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BIRTH, LAW, MEDICINE AND MORALITY

THE ELEVENTH SACKS LECTURE

OXFORD CENTRE FOR
POSTGRADUATE HEBREW STUDIES

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Birth, Law, Medicine and Morality*

In his article 'Health Law Comes of Age: Economics and Ethics in a Changing World',[1] a review of *Law, Medicine and Forensic Science*,[2] Clifford Stromberg[3] said this about the development of health law in the United States:

> Health law is booming. This field of legal practice hardly existed twenty years ago; it is now becoming one of the more important legal specialties. Until recently, practice in the 'medico-legal' field was largely limited to the defense of hospitals and physicians in malpractice actions and to occasional issues in criminal law. Today, 'health law' is a diverse and burgeoning enterprise. . . .
>
> These developments reflect the dynamic growth of the health industry. Health care is now the nation's third largest industry (after construction and agriculture), with national health expenditures that exceeded $280 billion in 1981. Health costs have leaped from about 4.0 per cent of our gross national product in 1960, to 5.9 per cent in 1970, and to 9.8 per cent in 1981. Health care constitutes about one third of the service sector and is the fastest growing portion of this fastest growing sector of our economy.[4]

Since the publication of Mr. Stromberg's excellent article, health care has continued its innovative and economic pace. In 1983, the industry accounted for 10.8 per cent of the gross national product with health costs exceeding US$355.4 billion.[5] This rapid growth is due in large part to the rapid evolution of medical science into areas undreamed of less than a decade ago, e.g. *in vitro* fertilization, embryo transfer, artificial hearts and organs, and genetic engineering. Health law is indeed among the most exciting legal specialities because it is constantly changing to keep pace with the rapid changes in medical technology. For example, medical scientists are now revolutionizing the very techniques by which life itself is reproduced. With the help of various laboratory techniques, couples who were unable to reproduce the 'old fashioned' way are now becoming parents. These new changes in scientific knowledge have created a new legal frontier which must

cause a transformation and a restructuring of our traditional rules and ethics on the subject of birth if they are to have current relevancy.

When does life begin? The Roman Catholic Church has traditionally defined the moment of conception to be the beginning of life.[6] The view of a great many eminent Protestant theologians apparently is that life begins at birth[7] while many traditional Protestant theologians agree with the Roman Catholic Church. The predominant view of the Jewish faith is that the life of a foetus becomes inviolable and of equal value to the life of the mother when, in birth, the 'greater part of the body' (in some views, this means the head) has emerged from the birth canal.[8]

The United States judiciary has expressly declined to grapple with the issue. In the controversial *Roe v. Wade*[9] decision, the United States Supreme Court wrote that 'when men trained in medicine, philosophy and theology are unable to arrive at any consensus, the judiciary, at this point in the development of man's knowledge, is not in a position to speculate as to the answer.'[10]

At one time, the absence of a universally accepted determination of when life begins had little effect upon the law[11] and our behaviour because the science of reproduction remained virtually constant. Few scientific advances had occurred in this area since the time of the ancient Roman *lex caesarea*,[12] after which the Caesarian section[13] was named. In the past few decades, however, scientific breakthroughs have been coming in rapid succession. Thus, the absence of an agreed answer to the question of when life begins may present an insurmountable hurdle to the legal world in defining the rights and duties of the unborn child, its parents and the scientists assisting at its creation.[14] The existence of the new procedures also demands a re-evaluation of ethical and religious attitudes toward birth itself.[15]

The procedures of artificial insemination, *in vitro* fertilization, surrogate motherhood, embryo transfer, artificial embryonation and embryo adoption have been developed in large part to meet the insatiable demand for infants that has arisen because of the increasing unavailability of 'desirable' infants for adoption[16] and the recent epidemic of infertility.[17] Infertility is defined as one year of unprotected coitus without conception.[18] In both Great Britain and the United States, an estimated ten to fifteen per cent of all married couples are infertile.[19] Medical studies indicate that forty per cent of infertility is attributable to male causes, fifteen per cent to cervical causes, ten per cent to uterine causes, thirty per cent to tubal and peritoneal causes, twenty per cent to ovarian causes, and five per cent to miscellaneous causes. (The total incidence is greater than 100% because in some 35 per cent of couples, infertility is of multiple aetiology.)[20] This estimate, however, may be well below the actual percentage of couples that are potentially infertile because it includes only those married couples who have tried unsuccessfully to conceive in the past year. It does not include those couples who haven't

tried to conceive and therefore do not know they are infertile,[21] and it does not include unmarried men and women.

The procedure (or procedures) an infertile couple may choose to undergo depends upon the cause of infertility, the couple's needs and their resources. Of course, unmarried couples who wish to have children are equally susceptible to infertility problems and may choose to utilize one of the procreative methods, but for the purposes of this paper, and for clarity in discussion of the various techniques, I will assume that the infertile couple is a married couple and I will refer to its members as 'the wife' and 'the husband', and to the fertile donor of sperm, ova or womb as 'the donor'.

The oldest of the reproductive techniques, which actually began centuries ago, is artificial insemination.[22] It is said that the first successful artificial insemination occurred in the 14th century when an Arab mare was impregnated with the semen of a stallion.[23] The first recorded successful human artificial insemination was performed in England in 1790 by a surgeon named John Hunter.[24] This new practice was slow to be accepted in the United States. It was not until nearly a century later, in 1866, that a physician named Marion Simms proved successful.[25] Instead of receiving praise worthy of his accomplishment, however, his actions were looked upon by the public with utter disdain. The community's deep-seated religious and moral scruples about the very idea of a woman becoming pregnant in such an unnatural manner forced Simms to abandon his experimentation.[26]

Nowadays, more than 20,000 babies in the United States[27] and 2,000-4,000 babies in the United Kingdom[28] a year are born as a result of artificial insemination. The procedure is quick and uncomplicated. A donor sperm is inserted into a woman's vagina near her uterus by means of a syringe. Artificial insemination can be provided in one of three ways: one, with the sperm of the husband as a donor (AIH); two, with the sperm of a third party donor (AID); and three, with a mixture of sperm from both the husband and the third party donor (AIC, which stands for 'confused' or 'combined' artificial insemination). The third method, which was more popular about ten years ago[29] than it is now, resolves some emotional and legal questions since there is no way to determine the identity of the sperm.[30] It gives the husband some emotional satisfaction that he is the natural father of the child. It also eases the physician's fear of committing perjury by listing the husband as the father on the birth certificate. Last, it strengthens the already almost irrebuttable jucidial presumption that the husband is the natural father of a child born during his marriage.[31]

Until the mid 1960s, no states had legislation on artificial insemination. Currently, twenty-seven states have statutes dealing with the issue,[32] which generally require the written consent of both the 'husband' and 'wife' and provide that the 'husband' will be considered the legal father. Two states

expressly deny any paternity rights to a third party donor.[33] Records must generally be kept confidential and must be filed with the state department of health. In many instances, the physician must certify that he performed the procedure.[34]

