sections, were used not to enhance the rights of pregnant women, but instead to provide an excuse to ignore them by concentrating exclusively on the potential child. The lesson these cases teach is that technology untempered by human rights can lead to the brutal dehumanization of pregnant women.

66. 42 N.J. 421, 201 A.2d 537 (1964), *cert. denied*, 377 U.S. 985 (1964).

67. *Id.* at 423, 201 A.2d at 538.

68. *Matter of Quinlan*, 70 N.J. 10, 355 A.2d 647 (1976). Nonetheless, the question of whether *Karen Quinlan's* parents could have ordered the ventilator disconnected if *Karen* had been pregnant was not addressed by the court.

69. 355 A.2d at 662-64. See also *Annas, Forced Cesareans: The Most Unkindest Cut of All*, 12 HASTINGS CENTER REP. 16 (June 1982).

The position the Court will likely take on whether or not it is proper to force a woman to undergo interventions like fetal surgery for the sake of her fetus will depend on how the Court views the reasonableness of the intervention. This will, in turn, be primarily determined by how the medical profession views these procedures (e.g., as "heroic" or routine), their success rates, and by the precise risks to the woman of having them forced on her. It seems likely that surgery that involves general anesthetic or actual physical invasion of a woman's body will not be permitted. Such surgery could only be compelled by treating the pregnant woman as an inert container.⁷⁰

70. A legally analogous situation occurs when a court authorizes a "search and seizure" of a substance that is inside the body of a criminal suspect. In the most famous "search and seizure" case, the U.S. Supreme Court ruled that having a physician take blood in a hospital to determine whether an individual is under the influence of alcohol is "reasonable" under the fourth amendment protection against unjustified searches and seizures because of the strong interest the community had in fairly and accurately determining guilt or innocence, the inability of determining intoxication by other means, and the very minor invasion of the body involved in drawing blood which, "for most people involves virtually no risk, trauma, or pain." *Schmerber v. California*, 384 U.S. 757, 771 (1966). In an earlier case the Court found a search unreasonable when police broke into a suspect's room, attempted to extract narcotics capsules he had put in his mouth, and then rushed him to the hospital and insisted that an emetic be administered to induce vomiting. This violated the suspect's interests in "human dignity." *Rochin v. California*, 342 U.S. 165, 174 (1952). Even closer to the cesarean section cases is a case in which the Court upheld a lower court ruling that it would be unreasonable under the fourth amendment to order surgery to remove a bullet from an accused armed robber who shot his victim and was in turn shot by him. The Court held, consistent with *Schmerber* and *Rochin* that the interests of the accused had to be balanced against the interests of the state. The accused's primary interests were in maintaining "personal privacy and bodily integrity." Removal of the bullet would require, among other things, general anesthesia. In the Court's words:

When conducted with the consent of the patient, surgery requiring general anesthesia is not necessarily demeaning or intrusive. In such a case, the surgeon is carrying out the patient's own will concerning the patient's body and the patient's right to privacy is therefor preserved. In this case, however . . . the Commonwealth proposes to *take control of respondent's body*, to "drug the citizen — not yet convicted of a criminal offense — with narcotics and barbiturates into a state of unconsciousness" and then to search beneath his skin for evidence of a crime. *This kind of surgery involves a virtually total divestment of respondent's ordinary control over surgical probing beneath his skin.*

Winston v. Lee, 470 U.S. 753, 765 (quoting *Lee v. Winston*, 717 F.2d 888, 901 (1985) (emphasis added).

