Journal of Contemporary Health Law & Policy (1985-2015)

Volume 2 | Issue 1

Article 13

1986

Medical-Legal Aspects of Cryonics: Prospects for Immortality Ethical - Legal and Social Challenges to a Brave New World Genetics - Ethics and the Law

Harold A. Buetow

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

Recommended Citation

Harold A. Buetow, *Medical-Legal Aspects of Cryonics: Prospects for Immortality Ethical - Legal and Social Challenges to a Brave New World Genetics - Ethics and the Law*, 2 J. Contemp. Health L. & Pol'y 173 (1986).

Available at: https://scholarship.law.edu/jchlp/vol2/iss1/13

This Book Review is brought to you for free and open access by CUA Law Scholarship Repository. It has been accepted for inclusion in Journal of Contemporary Health Law & Policy (1985-2015) by an authorized editor of CUA Law Scholarship Repository. For more information, please contact edinger@law.edu.

BOOK REVIEWS

MEDICAL-LEGAL ASPECTS OF CRYONICS: PROSPECTS FOR IMMORTALITY. New York City: Associated Faculty Press 1983. Pp. 81. \$12.00.

ETHICAL, LEGAL AND SOCIAL CHALLENGES TO A BRAVE NEW WORLD. New York City: Associated Faculty Press 2 Vols. 1982. 1 Vol. Pp. 286, \$32.00. 2 Vol. Pp. 264, \$28.50.

GENETICS, ETHICS AND THE LAW. By George P. Smith, II. New York City: Associated Faculty Press, 1981. Pp. 241. \$28.50, cloth; \$18.50, paper.

Reviewed by Harold A. Buetow, M.A., Ph.D., J.D.

In 1968, the University of Michigan Law Review published an article entitled, "Through A Test Tube Darkly: Artificial Insemination and The Law."¹ Its author was George P. Smith. With this article Smith embarked upon an adventure that has clearly established him as a prescient prophet of the New Biology.² The publication of the three books under current review attests further to his commitment to "look in dark places and to shed light on what he . . . sees there."³ This is the penultimate role of the true scholar. Once the light has been shed, it is for others to "decide whether the vision is true or distorted and, even if it is true, whether to pay attention to what they see or to continue to live with their illusions."⁴

The enormity of the research and the penetrating analyses in Smith's books shed a bright light on the multiple and complex problems of contemporary health law. The effort in these books is not dull and "synthetic,"⁵ but

^{1. 67} MICH. L. REV. 127 (1968).

^{2.} See the Bibliography of Professor Smith's writing in the field listed herein.

^{3.} G. CALABRESI, A COMMON LAW FOR THE AGE OF STATUTES 180 (1984); Calabresi, Correspondence to Paul D. Carrington, 35 J. LEGAL ED. 23 (1985).

^{4.} Id.

^{5.} Calabresi, Grant Gilmore and the Golden Age, 92 YALE L. J. 1, 2 (1982).

creative work of the first order that structures a framework for principled decision-making; it provides both a glimpse of law in action and an impetus for law reform.

I

The writings of Hippocrates discuss the control of hemmorhage by use of local cold, and during the Napoleonic Wars there were numerous reported successes where local hypothermia was induced to deaden pain during amputations.⁶ Working with low temperature experiments in the 1950's, biologists designed the term "cryobiology" to describe those investigations that were conducted well below normal body temperatures.⁷ The modern term "cryogenics" refers broadly to the technology of low temperature experiments, and the term "cryonics" to all disciplines centered on human cold storage.⁸

Today's successes in cryobiology include the freeze-preservation of viable cell suspensions, blood serum, micro-organisms, and semen; it also includes non-viable tissues used for transplantation, cryosurgery, and the preservation of large mammalian organs.⁹ Although these successes are significant, there has yet to be a complete cryonic suspension of an entire human body and its revival.¹⁰ It is only when a complete revival has been documented that the so-called cryonic or immortality movement will be fully recognized. While twenty-four cryonic suspensions have been reported, only nine cases have been actually verified.¹¹

Through cryonic suspension, the inevitability of old age and even death is challenged. Cryonic suspension is normally administered after death—with the body being frozen and stored at either the temperature of liquid nitrogen or liquid helium until scientific advances have conquered the incurable illness that brought about the death, and new life becomes possible.¹² The cryon (the cryonically suspended individual) is thereupon taken from his container-coffin, thawed, revived, repaired of the debilitating illness, and given a restored life.¹³

Smith explores with meticulous care the fascinating history of what has

^{6.} MEDICAL-LEGAL ASPECTS OF CRYONICS: PROSPECTS FOR IMMORTALITY 7 (1983).

^{7.} See Smith, The Iceperson Cometh: Cryonics, Law and Medicine, 1 J. CONTEMP. HEALTH ISSUES 23 (1983).