The statutes of at least nineteen states appear to prohibit artificial insemination of unmarried women.[35] Only one case thus far in the United States has addressed the issue. In *C.M. v. C.C.*,[36] an unmarried couple who had been dating wanted a child but allegedly did not want to conceive by sexual intercourse before their marriage.[37] A physician refused their request for artificial insemination, but by speaking with the physician they learned the basics of the procedure and tried it themselves in C.M.'s apartment. After a few attempts, they were successful.[38] While C.C. was pregnant, the two broke off the relationship, but C.M. still wanted to be known as the child's father and sued for visitation rights. He claimed that it was the couple's intention that he would act as the father.[39]

In deciding in favour of C.M. (the 'donor-father'), the court found the facts of the case to be more closely analogous to artificial insemination by husband than to artificial insemination by donor.[40] The latter method, by its terms, involves an anonymous donor who waives all paternity rights to any child conceived by his sperm. In *C.M. v. C.C.*, however, the child was conceived by the sperm of a known donor (with whom the woman was even considering marriage) whose intentions to act as the child's father were known to the woman. The court declined to comment on the propriety of artificial insemination between unmarried persons and instead focused on the best interests of the child, which is to have two parents if possible.[41]

None of the statutes on artificial insemination by donor expressly indicates who owns the sperm 'donation'[42] but sperm banks generally require the donor to sign a written waiver of any rights to the deposit and any paternity claims to children born by it.[43] In return, the sperm bank guarantees the donor's anonymity.[44]

Some men use sperm banks to store their sperm for their own future use. For example, in the 1960s the Apollo astronauts banked their sperm before their missions. Therefore, even if space travel were to affect their reproductive systems, they could still father healthy children using the stored sperm.[45] Today sperm banking is a common practice for men whose occupation exposes them to toxic substances and men who are undergoing radiation therapy. In these instances the sperm belongs to the donor, who pays for the maintenance and later withdrawal of the deposit.[46] Upon notice of the death of the donor, however, many storage agreements authorize the sperm bank to dispose of the deposit.[47] Requests from the widow of the donor to be inseminated with the sperm, as a matter of practice, are denied in the absence of express instructions in the donor's will or a court order.[48]

Although such requests are apparently commonplace occurrences, there has been to date only one judicial pronouncement on the issue of sperm deposit ownership after the death of a donor who had not left instructions for the use of his sperm. In the internationally publicized case of *Parpalaix v. CECOS*,[49] a French court found that the widow of a young man who had died of testicular cancer was entitled to the use of the sperm he had deposited nearly two years before his death despite the sperm bank's claim to ownership.[50]

Although the widow's cause of action and the sperm bank's defence lay in contract law,[51] the court determined that the widow's entitlement to the deposit was based on 'the fundamental right of a human being to conceive or not to conceive.'[52] Testimony by the widow and the deceased's parents convinced the court of 'the formal will of [the widow's] husband to make his wife the mother of a common child.'[53]

Although the *Parpalaix* decision has been generally acclaimed as eminently humane, it has been criticized by doctors and lawyers alike.[54] At least in France, a child born 'post-mortem'[55] could suffer legally.[56] It has even been suggested that a child so born would suffer psychologically from being conceived by a dead man.[57]

The development of artificial insemination and the subsequent reproductive technologies has permitted the creation of 'surrogate motherhood'.[58] Women who suffer from blocked or non-existent fallopian tubes (the largest cause of female infertility),[59] or those who suffer from medical problems which make pregnancy extremely dangerous or undesirable, can become mothers simply by contracting with another woman—the 'surrogate mother'—to carry and give birth to her husband's child. Thus, the husband is the biological father and the wife is the 'social' or adoptive mother.

The principle behind surrogate motherhood is quite simple. The surrogate usually becomes pregnant by the husband. Although the means of impregnation is usually artificial insemination, it can occur by any one of the new reproductive technologies.[60] The surrogate carries the foetus and gives birth. Because laws generally provide that the woman who gives birth to a child is its natural mother, the couple must adopt the child, usually through a private adoption, in order to obtain legal custody.

Although the medical aspect of surrogate motherhood can be as simple as the artificial insemination procedure, the legal, practical and emotional aspects are complex and problematic.[61] Surrogate mother contracts can be prohibitively expensive to many couples: the fee ranges from $5,000 to $25,000[62] and is approximately £6,500 in England.[63] Surrogate mother programmes are available in only a few centres in the United States. Even if the couple has found a centre in their state, they may not be able to find a suitable surrogate. The successful candidate would ideally have about the same physical characteristics as the wife.[64] She must pass various IQ and

aptitude tests, and must be in good physical as well as emotional health. Perhaps most important, she must understand what her future relationship, if any, with the child or couple will be.[65] The couple, or the screening counsellor, will want to know what motivates the candidate to become a surrogate in the attempt to ascertain her reliability. Many consider it crucial that the candidate be married with children of her own, the theory being that she will be more aware of the implications of the relationship into which she is entering.[66] The couple's greatest fear is that the surrogate will become attached to the child growing inside her and decide not to honour her contract with the couple to give it up for adoption. In such cases, the law has allowed the surrogate to keep the child, because the child was genetically hers and she had undertaken the biological risk of pregnancy.[67]

For example, in California, a couple who had contracted with a surrogate lost in a suit to compel the surrogate to honour her contract.[68] Although the husband was listed on the birth certificate as the baby's father, he was denied visitation rights and the baby was given the surrogate's surname.[69] The court apparently believed that surrogates should be free to dishonour contracts to give up a child that is biologically theirs because it views such contracts as void for public policy reasons.[70] Such was the view of an English court in *A. v. C*,[71] the only English case involving surrogate motherhood. As in the California case, the surrogate mother, here a nineteen-year-old girl, who was paid £500 for her services, became attached to the child she bore and refused to give it up.[72] The court severely admonished the couple (who were unmarried at the time of contracting) for their abominable behaviour in having made 'this extraordinary and irresponsible arrangement,' calling it a 'sordid commercial bargain.'[73]

Many state laws prohibit surrogate mother contracts, equating them with 'baby selling.'[74] Others have no statutes directly on the subject, thus the state's family laws and artificial insemination laws would appear to govern.[75] Even in those states where surrogate mothering is not prohibited, the couple may be forced to go through a public adoption agency rather than proceed by private adoption.[76] There may even be a waiting period after the child's birth after which the couple may obtain legal custody.[77]

Currently, in England, it appears that at least one surrogate motherhood 'agency' is, or at least has been, in operation[78] and has apparently caused national turmoil. A bill which would permit a surrogate mother to be paid for services but which would prohibit, under criminal penalty, the involvement of any intermediary[79] or agency, has been proposed by Enoch Powell, MP and at the time of this writing, may be law.[80] It appears to be fashioned after the recommendations of the Warnock committee, which was organized in 1983 to investigate and assess the moral, ethical and legal aspects of human fertilization and embryology.[81]

Another even more startling breakthrough in the new reproductive techniques has been *in vitro* fertilization, which we refer to as IVF.[82] This results in the so-called 'test-tube' babies. The idea of *in vitro* fertilization of human eggs, or oocytes, was first articulated as early as 1937 by an unknown physician writing to the New England Journal of Medicine.[83] The first well-documented experimentation was begun in 1970[84] by British physicians Edwards, Steptoe and Purdy, who treated Mrs Leslie Brown and were responsible for the birth of the first test-tube baby, Louise Brown, in 1978.[85]

The procedure involved in *in vitro* fertilization permits laboratory combinations of sperm and ovum from the biological parents. An ovum is removed from a woman's ovary[86] and united with sperm in a medium of nutrients in a Petri dish. The fertilized egg is then transferred to another medium where it develops into a 'blastocyst'[87] or 'conceptus.'[88] Next, the blastocyst is implanted into the womb at the appropriate stage of the woman's menstrual cycle and normal gestation takes place.