Not only was the burden on the citizen great, the state had other evidence available to make its case, so the search was not "reasonable." *Id.* Analogously, a forced

The "waiver" argument posits that the right to abortion is alienable and once a woman alienates it by deciding to carry the fetus to term, she has an affirmative obligation to consent to any reasonable medical or surgical intervention medicine has to offer to help her fetus be as healthy as possible. It transforms a woman's liberty interest in abortion into a new, state-imposed duty to protect her fetus. This, however, seems much more a moral construct of what we hope the "ideal mother" will do, than a legal obligation enforceable through the courts. The waiver argument seems misplaced for at least two reasons. First, such a waiver never in fact takes place. Women do not appear before judges to waive their rights at any time during the pregnancy. Secondly, and more importantly, women have a constitutional right to bear children if they are physically able to. To have a legal rule that there are no restrictions on a woman's decision to have an abortion, but if she elects childbirth instead then we will require her to surrender her basic rights of bodily integrity and privacy, creates a state-erected penalty on her exercise of her right to bear a child.⁷¹ Such a penalty or "infringement" would (or at least should) be unconstitutional.

On the other hand, if the intervention is viewed as trivial, such as requiring the woman to take one pill that would prevent her child from being born severely retarded, balancing the interests of the woman with that of her fetus might permit some action. Just what the extent of the action would be, however, is questionable. For example, would we force the woman's mouth open and jam the pill down her throat, or put her in jail until she took it voluntarily? Ironically, supervising more trivial interventions like diet and smoking, may require more massive privacy invasion than one-time surgery.⁷²

The extent of the woman's constitutional right to refuse treatment will likely be technologically-determined; turning on whether we have a safe and effective treatment that can be delivered in a very unintrusive

cesarean section is a much more intrusive and dangerous surgical procedure than the bullet removal, and much more demeaning to the patient because it treats her simply as a container. On the other hand, the potential state interest in the life of the fetus (soon-to-be-child) is very high.

71. Johnsen, *The Creation of Fetal Rights: Conflicts With Women's Constitutional Rights to Liberty, Privacy and Equal Protection*, 95 YALE L.J. 599 (1986). And see generally Nelson, Buggy, & Weil, *Forced Medical Treatment of Pregnant Women: "Compelling Each to Live as Seems Best to the Rest,"* 37 HASTINGS L.J. 703 (1986).

72. Miller, *Rights in Conflict? The Pregnant Woman v. The Fetus at Risk*, MASS. MED. 17-18 (Sept.-Oct. 1986). An intervention like a topical skin cream or spray that could be used on a one time basis without risk to the woman might be acceptable.

way. If this prediction is correct, future courts may well favor the constitutional right of the fetus to life and health over the woman's right to bodily integrity, at least in some limited circumstances.

C. Fetal Abuse: The Case of Pamela Monson Stewart

The Stewart case takes us one step further, and raises the issue of "fetal abuse." Could the state constitutionally define a new crime of fetal abuse similar to the current crime of child abuse and use it to force a pregnant woman to take or refrain from taking certain actions that might be harmful to their fetuses?

Reportedly, Mrs. Stewart was, because of placenta previa,⁷³ advised by her physician to refrain from taking drugs, stay off her feet, avoid intercourse, and seek immediate medical attention should she begin to hemorrhage. She allegedly ignored this advice. She stayed at home after she first noticed some bleeding, had intercourse with her husband, took amphetamines, and did not go to the hospital until many hours later. Her son was born with massive brain damage, and died six weeks later. Criminal charges were filed under California's child support statute, which includes "unborn children": "[i]f a parents of a minor child *willfully omits*, without lawful excuse, to furnish necessary clothing, food, shelter or *medical attendance, or other remedial care* for his or her child, he or she is guilty of a misdemeanor punishable by a fine not exceeding two thousand dollars, or by imprisonment [for one year]."⁷⁴

The case was dismissed in early 1987 because the trial judge determined that this child support statute did not apply to her conduct.⁷⁵ But this does not determine how a similar case would be decided under a properly-worded statute. The prosecution, for example, alleged that "disobeying instructions" or "failure to follow through on medical advice" should be grounds for criminal action. The danger in this approach is changing the nature of the doctor-patient relationship, and the nature of physician "advice." Physicians are neither policemen nor seers, and medical advice is an inherently vague term. To be effective

73. Placenta previa is the condition in which the placenta is in the lower segment of the uterus, extending to the margin of the internal os of the cervix or partially or completely obstructing the os.