^{8.} Id.

^{9.} Hazur, Cryobiology: The Freezing of Biological Systems, 168 SCIENCE 939 (1970).

^{10.} Supra note 6, at 19.

^{11.} Id. at 18.

^{12.} See Smith, Intimations of Immortality: Clones, Cryons and The Law, 6 UNIV. NEW SO. WALES L. J. 119 (1983).

^{13.} Supra note 6, at 16.

been termed the "Immortalist Movement,"¹⁴ whose impetus is traced to the 1964 publication of Dr. Robert Ettinger's book, THE PROSPECT OF IMMOR-TALITY.¹⁵ From sixteen to twenty life extension societies, or Cryonics Associations, exist in the United States alone and are directed toward the promotion of the science of cryonics and the elimination of death.¹⁶

Putting aside ethical and moral considerations, the use and development of cryonic suspension poses three central legal problems: the extent to which a physician may be guilty of malpractice in assisting with a suspension (owing to present weaknesses in defining death and the co-ordinate liability for murder attaching thereto), the need for legal recognition of the state of "suspension," and the present effect of the law's anachronistic treatment of estate devolution upon a cryon's suspension.¹⁷

Seeking to clarify the phenomenon of death and thereby define it, in 1981 The President's Commission for The Study of Ethical Problems in Medicine and Biomedical and Behavioral Research gave its unanimous approval to the drafting of a Uniform Determination of Death Act that defined death as an irreversible cessation of circulatory and respiratory functions or the irreversible cessation of all functions of the entire brain (including the brain stem). The Act has yet to be adopted widely by the states.¹⁸ Thus, no single criterion is recognized as entirely satisfactory for the determination of death that can substitute for the overall reasonable judgment of an attending physician under the particular circumstances of each case.¹⁹ If one were to be suspended *before* a determination of death, the attending physician would not only be guilty of civil malpractice or causing "harm" to his patient but from a criminal standpoint—be liable for murder, the purposeful taking of another's life.

For the estate planner, the issue becomes how the law should treat the disposition of the decedent's estate.²⁰ And the Rule Against Perpetuities, which mandates that an interest in property must vest within twenty-one years plus a life in being, plays havoc with the cryon's estate.²¹ If a modern Rule Against Perpetuities were fashioned consistent with the advances of the New Biology and the state of cryonics, one could be allowed to remain in a state of cryonic suspension for twenty-one years without fear of being pro-

- 19. Id.
- 20. Id.
- 21. Id.

^{14.} Id. at Ch. 2.

^{15.} Id. at 16.

^{16.} See R. ETTINGER, MAN INTO SUPERMAN (1972).

^{17.} Supra note 6, at Chs. 3, 4.

^{18.} Id. at 27.

nounced dead. At the conclusion of this period, it would be for a court to determine whether such a possibility (or feasibility of a scientific breakthrough) exists for a cure of the disease of the person in suspension. Smith suggests, with a creative flair, that if the state-of-the-art had advanced to such a level that a successful cure for the suspended person's (cryon's) illness existed, then the court could exercise its broad equitable powers of supervision to allow continued suspension for a period not to exceed ten additional years—at which time a final determination is to be made regarding the status of the cryonically suspended person. Contrariwise, if—at the end of the initial twenty-one year period—a judicial determination were made that no immediate or scientific advances promised the realistic hope of a cure of the cryon's malady, then in all likelihood a decision could be made to thaw the suspended individual, thereby recognizing that death has occurred, and the estate could be settled.²²

For the process of cryonic suspension to be promoted and encouraged *before* a legal determination of death, the participating physician-scientistlay person would have to receive an exculpation from civil liability in the contract for cryonic suspension which would assumedly be drawn before the process commenced. Such a recognition would be memorialized in an exculpatory clause within the contract conferring an immunity from civil liability for the participants for either a failure to find a cure for the illness of the cryon during the period of suspension or for participating in or supervising a medical-surgical intervention (i.e., the initial suspension itself) determined subsequently by a court to be life ending. It would, of course, be wise to have a judicial recognition of the immunity from criminal prosecution for "murder" in connection with the acts of cryonic suspension undertaken by a physician on a living individual, or a state statute that would admit as an absolute bar or total defense the acts undertaken to initiate the suspension before a legal determination of death.²³

In cases where one seeks to have his or her remains cryonically preserved *after* a determination of death is made, the law should be less flexible than in the cases where suspension is undertaken *before* death. Indeed, the failure to recognize a death as death would wreak havoc not only with the law of property and succession, but would act to destabilize the very social and religious fabric of society. It boggles the mind to conceive of a society where there is no ultimate end to the existence of many of its members.

Smith next moves to consider the hypothetical case of In re Glover before

^{22.} Id. at 28.