In vitro fertilization is especially attractive to those couples in which the wife is capable of producing normal ova which, due to obstructed or non-existent fallopian tubes, are unable to travel to the uterus. The ovum is extracted, united with the husband's sperm *in vitro*,and replaced in the wife, thus eliminating the stage of reproduction which normally occurs in the fallopian tubes.

In vitro fertilization is a much more complicated procedure than artificial insemination and, given its still experimental nature, the attendant risks are greater both to the wife[89] and to the developing foetus.[90] The treating physician is thus well advised to obtain informed consent as to each stage of the procedure.

An interesting case arising from the development of *in vitro* fertilization is *Delzio v. Presbyterian Hospital.*[91] The plaintiff, Mrs Delzio, who suffered from blocked fallopian tubes, and her husband chose to use *in vitro* fertilization. After a successful 'practice fertilization'[92] and nearly a year of closely monitoring her ovulatory pattern, Mrs Delzio's ova were collected and successfully united with her husband's sperm. A blastocyst was developing *in vitro* when the Delzios' treating physician's supervisor caused its destruction. The supervising physician told the Delzios' physician that he was unqualified to perform the procedure and that *in vitro* fertilization was unethical, immoral and not permitted by either the National Institute of Health or the hospital in which it was performed.[93]

Besides having previously had several unsuccessful operations to cure the defects, Mrs Delzio suffered numerous medical complications during the *in vitro* fertilization procedure. She had been informed by her doctor that the fertilization was successful, but soon had all her hopes for overcoming her infertility dashed by the destruction of the blastocyst. She and her husband brought suit against the hospital for the unlawful destruction of property

and for emotional distress. The jury ruled in favour of the hospital on the issue of unlawful destruction of property, and for the Delzios on the issue of emotional distress, for which a verdict was returned for $50,000 compensatory damages.[94]

In vitro fertilization research and practice is regulated in the United States on the federal level by the Department of Health and Human Services.[95] There are currently no statutes expressly governing *in vitro* fertilization, but some states' foetal research laws, which define 'foetus' as any product of conception, would seem to apply.[96] It has been suggested that the provisions of either the Uniform Anatomical Gift Act or those of the current artificial insemination statutes be applied to *in vitro* fertilization.[97] The *in vitro* situation where the legal parents are also the biological parents is analogous to homologous artificial insemination and easily comes under the ambit of most artificial insemination statutes.[98]

On February 3, 1984, at the University of California at Los Angeles Medical School, the first infant produced by embryo transfer (ET) was born.[99] In this procedure, which is a variation of *in vitro* fertilization, an already developing embryo conceived *in vitro* is implanted into the wife's uterus in the one-cell to sixteen-cell stage.[100] The developing embryo may be the product of the wife's egg and donor sperm. This might occur, for example, when the wife (due to blocked fallopian tubes) is unable to conceive by her husband or by artificial insemination by donor, and traditional *in vitro* fertilization has failed because the husband's sperm count is too low. Or, the embryo may be the product of a donated egg and the husband's sperm and would be transferred to the wife. This might occur in the case of a wife whose ovaries are inaccessible, or who suffers from a genetic disease she does not want to pass on, or where *in vitro* fertilization has failed. The donated egg is often obtained from the excess unused eggs of a woman who has undergone *in vitro* fertilization.[101]

The newest areas in reproductive technology are artificial embryonation (AE) and embryo adoption (EA),[102] the pioneers of which were Chicago physician Randolph Seed and his brother, embryologist Richard Seed.[103] Prompted by the difficulty of transferring a blastocyst created *in vitro* to a recipient uterus, artificial embryonation is an attempt to use a donor woman as a 'human Petri dish'.[104] A fertile donor is artificially inseminated with the husband's sperm (fertilization *in vivo*). Four to five days after fertilization, the embryo is flushed out of the donor's uterus via a plastic tube and implanted into the wife's uterus where it is carried to term. No surgery or anaesthesia is needed. It is desirable that the donor and wife be matched closely in physical characteristics, blood grouping and menstrual cycle timing.[105] The Seeds screen the potential donors themselves.[106] They prefer women between the ages of 21 and 35 who are free from genetic diseases and are emotionally stable.

It would appear that artificial embryonation creates a significant psychological advantage to the wife, who actually carries and gives birth to the child even though it is not genetically hers. Perhaps the most significant reason for preferring this method to the rest is that the wife gives more of herself in this procedure than in, say, the surrogate mother method. First, the wife carries the embryo from the time it is only a few cells to the time of its birth. The wife will experience the joys of pregnancy and delivery, and she will be able to nurse her baby. Legally, she is the 'biological' mother of the child since it is born of her womb.[107] She should have little or no worry about facing a legal battle should the ovum donor attempt to claim parental rights to the child. Obviously, the donor has considerably less emotional attachment to an egg than to an infant.[108]

Embryo adoption is virtually the same procedure as artificial embryonation (that is, fertilization *in vivo*) except that donor semen is used instead of the husband's semen. Thus, the resulting child is not genetically related to either the husband or the wife, even though the wife carries the child and gives birth. In this sense, adopting an embryo is somewhat analogous psychologically (although not legally) to adopting a child; the adoption simply occurs at a much earlier stage of the child's development.[109]

The pioneers of artificial embryonation and embryo adoption feel that these procedures will soon become more popular than *in vitro* fertilization or surrogate motherhood.[110] These procedures are cheaper by far,[111] they are safer because no drugs, anaesthesia or surgical procedures are used, and they can be used by more women. The problem with artificial embryonation and embryo adoption is that their practice may be technically considered 'foetal research' and therefore prohibited in eighteen states.[112] The flushing of the embryo from the donor's uterus is, according to the defining terms of the statutes, analogous to the abortion procedure.[113]

These new technologies, which have long been in the experimental stages, are now coming into a much more general use, enabling more and more infertile couples to reproduce, or at least participate in the reproductive process. But the new solutions to the problem of infertility raise profound problems of their own. In an excellent introduction to an article in *The Stanford Magazine* entitled 'Infertility: The Great Debate', these problems have been highlighted[114] as well as being discussed in the article itself.

It is conceivable for a child born through the new techniques to have any combination of up to five parents: an egg donor, a sperm donor, a woman who provides a womb for all or part of gestation, and the couple who rear the child.[115]

Consider the following legal problems. Does the child have the right to know the identity of the sperm donor, egg donor, or womb donor who contributed to his or her existence?[116] Should any of the donors have visitation rights? Who should be considered the mother of the child? The

ovum donor? The womb donor? The woman who will rear the child?[117] What is the legitimacy of the child born as a result of artificial insemination by donor?[118] Can a physician be held liable for a defective child conceived by artificial insemination by donor?[119] What are the inheritance rights of the 'posthumously conceived' child?[120] What are the unmarried woman's rights to the new procreative techniques?[121] What are a widow's rights with respect to her deceased husband's sperm?[122]

In the case of *in vitro* fertilization, can the physician be held liable for injury caused in the negligent handling or destruction of the blastocyst while it is in the Petri dish?[123] Can the physician be held accountable for the birth of a defective child on the theories of wrongful birth or wrongful life?[124] Should the physician and parents, under such circumstances, be held jointly liable under a strict liability theory?[125]

The range of legal problems created by surrogate motherhood is equally vast. Should a womb donor have visitation rights? What if the surrogate mother decides to keep the child she contracted to carry for another couple?[126] For what pre-natal injuries to the child should the surrogate mother be held accountable? What is the extent of the physician's and the couple's responsibility in the choice of a surrogate mother?