74. CAL. PENAL CODE § 270 (West 1986) (emphasis added).

75. G.J. ANNAS, *supra* note 53, at 96. See also Note, *Maternal Rights and Fetal Wrongs: The Case Against the Criminalization of "Fetal Abuse"*, 101 HARV. L. REV. 994 (1988).

in protecting fetuses, monitoring compliance would be necessary. This could require confining pregnant women to an environment in which eating, exercise, drug use, and sexual intercourse could be controlled.

Other quandaries arise if we decide to apply child neglect statutes to fetuses. Unlike a child, the fetus is absolutely dependent upon its mother and cannot itself be "treated" without in some way invading the mother. The "fetal protection" policy enunciated by the prosecution seems to assume that, like mother and child, mother and fetus are two separate individuals, with separate rights. But treating them separately before birth can only be done by favoring one over the other in disputes. Favoring the fetus radically devalues the pregnant woman and treats her like an inert incubator, or a culture medium for the fetus.

This view makes women unequal citizens, since only they can have children, and relegates them to performing one primary function: childbearing. It is one thing for the physician to view the fetus as a patient; it is another for the state to assume that the fetus's interests are in opposition to its mother, and to require treatment of the fetus by requiring the mother to be its servant.

Another problem is more technical: what is "fetal neglect"? Child neglect covers a wide variety of activities, but generally involves failure to provide certain things, like clothing, food, housing or medical attention, to the child. Such laws *do not*, however, require parents to provide "optimal" clothing, food, housing or medical attention to their children; and do not even forbid taking risks with children, such as engaging in dangerous sports, or affirmatively injuring children in the a format punishment to teach them a lesson.⁷⁶ Even if we can define fetal neglect we are left with the inherently sexist application of the law. On the surface at least, it would seem that the primary reason to attempt to make fetal abuse laws stricter than child abuse laws is that such laws can only apply to women. While this type of sex discrimination could survive current equal protection analysis, Sylvia Law seems correct in proposing an intermediate scrutiny framework for equal protection analysis that could protect women and which coercive fetal neglect laws could not survive:

laws governing reproductive biology should be scrutinized by courts to ensure that (1) the law has no significant impact in perpetuating either the oppression of women or culturally imposed sex-role constraints on individual freedom or (2) if the law has this impact, it is

76. G.J. ANNAS, *supra* note 53, at 94.

justified as the best means of serving a compelling state interest.⁷⁷

Society can never force a woman to take actions for the sake of her fetus without treating her as something less than a competent adult. Education, service provision, and enhanced opportunities seem most likely to improve the plight of fetuses and pregnant women alike.⁷⁸ But if we don't follow the road of equal opportunity and provision of reasonable health care, and if we do develop sophisticated methods to monitor the health of fetuses (e.g., by a bracelet device worn by all fertile women that monitors the health of the fetus and emits a warning signal when the fetus is in stress so that the woman can be picked up and taken to the hospital), the rights of women could well become subordinated to the welfare of their fetuses. The result would be a return to oppressive gender-based discrimination. This threat would be real in a future society which, like that envisioned by Margaret Atwood in *The Handmaid's Tale*,⁷⁹ has a dwindling population and needs every birth possible to maintain itself.

III. Conclusion

Technology's leading historian, Lewis Mumford, has noted that scientific knowledge has a dark side and only social policy and law are powerful enough tools to help society attempt to avoid this dark side. When "not touched by a sense of values [scientific knowledge] works . . . toward a complete dehumanization of the social order." He continues:

The plea that each of the sciences must be permitted to go its own way without control should be immediately rebutted by pointing out that they obviously need a little guidance when their applications in war and industry are so plainly disastrous. . . .⁸⁰

Reliance on the notion of "values," unfortunately, can no longer serve in an age which has cheapened that term to come to mean a call

77. Law, *Rethinking Sex and the Constitution*, 132 U. PA. L. REV. 955, 1009 (1984).

78. S. ELIAS & G.J. ANNAS, *supra* note 34, at 262. Nonetheless, the crack epidemic will make moves to criminalize fetal abuse more difficult to fight. See, e.g., Sherman, *Keeping Baby Safe from Mom*, Nat'l L.J., Oct. 3, 1988, at 1, col. 1, and *Crack Comes to the Nursery*, TIME, Sept. 19, 1988, at 85.