^{23.} Id.

1986]

the United States Supreme Court²⁴—a case where the issue litigated is whether or not Ralph Glover "died" as a consequence of his cryonic suspension administered *before* a determination of death or whether he was and is in a state of true cryonic suspension and thus not dead. This paradigm probes the most germane legal issues raised previously by the use of cryonics and then investigates with specificity the elements of designing and administering an estate plan for a cryon.²⁵ An insurance plan for cryonic suspension for a number of years could be provided for by a policy being written on the life of the future cryon that would pay a benefit at "death" to its estate for whatever amount was thought necessary to maintain the necessary suspension.²⁶

In order to assist in the legal validation of a cryonic suspension, Smith concludes his analysis by presenting four legal forms: a Body Authorization Form to allow preparation of the act of suspension,²⁷ a Funeral Home Agreement authorizing the supervision of the act,²⁸ a Model Inter Vivos Trust to provide for the subsequent administration of a suspension,²⁹ and a Model Cryonic Suspension Affidavit that includes exculpatory provisions providing immunity from liability for misuse of the cryon or actual mishap during the act of cryonic suspension.³⁰

II.

In ETHICAL, LEGAL AND SOCIAL CHALLENGES TO A BRAVE NEW WORLD, Smith has selected nineteen essays that present a panorama of complexities and hopes comprising the so-called "New Biology." Observing the delicate and vexatious nature of the biomedical decisions that call into focus highly charged areas of autonomy, life, death, and freedom of scientific inquiry, Smith posits a test thesis which he submits is inherent when any critical decision is necessary to resolve a particular controversy involving contemporary health law. This test seeks to weigh the utility of the good (economic, social, cultural, or political) of maintaining the *status quo* against the gravity of the harm of undertaking a new and different course of action. He writes: "The simple, yet sometimes elusive goal of any deliberative process involving the technologies of the present and the future should always be to maximize the total potential for human growth, devel-

^{24.} Id. at 30-35.

^{25.} Id. at Ch. 4.

^{26.} Id. at 47. The range for the policy is from \$75,000.00 to \$100,000.00

^{27.} Appendix A.

^{28.} Appendix B.

^{29.} Appendix C.

^{30.} Appendix D.

opment of inter-personal reactions and intellectual fulfillment and—at the same time—minimize all suffering connected with the attainment and perpetuation of this lifetime goal."³¹ While the sanctity of life, from its conception through its natural conclusion, is an absolute, the realities of modern medicine point to the facts that qualitative standards of evaluation are being utilized in a growing number of cases and the ethics of each particular atrisk situation becomes more and more significant.

The first essay in the first volume enunciates with clarity and wisdom the theme of the entire two volumes: the great value of life from the total view-point of living and dying.³² Initial life is shaped in the womb, and a procedure known as genetic screening can make a determination about the quality of life a fetus will experience after birth. In other words, is the fetus carrying a genetic abnormality (such as Down's syndrome) that will possibly prevent it from leading the type of life some would view as without handicap? In a growing number of cases, given this information, prospective parents may decide to abort the fetus. The second essay investigates the new and expanding field of genetic screening and the various legal theories for imposing liability on physicians for errors in their diagnoses which have an outcome in the birth of a genetically defective infant.³³

Because of various medical and genetic difficulties, an alarming number of individuals are unable to father or mother a child. Thus, artificial insemination and surrogate motherhood are growing in popularity as mechanisms to correct these problems; the third and fourth essays deal with them.³⁴ The book considers next the juridical status of the unborn fetus together with the proposed 1981 Helms-Hyde Bills in the United States Congress concerning the beginnings of life at conception and the governmental protection extended thereto.³⁵

After having explored the beginnings of life, the sixth essay investigates the conclusion of life and the self-autonomous right to accelerate such con-

^{31.} Vol. 1, Preface and Introduction.

^{32.} Id., Ch. 1, Fried, The Value of Life.

^{33.} Id., Ch. 2, Capron, Tort Liability in Genetic Counselling.

^{34.} Id., Ch. 3, Smith, A Close Encounter of the First Kind: Artificial Insemination and An Enlightened Judiciary; Ch. 4, Erickson, Contracts to Bear A Child.