Religious attitudes also pose threats to the new reproductive technologies. The Roman Catholic church believes reproduction to be only a conditional right, and views any interference with the natural process, from artificial insemination by husband to embryo transfer, as morally unacceptable.[127] The liberal Protestant view is that procreative methods are to be judged by the extent to which the couple's mutual love may be expressed through them.[128]

While the orthodox rabbinical views based on the Talmudic interpretations are as unyieldingly strict as those of the Roman Catholics, some of the modern Jewish views are becoming more liberal.[129] Orthodox Jews oppose artificial insemination by donor[130] but in rare instances will allow it if the couple has obtained permission from their Rabbi.[131] In these instances it is mandatory that the donor *not* be Jewish, to prevent the possibility of the resulting child later marrying a half-brother or a half-sister.[132] Some modern rabbinic opinion still views artificial insemination by donor as an abhorrent practice which destroys the family unit by separating marriage from its important function of reproduction (allowing the woman to reproduce independently).[133] Other Jewish scholars take a more practical view of artifical insemination by donor: they would not consider a woman who undergoes the procedure as an adulteress, nor the child as a 'mamzer' (bastard), and they dismiss the fear of the Orthodox that an incestuous marriage might result as 'highly unlikely'.[134]

One modern rabbinic opinion on *in vitro* fertilization is that it is an acceptable means of fulfilling the commandment to have children. Rabbi

Seymour Siegel of Manhattan's Jewish Theological Seminary admits that 'When nature does not permit conception, it is desirable to outwit nature.'[135] Rabbi David Bleich of Yeshiva University is optimistic about the future of *in vitro* fertilization, but holds some reservations about the procedure in its present experimental stage, for three reasons.[136] First, a defective child born by *in vitro* fertilization is forced by scientific experimentation to suffer his abnormalities. Until the technique is perfected to the point that there would be very little or no risk to the foetus, *in vitro* fertilization cannot be approved. Second, because *in vitro* fertilization entails the extraction and fertilization of three or four ova to ensure success, it very often leads to the destruction of the excess developing embryos. Many halakhic authorities[137] maintain that the destruction of an embryo at any time, even immediately following its conception, is foeticide.[138] Other authorities maintain that foeticide cannot occur until after the first forty days of gestation.[139] If *in vitro* fertilization were limited to the fertilization of a single ovum, this problem would be avoided. Third, the method of procuring the semen for fertilization *in vitro* may be considered 'destruction of the seed' and therefore forbidden under strictly traditional Jewish law.[140]

The legitimacy of children born through these new techniques is another problem to Jewish traditional law. Most authorities consider a child born by artificial insemination by donor to be legitimate, but considerable opinion maintains that it is the donor who must be considered the father in some or all respects.[141] Whether the child born by artificial insemination or *in vitro* fertilization should inherit the husband's estate, or what filial relationship exists between the husband and child, are yet unresolved questions. More importantly, the child's status as a Jew may be in question where the surrogate mother is not Jewish. It is also debatable whether the husband has fulfilled his obligation to procreate. Consider, too, whether the wife has fulfilled her obligation by allowing an egg donor or a womb donor to participate in the production of the children she will raise. If the egg or womb donor is not Jewish, should this deny the child its status as a Jew?

The acceptance of these new techniques would be of great significance in the present time of shrinking Jewish population world-wide, especially in Western Europe and the United States. In the *Wall Street Journal* on April 13, 1984, it was stated that 'Jews in the United States are not bearing enough children to replace themselves.'[142] Demographers at the Hebrew University of Jerusalem estimate that the Jewish population of the United States will fall by five to seventeen per cent by the turn of the century. Elihu Bergman, a Washington, D.C., lobbyist and long-time student of Jewish population trends, holds steadfast in the controversial projections he made while at the Harvard Centre for Population Studies in 1977.[143] If present trends continue, he estimates, the nations's Jewish population will decline to 420,000, or less than a tenth of its present size, by the year 2076.[144]

We have considered the various new techniques for conception available through modern medical technology. We have also considered the legal and moral ramifications of conception through these new techniques. We have travelled further in the last decade in the development of new conception techniques for humans than in the previous thousand years. Since law is often considered the societal response to societal needs, the law will undoubtedly have to change and give guidance in the many areas discussed in this article. These problems are not only of concern to the couples involved themselves, but also to the medical, legal, philosophical and religious authorities. We can no longer delay dealing with the new techniques of conception. They are upon us and are being widely used by couples who otherwise would be frustrated in their efforts to reproduce. We must provide answers in a comprehensive manner, rather than the 'hit and miss' technique, which has been the law's, and indeed, religion's response thus far.

NOTES

*The Eleventh Annual Sacks Lecture was given in May, 1984 at the Oxford Centre for Postgraduate Hebrew Studies. The present manuscript is based upon that lecture; it is not a verbatim transcript. Because of the rapid advances in medical science and the valuable pertinent literature published since the lecture was delivered, the material has been greatly expanded and updated. Much of this material is based on my article in the *New York Law School Law Review*, Vol. 31, No. 1. I am especially grateful to Benedene Sonnenblick, who laboured long and hard with me on the legal research for this manuscript, and to Dr George Mandel for his valuable assistance in editing the manuscript.

1. 92 Yale L.J. 203 (1982).

2. W. CURRAN & E.D. SHAPIRO, LAW, MEDICINE AND FORENSIC SCIENCE (3rd ed. 1982).

3. A partner at the firm of Hogan & Hartson in Washington, DC, formerly Deputy Executive Secretary, U.S. Department of Health and Human Services and consultant on health law and policy to the Federal Trade Commission.

4. Stromberg, *supra* note 1 at 203.

5. National Center for Health Statistics; *Health, United States, 1984* DHHS Pub. No. (PHS) 85–1232. Public Health Service. Wash. U.S. Gov't. Printing Office, Dec. 1984.

6. *See* NOONAN, CONTRACEPTION 85–91 (1966); NOONAN, THE MORALITY OF ABORTION 51 (1970). For a helpful synopsis of the Catholic view, *see* COUNCIL FOR SCIENCE AND SOCIETY, *Introduction: The Question Reviewed* in HUMAN PROCREATION: ETHICAL ASPECTS OF THE NEW TECHNIQUES 1–11 (1984) (hereinafter referred to as COUNCIL FOR SCIENCE AND SOCIETY).

7. *See* Roe v. Wade, 410 U.S. 113, 160 and fn. 58 (1973).

8. I. JAKOBOVITS, JEWISH MEDICAL ETHICS: A COMPARATIVE AND HISTORICAL STUDY OF THE JEWISH RELIGIOUS ATTITUDE TO MEDICINE AND ITS PRACTICE (1959). For a slightly more liberal view, *see* D. FELDMAN, BIRTH CONTROL IN JEWISH LAW 251–294 (1968).