79. ATWOOD, *supra* note 4.

80. THE LEWIS MUMFORD READER (D. Miller ed. 1986).

for moral relativism at best, and a reflection of personal taste, like table manners, at worst. Indeed, it is probably because of our current vacuous notion of values that they are touted as potential saviors from the many potentially dehumanizing technologies devised by the minds of men. Values do nothing to slow the pace of "progress," and offer no threat to the technological imperative. Langdon Winner has persuasively argued that we need much more, something with meaning. He has suggested law, with its focus on human *rights*, as essential. Among other things, he has noted that Moses did not come down from the mountain with "Ten Values"; and that the first ten amendments to the Constitution are not called the "Bill of Values."⁸¹

It is insufficient to note that "scientific/technological advance" has changed "the very conceptions of *human rights*" by transforming the type of lives we lead and changing our view of human necessities to include things that have traditionally been considered luxuries.⁸² We must incorporate technological change into a coherent view of humanness, and what rights humans should be able to lay claim to against their government. This will not be an easy task, and the Constitution (and its interpreter, the Court) is a necessary, but not sufficient instrument to accomplish it. More than our notion of human rights is being transformed by science and technology: our very notion of what it means to be human is being changed, including the meaning of pregnancy and motherhood. And this recognition must be followed by meaningful dialogue aimed at distilling those characteristics of human life we find essential to give it meaning and worth. As Aldous Huxley wrote more than twenty-five years after he imagined *Brave New World*:

Brave New World presents a fanciful and somewhat ribald picture of a society in which the attempt to recreate human beings in the likeness of termites has been pushed almost to the limits of the possible. That we are being propelled in the direction of *Brave New World* is obvious. But no less obvious is the fact that we can, if we so desire, refuse to cooperate with the blind forces that are propelling us.⁸³

81. L. WINNER, *THE WHALE AND THE REACTOR: A SEARCH FOR LIMITS IN AN AGE OF HIGH TECHNOLOGY* 155-63 (1986). See also R. DRINAN, *CRY OF THE OPPRESSED: THE HISTORY OF THE HUMAN RIGHTS REVOLUTION* (1987).

82. Holton, *The Advance of Science and Its Burdens in Art and Science*, 115 *DAEDALUS* 75 (No. 3, 1986).

83. A. HUXLEY, *BRAVE NEW WORLD REVISITED* 24-25 (1958).

It is inconceivable that all the potential changes in humanness science and technology can bring us are "good" and are thus to be welcomed as part of the "good life." The advent of the nuclear age sufficiently rebuts this claim. But in the area of medicine, a field which is always seen as beneficent, we are less likely to be on guard against potentially dangerous threats to human well-being. We may need to develop not just "ethical impact statements," but "human rights impact statements" as well to help society evaluate new medical technologies in more meaningful ways that current methods of technology assessment permit. The challenge to our Bill of Rights and its guardians is to appreciate that technology is more than a tool; that rights are more than values; and that only by safeguarding fundamental human rights, are we likely to enjoy a future as *human* beings, with some coherent concept of what it means to live well on this planet.

In any such discussion, the right of privacy is likely to be viewed as a central right of citizens, and one especially critical to preserving our notions of the mother-child relationship and the personhood of pregnant women in a world of rapidly expanding medical technology. Justice Blackmun's admonition in *Thornburgh* seems an appropriate note on which to conclude:

Our cases long have recognized that the Constitution embodies a promise that a certain sphere of individual liberty will be kept largely beyond the reach of government. *That promise extends to women as well as to men.*⁸⁴

84. *Thornburgh v. American College of Obstetricians & Gynecologists*, 476 U.S. 747, 772 (1986) (emphasis added).