^{35.} Id., Ch. 5, King, The Juridical Status of The Fetus: A Proposal for Legal Protection of the Unborn. Id., The Helms-Hyde Proposal Briefing Paper at 151-152. These bills not only struck down prohibitions imposed by the states on abortions by mandating federal district and appelate courts to refrain from hearing any case involving abortion related issues, but would have seen the federal government declaring that life begins at the moment of conception and guaranteeing full constitutional protection to the civil rights of these "persons." Id. These bills were, of course, never enacted into legislation.

clusions.³⁶ The seventh essay, pertaining to ethical tribunals,³⁷ deals with collective decision-making as an aid here. The concluding essays probe the partnership between law, science, and medicine as they chart the parameters of the "New Biology."³⁸ The last piece especially considers the role of government in advocating and protecting a guaranteed right of scientific inquiry.³⁹

Volume Two opens with rather controversial observations by the Nobel Laureate, Linus Pauling, on the need for so-called genetic integrity and containment.⁴⁰ Developing an exploration of the parameters of genetic policies that would impact dramatically on political, ethical, social, and legal spheres of action, the second⁴¹ and third essays⁴² test the compatibility of eugenic policies designed to breed the "best" qualities of man with the dangers of such actions to the fundamental right of self-determination and what some consider the absolute imperative for genetic heterogeneity. In a most imaginative and intriguing manner, the fourth essay explores the allocation of scarce resources or selection of modes of health care delivery (e.g. *triage*).⁴³

The central focus of the four succeeding chapters is eugenic selection or advancement.⁴⁴ Researchers select those upon whom they perform their experimentations—either for therapeutic benefits or for pure research—for a variety of reasons. The experimental subjects may be terminal medical cases, mental retards, imprisoned criminals, infants, or individuals coerced in some way. Because of the unequal bargaining power of people in these positions, authorities often consider informed consent to the experimentation to be unnecessary. The interest of the State in promoting and maintaining a policy of genetic advancement may result in laws preventing mentally retarded individuals from entering into marriage contracts. State interest

41. Id., Ch. 2, Canavan, Genetics, Politics and The Image of Man.

42. Id., Ch. 3, Vukowich, The Dawning of The Brave New World—Legal, Ethical and Social Issues of Eugenics.

^{36.} Id., Ch. 6, Clarke, The Choice to Refuse or Withhold Medical Treatment: The Emerging Technology and Medical-Ethical Consensus.

^{37.} Id., Ch. 7, Dagi, The Ethical Tribunal in Medicine.

^{38.} Id., Ch. 8, Berger, Reflections on Law and Experimental Medicine; id., Ch. 9, Cavalieri, Science as Technology; id., Ch. 10, Delgado & Miller, God, Galileo and Government: Toward Constitutional Protection for Scientific Inquiry.

^{39.} Id., Delgado & Miller, supra note 38.

^{40.} Vol. 2, Ch. 1, Pauling, Reflections on The New Biology.

^{43.} Id., Ch. 4, Annas, Allocation of Artificial Hearts in the Year 2002: Minerva v. National Health. See generally Smith, Triage: Endgame Realities, 1 J. CONTEMP. HEALTH L. & POL'Y 143 (1985).

^{44.} Vol. 2, Ch. 5, Macklin & Sherwin, Experimenting on Human Subjects: Philosophical Perspectives; Ch. 6, Breggin, Psychosurgery for Political Purposes; Ch. 7, Beyer, Madness and Medicine: The Forcible Administration of Psychotropic Drugs; Ch. 8, Shaman, Persons Who Are Mentally Retarded: Their Right to Marry and Have Children.

may also result in legal decrees of sterilization to prevent eugenically weakened offspring from being born and becoming economic burdens on society at large.⁴⁵

Owing to extreme shortages of qualified personnel to staff mental institutions and a growing reluctance to allow mentally imbalanced individuals to live in deinstitutionalized settings, the State oftentimes follows the most expedient and less costly procedure of forcibly administering drugs to restrain the inmates. The State sadly abridges psychic and functional integrity in the name of fiscal solvency. To be sure, all these courses of action rob—to one degree or other—the at-risk individual of his autonomy. They abridge his fundamental rights. But at the same time, these actions achieve the greatest economic good for the greatest number of citizens: utilitarianism at its zenith! These four essays, then, explore these and other problems and offer sobering evaluations of the consequences of action or of inaction. With a growing climate of secularism, it may be fair to expect more compromise of what tradition has recognized as human or basic values, in the name of advancing a policy designed to maximize the quality of the human "experiment" through eugenic advancement and economic responsibility.

In that connection, it is fitting to close these reflections on the challenges of the New Biology to the "Brave New World" by considering a thoughtful essay on various theological perceptions of the effect of religion on the new genetic technology and *vice versa*. Professor David H. Smith, the author of the essay, observes that a vital religious tradition, Christian or otherwise, and a policy of *laissez faire* in medical technology cannot exist together.⁴⁶

So long as religious people think . . . some of them will come to conclusions which require a thorough inspection of the road ahead, if not emergency braking. Conforming our individual or common behavior to their suggestions may be very inconsistent. No one's views should be canonized . . . If we fail to see that medical technology, including new reproductive technologies, must *serve* us—our opinions, traditions and values—then we will have for-saken their very *raison d'etre*.⁴⁷

III.