9. 410 U.S. 113 (1973).

10. *Id.* at 159.

11. Except in property law. In 1762, Lord Blackstone, when called upon to determine the property rights of the unborn child, wrote, 'An infant . . . in the mother's womb is supposed in law to be born for many purposes. It is capable of having a legacy . . . made to it . . . it is able to have an estate . . . as if it were actually born.' W. BLACKSTONE, COMMENTARIES 130 (1762). *See generally* M. Shaw & C. Dame, *Legal Status of the Fetus in* GENETICS AND THE LAW (1976).

12. An ancient Roman law which required dying women to be operated on during the last weeks of pregnancy to save the child. 6 ENC. AMERICANA (1984).

13. Contrary to popular belief, the Caesarian section was not so named because it was the procedure by which Julius Caesar was born. There is no contemporary literature indicating that Caesar was born by this method, which DORLAND'S ILLUSTRATED MEDICAL DICTIONARY (26th ed.) at 1184 states is an incision through the abdominal and uterine walls for delivery of a foetus. The procedure was included (*lex caesarea*) in the codification of Roman Law in 715 BC, as a means of salvaging a foetus, if living, or of providing for its separate burial, in the event of the mother's death. *Id.*

14. *See* COUNCIL FOR SCIENCE AND SOCIETY at 1–11.

15. This has been the subject of world-wide debate. *See, e.g.* Waddlington, *Artificial Conception, The Challenge for Family Law*, 69 Va. L. R. 465 (1983); Feldman, *Frozen*

Embryos: to be or not to be, that is one of the questions, 12 Aspects Med. Prac. 8 (1984); Friedman, *A Legal, Moral, Social Nightmare, Society Seeks to Define the Problems of the Birth Revolution*, Time Mag., Sept. 10, 1984 at 54; Comment, *Love's Labor Lost: Legal and Ethical Implications in Artificial Procreation*, 58 U. Det. Urb. L. 459 (1981); Armstrong, *Baby-Making in the Lab: Ethics and Law Need to Catch Up with Science*, The Christian Science Monitor, June 26, 1984 at 21; *Infertility, The Great Debate*, The Stanford Magazine 29–35 (Winter 1984); COUNCIL FOR SCIENCE AND SOCIETY, *supra* note 6; JEWISH BIOETHICS (Rosner & Bleich ed. 1979).

16. According to Professor Walter Waddlington, the shortage of available infants may be due to the 'legal availability of abortion and contraceptives; diminished social and legal stigma accompanying illegitimacy; recognition of constitutional limits on legal discrimination predicated on illegitimate status; greater economic opportunity and child care services for some women; and changing male attitudes about child-raising roles.' Waddlington, *supra* note 15 at 466–67.

17. 'Among women 20–24 years old, the group that delivers a third of the nation's babies, the infertility rate has nearly tripled since 1965. Smoking, over-exercise, pollution, alcohol, contraceptives, infections, drugs taken for other ailments, and drugs taken for fun – all of these and more are to blame individually and in combination.' Kramer, *Last Chance Babies: The Wonders of In Vitro Fertilization*, New York Magazine, Vol. 18, no. 31, Aug. 12, 1985.

18. CLINICAL GYNECOLOGIC ENDOCRINOLOGY AND INFERTILITY 468 (3d ed. 1984).

19. *Id. See also* ANDREWS, NEW CONCEPTIONS 2 (1984) referring to surveys done by the National Center for Health Statistics in the United States. The estimated percentage of infertile married couples in England is obtained from COUNCIL FOR SCIENCE AND SOCIETY at 13.

20. Shane, M.D., Schiff, M.D. & Wilson, M.D., *The Infertile Couple: Evaluation and Treatment*, 28 Clin. Symp. 5,8 (1976).

21. ANDREWS *supra* note 19 at 2, quoting Martin O'Connell, Chief of the Fertility Statistics Branch of the Census Bureau of the United States.

22. *See generally* ANDREWS, *supra* note 19 at 159–196 and 299–302 (1984); Waddlington, *Artificial Insemination: The Dangers of a Poorly Kept Secret*, 64 NWU. L. Rev. 777 (1970); W. FINEGOLD, ARTIFICIAL INSEMINATION (1964).

23. S. KLING, SEXUAL BEHAVIOR AND THE LAW 59–60 (1965).

24. FINEGOLD, *supra* note 22 at 6.

25. KLING, *supra* note 23.

26. *Id.*

27. *See* Andrews, *The Stork Market: The Law of the New Reproductive Technologies*, 70 A.B.A.J. 50 (1984).

28. COUNCIL FOR SCIENCE AND SOCIETY at 14.

29. *See* Waddlington, *supra* note 15 at 469 citing Curie-Cohen, Lutrell & Shapiro, *Current Practice of Artificial Insemination by Donor in the United States*, 300 New Eng. J. Med. 585 (1979).

30. CURRAN & SHAPIRO, *supra* note 2 at 932.

31. *See* Waddlington, *supra* note 15 at 469.

32. Alaska Stat. sec. 25.20.045 (1983); Ark. Stat. Ann. sec. 61–141(C) (1971); Cal. Civ. Code sec. 7005 (West 1983); Colo. Rev. Stat. sec. 19–6–106 (1978); Conn. Gen. Stat Ann. sec. 45–69f to 69n (West 1981); Fla. Stat. Ann. sec. 742.11 (West Supp. 1984); Ga. Code ann. secs. 74–101.1–9904 (1984); Ill. ann. Stat. Ch. 40 sec. 1451 *et seq.* (Smith-Hurd Supp. 1983–84); Kan. Stat. Ann. secs. 23–128 to –130 (1981); La. Civ. Code Ann. art. 188 (West Supp. 1984); Md. Est. & Trusts Code Ann. sec. 1–206(b) (1974); Mass. Gen. Laws Ann. ch. 46, sec. 4B (West Supp. 1983–84); Mich. Comp. Laws sec. 700–111(2) (1980); Minn. Stat. sec. 257.56 (1982); Mont. Code Ann. 40–6–106 (1983); Nev. Rev. Stat. sec 126.061 (1983); N. J. Stat. Ann. secs. 9:7–38 to :17–59 (West 1983); N.Y. Dom. Rel. Law sec. 73 (McKinney 1977); N.C. Gen. Stat. sec. 49A (1976); Okla. Stat. tit. secs. 551–553 (Supp. 1983–1984); Or. Rev. Stat. secs. 109.239 to

.247, 677.355 to .370 (1983); Tenn. Code Ann. sec. 53–446 (Supp. 1982); Tex. Fam. Code Ann. sec. 12.03 (Vernon 1975); Va. Code sec. 64.1–7.1 (1980); Wash. Rev. Code Ann. sec. 26.26.050 (Supp. 1983–1984); Wis. Stat. Ann. sec. 891.40 (West Supp. 1983–1984); Wyo. Stat. sec. 14–2–103 (1978).

For a discussion of the legal status of artificial insemination in England, *see* Parker, *Legal Aspects of Artificial Insemination and Embryo Transfer*, 12 Fam. L. 103 (1982); COUNCIL FOR SCIENCE AND SOCIETY at 62–75.