Smith's third book is entitled GENETICS, ETHICS AND THE LAW. It is a *tour de force* of considerable dimension. Stating that the current quest to manipulate the human genetic code results simply from both the traditional

^{45.} Id.

^{46.} Id., Ch. 9, Smith, Theological Reflections on The New Biology.

^{47.} Id. at 258.

societal desire to advance scientific knowledge and thereby to rid the world of diseases and infirmity, together with the more modern objective to provide children to infertile marriage partners who desire a family,⁴⁸ Smith acknowledges that in order to combat disease, genetic engineering may—and frequently does—rely upon eugenics, the science that is concerned with the improvement of heredity.⁴⁹ The central problem that arises as a consequence of current efforts to manipulate the genetic code concerns man's reactions to his new spheres of self-knowledge.⁵⁰ "As man acquires these Godlike powers, he must endeavor to execute them with a rational purpose and in a spirit of humanism; he should seek to minimize human suffering."⁵¹ He submits that genetic engineering that is promotive of and contributes to the social good should be utilized fully.⁵²

Smith introduces some fascinating and sobering statistics on genetically transmissible diseases (e.g., retinoblastoma, Huntington's chorea)⁵³ and the statistical probabilities of a married couple with a congenital abnormality and/or mental defect having had one child so afflicted with such a genetic anomaly having another such child.⁵⁴ Smith then discusses genetic education and counseling as alternatives to the pain and anguish of birthing an offspring who—in most cases—is foredoomed to a brief life of excruciating suffering.⁵⁵ He uses current judicial cases to illustrate major positions and in the copiously developed footnotes he presents a skillful expansion of central themes and ideas together with comparative analyses. Dogmatism is never an attitude in this work. Rather, there is a carefully crafted analysis of the "state of the biological art" and its positive and negative potential to assist man in leading a fuller, richer, and less diseased life.

In Chapter Two, Smith analyzes the effects of a negative eugenics program: i.e., one which seeks to restrain or actually prevent certain individuals from either marriage or procreation.⁵⁶ Compulsory genetic screening at birth or prior to marriage or genetic counseling might well be recognized as unconstitutional, since the taking of a child's blood sample upon birth could

56. Id.

^{48.} See generally Smith, Genetics, Eugenics and the Family: Exploring the Yin and the Yung, 8 U. TASMANIA L. REV. 4 (1984); G. SMITH, GENETICS, ETHICS AND THE LAW 1 (1981).

^{49.} Id.

^{50.} Id. at 2.

^{51.} *Id*.

^{52.} Id. at 8.

^{53.} Id. at 10.

^{54.} Id. at 15. See generally C. AUERBACH, THE SCIENCE OF GENETICS (rev. ed. 1969); A. SCHEINFELD, YOUR HEREDITY AND ENVIRONMENT (1963).

^{55.} Id. passim.

be viewed as a physical invasion of the body in violation of the Fourth Amendment and a compulsory counseling program after marriage would surely be regarded as a direct interference with the fundamental right to marry and procreate.⁵⁷ Pre-marital genetic screening, however, would be a relatively easy addition to State statutes that already require pre-marital testing for blood group and Rh status, and forbid marriage among degrees of consanguinity.⁵⁸

Eugenic sterilization laws are still in place in a number of states. The most outstanding judicial precedent upholding the constitutionality of laws of this nature, *Buck v. Bell*, decided in 1927,⁵⁹ remains a strong precedent and has yet to be overruled directly.⁶⁰ In this case, the United States Supreme Court upheld a Virginia statute providing for sterilization of inmates committed to state-supported institutions who were found to have a hereditary form of insanity or imbecility.⁶¹ The judicial extension of this decision—to the sterilization of carriers of recessive defective genes, for example—could not be accomplished very easily, if at all, since the Supreme Court has recognized marriage and the begetting of children as fundamental rights.⁶²

Efforts to promote a positive approach to the improvement of the genetic profile of society of its gene pool are commonly viewed as being within the rubric of a program for positive eugenics.⁶³ Artifical insemination by a donor (AID), *in vitro* fertilization and surrogate motherhood contracts, together with forms of asexual reproduction (i.e., cloning, parthenogenesis) would all form a central focus of such a program.⁶⁴ While one could structure an argument that recognizes the state's inherent legal right of *parens patriae* or its broad police powers to promote policies designed to protect and enhance the gene pool of its citizens, there are monumental issues of constitutional law to be resolved before such a program could be validated. For example, if a legislative program were to allow only individuals with superior genetic endowments to clone, it could be challenged as an obvious violation of the Equal Protection Clause of the Constitution because of its essential discrimination between those with superior genetic traits and all

63. Supra note 48, at Ch. 5.

64. Id. See Smith, The Razor's Edge of Human Bonding: Artificial Fathers and Surrogate Mothers, 5 WES. NEW ENG. L. REV. 639 (1982).

^{57.} Id. at 19.

^{58.} Id.

^{59. 274} U.S. 200 (1927).

^{60.} Supra note 48, at 20.

^{61.} Id.

^{62.} Id. See Smith & Iraola, Sexuality, Privacy and the New Biology, 67 MARQ. L. REV. 63 (1984).

others.⁶⁵ Still another challenge to a state's interest in the propagation of superior traits might be maintained, however, on the ground that such a state interest violates the U.S. Consitution's Thirteenth Amendment or the so-called Nobility Clause that prohibits the imposition of involuntary servitudes.⁶⁶

As indicated, artifical insemination by a donor (AID) is a very common method used to complement not only a positive eugenics program, but also as a means to allow an otherwise infertile married couple to have a child. If a married man's sperm is defective, semen from a donor may legally be obtained artificially (with the husband's consent) and administered to the wife. More and more states are no longer acknowledging such a situation as adulterous nor the offspring as illegitimate.⁶⁷

The newer methods of reproduction—such as in *in vitro* fertilization, embryo implantation, as well as cloning and parthenogenesis—are, when utilized, producing genetic children of one of the parents but not the other.⁶⁸ Indeed, perfection of *in vitro* fertilization and embryo implants will allow the birth of a child who is neither the genetic child of the woman who bore him nor that of her husband.⁶⁹ Although these technologies could introduce a radically new dimension into the concept of the traditional family, as a practical and human process it is Smith's opinion that the children born of such a process should be legitimized by civil law.⁷⁰ The legal problems associated with these new techniques do not differ significantly from those already presented and resolved for the most part with artificial insemination by a donor, he writes, and should be dealt with accordingly.⁷¹

Granted, Smith says, not every married couple is *entitled* to have a child. But for those who wish to seek the assistance of the new reproductive technologies for marital fulfillment rather than suffer the uncertainties of the adoptive process⁷² or the pain of a barren marriage, society should assist in the process by the legitimation of the offspring; for surely the very essence of society's continuance is tied to reproduction within or without the practical

69. Id.

^{65.} Id. at 106.

^{66.} Id.

^{67.} Supra note 63. See generally Smith, Close Encounters of The First Kind: Artificial Insemination and an Enlightened Judiciary, 17 J. FAM. LAW 41 (1978); Smith, Through A Test Tube Darkly: Artificial Insemination and The Law, 67 MICH. L. REV. 127 (1968).

^{68.} Id. at 118. See Smith, Australia's Frozen Orphan Embryos: A Medical, Legal and Ethical Dilemma, 24 J. FAM. LAW 27 (1985).

^{70.} Id.

^{71.} Id. at 119.

^{72.} See Landes & Posner, The Economics of The Baby Shortage, 7 J. LEGAL STUD. 323 (1978).

bounds of a marriage contract. Smith opines that the best interests of society and of the offspring in cases of this nature mandate legal action.

In order to justify an intentional invasion of one's bodily integrity, free and informed consent must be obtained. This is the pivotal issue on which hangs the majority of not only the basic ethical problems in human experimentation, but also the growing number of cases dealing with medical malpractice as well as those involving surgical misfeasance and nonfeasance.⁷³ If one is without capacity to consent to a therapeutic or non-therapeutic modality of medical or surgical treatment, then his consent must be obtained from one empowered by kinship or court decree to consent for him.⁷⁴

The underlying legal principle of informed consent is a recognition of a right to refuse not only treatment, but experimentation, efforts to modify behavior, or any other actions which interfere with one's autonomy or right of self-determination.⁷⁵ With increasing regularity, the courts are recognizing a right to refuse medical treatment based upon religious beliefs; but refusal by an individual cannot jeopardize the life of another. Thus, a pregnant woman could not legally refuse emergency treatment and thereby put her unborn child at-risk.⁷⁶ Courts have recognized, further, that prison confinement in no way should qualify one's right to refuse to participate in any form of treatment or experimentation.⁷⁷

In a landmark case in 1884, decided by the Massachusetts Supreme Judicial Court, it was held that, as to pre-natal torts, a fetus could not recover damages for injuries sustained while in its mother's womb.⁷⁸ It was not until 1946 that judicial temperament changed, with the case of *Bonbrest v. Kotz*, which held that injuries to an unborn child which is viable are compensable in an action maintained by the child after it is born.⁷⁹ While today tort liability exists for wrongfully causing one to be born, the recognition of this liability has yet to develop uniformly into an equal recognition that a child "wrongfully born" may sue in its own right for that wrongful life.⁸⁰

Smith examines at length the classic case distinction between actions for wrongful birth and wrongful life.⁸¹ In wrongful birth actions, parents of a

^{73.} Supra note 48, at 32.