33. The statutes of Texas and Oregon explicitly state the rights and duties of the third party donors. All other states, however, imply that the donor has no rights since the husband will be considered the legal father. *See* Or. Rev. Stat. sec. 109.239 (1983), Tex. Fam. Code. Ann.sec. 12.03 (Vernon 1975).

34. For a detailed overview of the various statutes on artificial insemination, *See* Fashing, *Artificial Conception: A Legislative Proposal*, 5 Cardozo L. Rev. 713 (1984). *See also* Andrews, *supra* note 27.

35. At least three commentators have questioned the constitutionality of denying an unmarried woman the right to procreate by artificial insemination. *See* Shaman, *Legal Aspects of Artificial Insemination*, 18 J. Fam. Law 331 at 344–46 (1979–80); Kritchevsky, *The Unmarried Woman's Right to Artificial Insemination: A Call for an Expanded Definition of Family*, 4 Harv. Women's L. J. 1 (1981); Note, *Reproductive Technology and Procreation Rights of the Unmarried*, 98 Harv. L. Rev. 669 (1985).

36. 152 N.J. Super. 160, 377 A.2d 821 (Cumberland County Ct. 1977).

37. *Id.* at 161, 821.

38. One cannot help but be sceptical about the assertion that the method of conception was artificial insemination and not sexual intercourse, considering that the estimated success rate of artificial insemination even under ideal laboratory conditions can be as low as twenty per cent. ANDREWS, *supra* note 19 at 181.

39. *Id.* at 822.

40. *Id.* at 167, 825.

41. *Id.*

42. The term 'donation' is a misnomer. 'Donors' are actually paid for depositing semen in most sperm banks. *See* Waddlington, *supra* note 15 at 470–471 citing Curie-Cohen, Lutrell & Shapiro, *Current Practice of Artificial Insemination by Donor in the United States*, 300 New Eng. J. Med. 585 (1979).The more meticulous commentator may refer to the deposits of semen as 'venditions', to the men who produced the deposits as 'vendors' and to the procedure which utilizes them as 'artificial insemination by vendor' (AIV). See *Law Conference 1984– Discussion on Bioethics*, N.Z.L.J. 237 July 1984.

43. According to the IDANT Corporation, the world's largest human sperm bank, located in New York City, New York.

44. *Id.*

45. Leach, *Perpetuities in the Atomic Age: The Sperm Bank and the Fertile Decedent*, 48 A.B.A.J. 942 (1962).

46. *See, e.g.* the IDANT Corporation, *supra* note 43.

47. *Id.*

48. *Id.*

49. Trib. gr. inst. Creteil, Aug. 1, 1984; Gazette du Palais, Sept. 5, 1984 at 11.

50. It is not clear from the text of the opinion or from the news sources what the exact terms of the storage agreement were.

51. Trib. gr. inst. Creteil, Aug. 1. 1984; Gaz. Pal. Sept. 15. 1984 at 12.

52. *Id.*

53. *Id.* at 13.

Although Mrs. Parpalaix triumphed in court, she unfortunately was unable to overcome the medical difficulties. The artificial insemination procedure failed due to the small quantity and

poor quality of Alain Parpalaix's sperm. *Woman Fails to Conceive From Dead Husband's Sperm*, Reuters North European Service, Jan. 11, 1985.

54. *See* Dionne, *Widow Wins Paris Case for Husband's Sperm*, The New York Times, Aug. 2, 1984 at 8, col.1; Maubouche, *French Woman Wins Sperm Bank Decision*, Wash. Post. Aug. 2, 1984; Maitland, *Dead Man's Sperm Case Forces Experts to Step Into The Unknown*, Reuters North European Service, Aug. 2, 1984.

55. The term 'post-mortem insemination' was coined by the French attorney Xavier Labbée in the article written by him before the *Parpalaix* decision was rendered. Labbée, *L'Insémination Artificielle Pratiquée après la Mort du Donneur*, Gazette du Palais, Sept. 15, 1984 at 2. American commentators have referred to children so born as 'posthumous sperm bank children' or more amusingly as children 'en ventre sa frigidaire' which is a variation of the legal term for an unborn child as 'en ventre sa mère'. Leach, *Perpetuities in the Atomic Age: The Sperm Bank and the Fertile Decedent*, 48 A.B.A.J. 942 (1962).

56. The *Parpalaix* court noted the difficulty of obtaining legal recognition of the legitimacy of a child born to the plaintiff through post-mortem artificial insemination. Article 325 of the Napoleonic Code deems illegitimate any child born more than 300 days after the putative father's death. Art. 315 C. civ. Moreover, Article 725 provides that for a child to inherit through his or her father, he or she must exist at the time of the father's death and explicitly disqualifies 'he who is not yet conceived.' Art. 725 C. civ.

57. Nau, *Legal Perils of Posthumous Procreation*, Le Monde, Aug. 3, 1984 at 12.

58. *See generally* Smith, *The Razor's Edge of Human Bonding: Artificial Fathers and Surrogate Mothers*, 5 W. New Eng. L. Rev. 639–666 (1983); Furrow, *Surrogate Motherhood: A New Option for Parenting* (editorial), 12 Law, Med. & Health Care 106 (1984); Holder, *Surrogate Motherhood, Babies for Fun and Profit*, 12 Law, Med. & Health Care 115 (1984); Bowal, *Surrogate Procreation: A Motherhood Issue in Legal Obscurity* (Canada), 9 Queens L.J. 5 (1983); Parker, *Surrogate Mothering, An Overview* (Great Britain), 14 Fam. L. 140 (1984); Keane, *Legal Problems of Surrogate Motherhood*, 1980 S. Ill. U. L. J. 147 (1980); ANDREWS, *supra* note 19 at 302–304; Note, *Surrogate Motherhood: Contractual Issues and Remedies under Legislative Proposals*, 23 Washburn L. J. 601 (1984); Note, *Surrogate Motherhood: The Outer Limits of Protected Conduct*, 4 Det. C. L. Rev. 1131 (1981); Note, *Contracts to Bear a Child*, 66 Cal. L. Rev. 611 (1978).

59. *See supra* note 20.

60. ANDREWS, *supra* note 19 at 254–256.

61. *See* ANDREWS, *supra* note 19 at 197–242.

62. *Id.* at 203.

63. See *Surrogacy; Wrong Mothers, Wrong Babies*, The Economist, Apr. 20, 1985 at 27 (Brit. ed.) (at 63, U.S. ed.) which reports services of a surrogate mother which were obtained through a surrogate agency.

64. *See* ANDREWS, *supra* note 19.

65. *Id.* at 203–211.

66. *Id.*

67. For a discussion of relevant case law, *see e.g.* Smith, *supra* note 58 at 657–662; Andrews, *supra* note 27 at 53.

68. Wash. Post, Apr. 7. 1981 at A7 cols. 1–2; Wash. Post, June 5, 1981 at A6 col. 1; Time Mag., June 22, 1981 at 71.

69. *Id.*

70. *See supra* note 68.

71. (1985) FLR 445, (1984) Fam.Law 241. *See also* Parker, *supra* note 58.

72. (1985) FLR 445, (1984) Fam. Law 241.

73. *Id.*

74. *See* Fashing, *supra* note 34; Andrews, *supra* note 27; ANDREWS, *supra* note 19; Keane, *supra* note 58 at 152–161.

75. Fashing, *supra* note 34.

76. It should be noted that in the United States the adoption procedure is generally much quicker and easier in private than in public adoption agencies.

77. ANDREWS, *supra* note 19. The significance of this seems to be that the biological mother then has a period during which she may become attached to the child before she gives it up. In most successful programmes, the baby is taken from the surrogate before she ever sees it. *Id.*

78. See *Surrogacy, Wrong Mothers, Wrong Babies*, The Economist, Apr. 20, 1985 at 27 (Brit. ed.) (at 63, U.S. ed.).

79. This would include any paid adviser, such as a lawyer or psychologist. See *id.*

80. This bill has been the subject of much criticism by doctors and the media. The Economist has called the bill 'the embryo of some extraordinarily bad law.' *Surrogacy: Wrong Mothers, Wrong Babies*, The Economist, Apr. 20, 1985 at 27 (Brit. ed.) (at 63, U.S. ed.) The bill would also prohibit the possession of a human embryo for any reason except to help a specific individual. The Economist points to four types of important research this bill would preclude: research to improve the *in vitro* fertilization technique; the testing of new contraceptives which would prevent sperm from joining with the egg; tests using eggs to examine the sperm of infertile men; and tests into the embryo freezing technique. *Embryo Research; Prohibited in Britain?*, The Economist, May 4, 1985 at 91.

81. For an overview of the Warnock Committee recommendations, see, *Family Law Developments: An Update*, 14 Fam. L. 217 (1984).

82. *See generally* COUNCIL FOR SCIENCE AND SOCIETY at 15; Trounson, *Pregnancy Established in An Infertile Patient After Transfer of a Donated Embryo Fertilised In Vitro*, 286 Br. Med.J. 835 (1983); Jones, *the Program for In Vitro fertilization at Norfolk*, 38 Fert. & Ster. 14 (1982); ANDREWS, *supra* note 19 at 120–158.

83. Anon., *Conception in a Watchglass*, 217 New Eng. J.Med. 678 (1937).

84. Edwards, Steptoe & Purdy, *Fertilization and Cleavage In Vitro of Preovular Human Oocytes*, 227 Nature 1307 (1970); Edwards, Steptoe & Purdy, *Establishing Full-term Human Pregnancies Using Cleaving Embryos Grown In Vitro*, 87 Br. J. Ob. Gyn. 737 (1980).

85. STEPTOE & EDWARDS, A MATTER OF LIFE (1980).

86. This procedure, performed under a general anaesthetic, is called a laparoscopy. A needle is surgically passed through the woman's navel and collects ova.

87. DORLAND'S ILLUSTRATED MEDICAL DICTIONARY, 173 (26th ed. 1980).

88. *Id.*at 296.

89. The risks to the blastocyst recipient include (1) ovarian hyperstimulation or ovarian cysts resulting from the injection of hormones necessary to the procedure; (2) the side-effects of repeated laparoscopies; (3) the need for amniocentesis; and (4) spontaneous abortion. Bernholz & Herman, *Legal Implications of Human In Vitro Fertilization for the Practising Physician in North Carolina*, 6 Campbell L. Rev. at 8 (1984), citing *Ethics Advisory Board of the Department of Health, Education and Welfare, Report and Conclusions: HEW Support of Research Involving Human In Vitro Fertilization and Embryo Transfer*, 44 Fed. Reg. 35,034 (1979).

90. *Id.* Injury to the developing foetus, such as mutation or genetic abnormalities may stem from superovulation, polysloid embryo, low quality sperm used in fertilization, or preservation techniques. *Id. See also* Schlessman, *How Does One Assess the Risk of Abnormalities from Human In Vitro Fertilization?*, 135 Am. J. Ostet. Gynecol. 135 (1979).

91. 74 Civ. 3588 (S.D.N.Y. 1976).

92. *See id.*

93. *Id.*

94. *Id.* For a more detailed discussion of the case, *see* Palm, *Legal Implications of Artificial Conception: Making Babies Makes Law*, Med. Tr. Tech. Qtrly 404 (1982 Ann.); Note, *In Vitro Fertilization: Hope for Childless Couples Breeds Legal Exposure for Physicians*, 17 U. Rich. L. Rev. 311 (1983).

95. 45 C.F.R. secs 46.101–46.211 (1982). For a detailed discussion of these administrative

regulations, *see* Bernholz & Herman *supra* note 89.

96. *See* ANDREWS, *supra* note 19 at 147–157.

97. *See* Note, *Artificial Conception: A Legislative Proposal*, 5 Cardozo L. R. 713.

98. *Id.*

99. *Id. See also* ANDREWS, *supra* note 19 at 50–52.

100. Leeton, *In Vitro Fertilization and Embryo Transfer: What It Is And How It Works* in TEST-TUBE BABIES (Walters & Singer ed. 1982).

101. ANDREWS, *supra* note 19 at 247. For more information on the medical procedure, *see* Biggers, *In Vitro Fertilization and Embryo Transfer in Human Beings*, 304 New Eng. J. Med. 336 (1981); Buster, *Non-Surgical Transfer of In Vivo Fertilized Donated Ova to Five Infertile Women: Report of Two Pregnancies*, Fertility & Sterility (Apr. 1983).

102. ANDREWS, *supra* note 19 at 243–255.

103. *Id.* at 251.

104. *Id.*

105. *Id.*

106. *Id.*

107. *See supra* page 5 and accompanying notes.

108. *See supra* pages 5–6 and accompanying notes.

109. In April 1983, an American couple who had enrolled in an *in vitro* fertilization programme in Melbourne, Australia died tragically in a plane crash before their two already fertilized and developing blastocysts could be implanted in the wife. The development of the two embryos was halted by storing them in steel tanks containing liquid nitrogen at -328 degrees Fahrenheit, where they remained 'orphaned' for over a year. Upon hearing of their existence, the Victoria State legislature issued a report recommending the destruction of all frozen embryos unless the genetic parents had left specific instructions to the contrary. However, after considerable protest and political pressure by, among others, Australia's Right to Life groups and the Roman Catholic Church of Australia, legislation was passed enabling the orphan embryos to be 'adopted' anonymously by one of the more than one hundred women who had volunteered to become surrogates. Said Victoria State Attorney General Jim Keenan about the legislative pronouncements, 'I'm quite happy with it . . . it didn't seem unreasonable to allow them to be adopted.' *See* Gee, *Orphan Embryos Stir Debate*, United Press International, June 24, 1984 (BC cycle); *Report Recommends Destruction of Test-Tube 'Orphans'*, Reuters North European Service, Sept. 3, 1984 (AM cycle); Renfrew, *Strong Opposition to Recommendation to Destroy Orphan Embryos*, The Associated Press, Sept. 4, 1984 at C6 col.1 (late city final ed.); Renfrew, *Scientists Promise Every Effort to Revive Embryos*, The Associated Press, Oct. 24, 1984 (AM cycle); Renfrew, *Women ask to Adopt Frozen Orphan Embryos*, The Associated Press, Oct. 24, 1984 (PM cycle).

110. ANDREWS, *supra* note 19 at 252.

111. *Id.* The cost per menstrual cycle monitored or per insemination is approximately $250. *Id.* at 252–53.

112. *Id.* at 253.