^{74.} Id.

^{75.} Id. at 41.

^{76.} Id. at 42.

^{77.} Id. at 43, 44. See generally J. KATZ & A CAPRON, CATASTROPHIC DISEASES: WHO DECIDES WHAT (1975); C. FRIED, MEDICAL EXPERIMENTATION: PERSONAL INTEGRITY AND SOCIAL POLICY (1974).

^{78.} Dietrich v. Northhampton, 138 Mass. 14 (1884).

^{79. 65} F. Supp. 138 (D.D.C. 1946).

^{80.} Supra note 48, at 80.

^{81.} Id. at 70.

child who is usually "unplanned" maintain a suit against a physician for negligent performance of a sterilization operation.⁸² An action for wrongful life breaks down into the elements of a common action in negligence.⁸³ At its base is an existing legal duty on the part of someone to either insure that the infant is not born or that the proper disclosure be made to its parents (normally through genetic screening) for their decision as to whether or not the pregnancy should continue to term.⁸⁴ Obviously, the most difficult problem establishing either of these tort actions is causation.⁸⁵

The book considers next the role of governmental supervision of scientific study and research, with the observation that scientists make the vast bulk of their research decisions without public involvement—the only guide for their actions being an international code of ethics for clinical research.⁸⁶ In the interest of individual liberty and freedom of experimentation, Smith advocates a strong non-interventionist approach by the government; in his zeal, he almost overlooks entirely the valid needs of the State to become involved in the critical decisions of the "New Biology."

Starting in 1966, the Surgeon General of the United States announced that the United States Public Health Service would not grant, renew, or continue to support research programs involving humans unless the institutions at which the research was being conducted undertook a review of the risks and potential medical benefits of the research, the rights and the personal welfare of the research subjects, and the need for their informed consent to participate.⁸⁷ Subsequent federal governmental action advancing these concerns and needs occurred in 1973 and 1974 with appropriate regulations addressing the matter being issued.⁸⁸ In 1974, Congress established the National Commission for The Protection of Human Subjects of Biomedical and Behavioral Research and charged it to identify basic ethical principles for biomedical and behavioral research involving human subjects.⁸⁹ The Commission issued various recommendations, addressing such issues as nontherapeutic fetal research, ex utero research, research on prisoners, genetic engineering, and decisions to forego life-sustaining treatment.⁹⁰ Even with his reluctance to countenance federal intrusions into any areas of personal (scientific) freedom, Smith does recognize that-as to this Commission-its

82. Id.
83. Id.
84. Id.
85. Id. at 81.
86. Id. at 130.
87. Id. at 131.
88. Id.
89. Id.
90. Id. at 132.

recommendations balanced satisfactorily the need for continued scientific research with the needs for ethical standards of guidance.⁹¹

Defining Bioethics as an attempt to develop a philosophy regarding the application of man's biological knowledge in furtherance of the social good,⁹² Smith proceeds to draw upon Teilhard de Chardin's "Omega Point"⁹³ as the focus for his subsequent analysis of the bioethical conundrum: how normative standards should be structured and what standards should be sued for, applying genetic rules of research and development for future generations.⁹⁴ His answer to this problem is for the law to recognize that "[s]ociety should encourage, not stifle, research; for a society unable to accept and encourage either current or future behavioral variations does not promote a hospitable environment for the free development and expression of ideas of any kind. Man cannot learn by merely thinking in this area."⁹⁵

In the final chapter of this absorbing work, Smith treats the topic of "Science and Religion: Compatibilities and Conflicts."⁹⁶ Recognizing science as "ordered knowledge," and that probabilities are at the center of all scientific inquiry, he admits that absolute truth is not within its realization.⁹⁷ Contrariwise, the admixture of feelings and beliefs in religion is a source of both mystery and incomprehensibility to the scientist,⁹⁸ with scientists' view of faith as a rather "primitive principle."⁹⁹

Regarding the new reproductive technologies, the Roman Catholic Church considers the contract of marriage as an exclusive one which forbids intercourse with a third person and/or the use of semen from a donor to effect artificial congress.¹⁰⁰ Adultery is adultery, regardless of whether a husband gives his consent for his wife to be impregnated by a donor's sperm,¹⁰¹ and the Church automatically rejects fertilization by donor gametes *in vivo* or *in vitro*.¹⁰² As to sterilization, the position of the Church is

97. Id. at 153; see generally Smith, Intrusions of a Parvenu: Science, Religion and The New Biology, 3 PACE U. L. REV. 63 (1982).

98. Id.

99. Id. See B. Russel, The Impact of Science on Society (1952); A Whitehead, Science and The Modern World (1926).

100. Id. at 155.

101. Id.

102. Id.

^{91.} Id.

^{92.} Id. at 145.

^{93.} For Chardin, the "Omega Point" was that cultural stage in the evolutionary process where the minds of men attain a common language of scientific humanism as a workable philosophy. *Id. See* P. CHAUCHARD, MAN AND COSMOS 153-156 (1965).

^{94.} Supra note 48, at 146. See generally Marcin, Justice and Love, 33 CATH. U. L. REV. 363 (1984).

^{95.} Id. at 147.

^{96.} Id. at Ch. 9.

again prohibitive.¹⁰³

Contemporary liberal, Protestant philosophy considers that there are no universal modes of conduct required of Christians but that the critical determinant in any relationship is love. If love is proven, then no particular action undertaken within the confines of the New Biology is prohibited.¹⁰⁴ Conservative Protestant religious ethic, however, disagrees with this posture and holds that the Bible is the divine expression of God's unalterable will and that a monogamous marriage is part of this will.¹⁰⁵ The clear inference to be drawn here is that artificial insemination by a donor (AID) is not only morally objectionable, but an invasion of the unity of the monogamous relationship¹⁰⁶ and—further—that genetic engineering or manipulation by *in vitro* fertilization or the other new reproductive technologies qualifies as an offensive sexual relation.¹⁰⁷ Traditional Protestant ethics, however, allows the State to act justifiably (that is, in a reasonable manner) to effect compulsory sterilization.¹⁰⁸

Under most of the Jewish religious perspective, a married woman participating in AID is not guilty of adultery, the issue born is considered to be legitimate regardless of whether the woman is married or unmarried, and the third party donor of the semen is always recognized as the natural father.¹⁰⁹ Sterilization is prohibited, yet where designed to save life, is permissible. The Orthodox faith would probably disallow State actions to sterilize incompetent criminals.¹¹⁰

When explorations of the New Biology are designed to minimize human levels of suffering and maximize the social good, Smith advocates that they should be undertaken.¹¹¹ It is his opinion that the search to balance the gravity of the harm against the utility of the good of each new exploration charts both the initial feasibility and the ultimate direction of the undertaking. Herman J. Muller, the distinguished geneticist and late Nobel Laureate, once observed:

The mind of man must more and more become the master, not only of the outer material world, and so too of his social world, but also of the genetic thread of life within him. Thus, there will come

^{103.} Id. at 156.

^{104.} Id. See generally Smith, Uncertainties on The Spiral Staircase: Metaethics and The New Biology, 41 THE PHAROS 10 (1978).

^{105.} Id.

^{106.} Id.

^{107.} Id.

^{108.} Id.

^{109.} Id. at 157. 110. Id.

^{111.} *Id.* at 164.

an even greater freedom Intelligence . . . has of late grown astonishingly; but without a corresponding growth in social motivation and in the means of carrying it out, man's great new tools—so much more dangerous and more easily misdirected on a large scale than were the primitive instruments of the past—may work only misery and even destruction. Love must balance knowledge or we fail.¹¹²

Richly balanced appendices—ten in all—bring added strength to this volume.¹¹³ In addition to the rather standard inclusions of The Helsinki Declaration on Clinical Research,¹¹⁴ The Nuremberg Code of Ethics in Medical Research,¹¹⁵ and The United Nations' Declaration on The Rights of Mentally Retarded Persons,¹¹⁶ Professor Smith presents heretofore uncommon and in some cases rare—sources of information including a Model Informed Consent Law,¹¹⁷ a Proposed Voluntary Sterilization Act,¹¹⁸ a Model Artificial Insemination Statute,¹¹⁹ together with the Recommendations of The National Commission for The Protection of Human Subjects (Prisoners) of Biomedical Research¹²⁰ and Children,¹²¹ the Amended 1980 Guidelines for Research on Recombinant DNA Molecules,¹²² and The Belmont Report on Ethical Principles for Treating Humans.¹²³

This book is a significant contribution to the literature of the New Biology. Its strengths are to be found in its thorough and objective analyses, its depth of research, and its insightful recommendations concerning the relevant legal issues. It will serve as a valuable framework for principled analysis of this new and exciting field. In none of these materials, however, does Smith profess to be any more than a lawyer. His approaches eschew considerations that are moral or ethical; they are strictly from a legal point of view.

- 116. Id. at Appendix I.
- 117. Id. at Appendix A.
- 118. Id. at Appendix B.
- 119. Id. at Appendix C.
- 120. Id. at Appendix F.
- 121. Id. at Appendix H. 122. Id. at Appendix G.
- 122. Id. at Appendix U. 123. Id. at Appendix J.

^{112.} H. MULLER, OUT OF THE NIGHT 43, 158 (1935).

^{113.} Supra note 111, at 167-237.

^{114.} Id. at Appendix D.

^{115.} Id. at Appendix E.