113. Consider, for example, the definition of foetus under CFR section 46.203(c), which states; 'Fetus means the product of conception *from the time of implantation* (as evidenced by any of the presumptive signs of pregnancy, such as missed menses, or a medically acceptable pregnancy test), until a determination is made, following expulsion or extraction of the fetus, that it is viable.' *Id.* (Emphasis added)

114. *Infertility, The Great Debate*, The Stanford Magazine 29–35 (Winter 1984).

115. ANDREWS, *supra* note 27.

116. Most authorities agree that the identity of the donor, at least in artificial insemination by donor cases, should be kept confidential. *See, e.g.*, Smith, *supra* note 58 at 644–649; COUNCIL FOR SCIENCE AND SOCIETY at 37.

117. In July of 1984, the British Committee of Inquiry into Human Fertilization issued a

report recommending 'that when a child is born to a woman following donation of another's egg, the woman giving birth should, for all purposes, be regarded in law as the mother of that child, and that the egg donor should have no rights and obligations in respect to the child.' *Artificial Ways For Couples to Have a Child*, The New York Times, Nov. 16, 1984 Sec. A at 20, col. 1 (late city final ed.).

118. *See* Shaman, *supra* note 35; Waddlington, *supra* note 22.

119. The doctor may be held on a strict liability theory where he has not adequately tested the donor for defects that may be passed on to the child. Shaman, *supra*, note 35.

120. *See*, Thies, *A Look to the Future: Property Rights and the Posthumously Conceived Child*, 110 Trusts & Estates 922 (1971); Leach, *Perpetuities in the Atomic Age: The Sperm bank and the Fertile Decedent*, 48 A.B.A.J. 942 (1962).

121. *See* Kritchevsky,*supra* note 35; Note, *supra* note 35; Shaman, *supra* note 35.

122. *See supra* pages 4–5 and accompanying notes.

123. *See* the discussion of Delzio v. Presbyterian Hospital, *supra* pages 7–8 and accompanying notes.

124. In a wrongful birth or wrongful life action, the parents of an unplanned child seek to shift to the defendant various costs, including medical expenses of pregnancy and delivery, pain and suffering, and the more formidable costs of rearing and educating a child. BLACK'S LAW DICTIONARY 830 (5th ed. 1983). Suits are often brought against physicians who fail to diagnose severe foetal defects during pregnancy in time to abort. *See* Harbeson v. Parke-Davis, Inc., 98 Wash. 2d 460, 656 P.2d 483 (1983); Turpin v Sortini, 182 Cal. Rptr. 337, 643 P.2d 954 (1982); Procanik v. Cillo, 97 N.J. 339, 478 A.2d 755 (1984); (wrongful life) and Berman v. Allen, 80 N.J. 421, 404 A.2d 8 (1979); Speck v. Finegold, 497 Pa. 77, 439 A.2d 110 (1981); Gildner v. Thomas Jefferson Memorial Hospital, 451 F. Supp. 692 (E.D. Pa. 1978); Robak v. United States, 658 F. 2d 471 (7th Cir. 1981) (wrongful birth cases which disallowed recovery for wrongful life). See generally *Torts: Wrongful Birth and Wrongful Life Causes of Action*, 1983 Ann. Surv. Am. L. 675–92 (Fall 1984).

125. *See* Bernholz & Herman, *supra* note 89 and Palm, *supra* note 94.

126. *See supra* page 6 and accompanying notes.

127. *See, e.g.* G. SMITH, GENETICS, ETHICS AND THE LAW at 153–156 (1981); G. ANNAS & A. MULUNSKY, GENETICS AND THE LAW at 397 (1975); Noonan, *Christian Tradition and the Control of Human Reproduction*, J. Christ. Juris. 1 (1983 Ann.); Comment, *Love's Labor Lost: Legal and Ethical Implications in Artificial Insemination*, 58 U. Det. Urb. L. 459 at 462–464 (1981); Note, *In Vitro Fertilization: Hope for Childless Couples Breeds Legal Exposure for Physicians*, 17 U Rich. L. Rev. 311 at 319–320 (1983).

128 SMITH, *supra* note 127 at 156. *But see* Ramsey, *Shall We Reproduce? The Medical Ethics of In Vitro Fertilization*, 220 JAMA 1346 (1972).

129. However, there are still many Jewish scholars who adamantly oppose techniques such as artificial insemination by donor. *See* Comment, *supra* note 127 at 461; JAKOBOVITS, *supra* note 8; Rosner, *Artificial Insemination in Jewish Law* in JEWISH BIOETHICS 107 (1984). *But see* SMITH, GENETICS AND THE LAW 157 (1981).

130. The concept of artificial insemination is present even in the ancient teachings of Jewish religion. Consider the following three sources: 1. It was argued from the 5th century Babylonian Talmud that the Sages recognized that it was possible for a woman to become pregnant *sine concubito* while bathing in water into which a man had discharged semen. *See* Rosner, *supra* note 129 at 107 citing Babylonian Talmud Hagigah 14b. 2. In his work *Haggahot Semak*, Rabbi Perez ben Elijah of Corbeil warns that a woman should not lie on sheets upon which a man not her husband has slept, lest she conceive by his sperm. *Id.* at 107. 3. In the oft-quoted Midrashic legend, Ben Sira was conceived by the prophet Jeremiah's daughter while she bathed in water into which her father, coerced by wicked men, had discharged semen. *Id.* at 108.

Some Jewish scholars hold steadfast to the view that artificial insemination by donor

constitutes adultery. *See* Rosner, *supra* note 122. Whereas the incidents of impregnation described in the ancient sources occurred accidentally, the modern procedure of artificial insemination by donor entails the active participation of the wife, the donor, and the physician, and is therefore unacceptable. Accordingly, the husband may divorce his wife on the grounds of artificial insemination by donor. *Id.* Other Jewish scholars, interpreting the phrase '. . . to be a God unto thee and to thy seed after thee' (Genesis 17:7), would prohibit artificial insemination by donor because this phrase means that God does not favour those whose paternity is not known. *Id.* Still others would prohibit artificial insemination by donor because it leaves the possibility that the resulting child may unknowingly marry his or her half-sibling. *Id.*

131. ANDREWS, *supra* note 19 at 188.

132. *Id.*

133. Comment, *supra* note 127 at 461–462.

134. *Id.* at 462.

135. Note, *supra* note 127 at 320.

136. Bleich, *Test-Tube Babies* in JEWISH BIOETHICS 80 (Rosner and Bleich ed. 1984).

137. I.e. authorities in *halakhah*, or Jewish law.

138. Bleich, *supra* note 136 at 84.

139. *Id.*

140. *Id.*

141. Rosner, *supra* note 129.

142. *American Judaism: As Jewish Population Falls in U.S., Leaders Seek to Reverse Trend*, Wall Street Journal, Apr. 13, 1984 at 1 col. 1.

143. *Id.*

144. For a summary of the Torah view of the Jewish demographic problem and a discussion of the implications of programmes to reduce the birth rate, *see* Tendler, *Population Control — The Jewish View* in JEWISH BIOETHICS 97–104 (1984).

The endowment of the annual Sacks Lectures at the Oxford Centre for Postgraduate Hebrew Studies was a gift from the friends of Dr Samuel Sacks and the late Dr Elsie Sacks in honour of their fiftieth wedding anniversary.

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