

**FOETAL TISSUE TRANSPLANTATION :
THE ETHICS, THE LAW AND
THE BORN ALIVE RULE IN CANADA**

BY

INDRA L. MAHARAJ

A Thesis
Submitted to the Faculty of Graduate Studies
In Partial Fulfillment of the Requirements
for the Degree of

MASTER OF LAWS

Department of Law
University of Manitoba
Winnipeg, Manitoba

© August, 2000



National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file *Votre référence*

Our file *Notre référence*

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-53252-6

Canada

**THE UNIVERSITY OF MANITOBA
FACULTY OF GRADUATE STUDIES

COPYRIGHT PERMISSION PAGE**

**Foetal Tissue Transplantation:
The Ethics, The Law and the Born Alive Rule in Canada**

BY

Indra L. Maharaj

**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University
of Manitoba in partial fulfillment of the requirements of the degree
of
Master of Laws**

INDRA L. MAHARAJ © 2000

Permission has been granted to the Library of The University of Manitoba to lend or sell copies of this thesis/practicum, to the National Library of Canada to microfilm this thesis/practicum and to lend or sell copies of the film, and to Dissertations Abstracts International to publish an abstract of this thesis/practicum.

The author reserves other publication rights, and neither this thesis/practicum nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

ABSTRACT

The advent of antibiotics revolutionized infection management regimes. However, even penicillin was treated with understandable scepticism. Today, its use is common. Foetal tissue transplantation may be the “penicillin” of Parkinson’s Disease treatment. It can be transplanted into the recipient and produce the missing chemicals that cause the symptoms. It seems like a clear “go forward” proposition but the fact that fetuses are the tissue source has created social resistance. The foetus is unlike any other human tissue. If separated from the pregnant woman prior to viability, it cannot survive. However, if left alone, it has the potential to develop into an independent and unique human being. Bearing this in mind, how can abortion and transplantation be justified?

In true Canadian style, a balance has been reached. First trimester abortions can be obtained electively. Only first and early second trimester foetal tissue is transplantable. I believe that transplantation is not dependent upon the morality of abortion because abortion and suitable tissue both exist.

In this thesis, I discuss the various ethical arguments and the legal issues raised by this technology. To put it all into perspective, I review the born alive rule in depth and examine its influence in the law generally. After conducting the foregoing analysis, I support the use of first trimester electively aborted foetal tissue for therapeutic transplantation, with appropriate controls to ensure that the pregnant woman is a willing participant with full knowledge of the ultimate of her foetal tissue.

ACKNOWLEDGMENTS

This project started as an outlet for the intellectual boredom that I anticipated would fill my first maternity leave. After all, babies just eat and sleep ... right? After the birth of our son Narayan, I found time to be at a premium and intellectual energy even more scarce. Having failed to complete my task within the time allotted for my maternity leave, I continued to try to make time. I continued through many life changes, including the birth of our daughter Savita. Ironically, I thought that my second maternity leave would be an ideal time to pursue another academic project. After all, the kids will play together ...right? As dear friends of ours advised us – one child is easy ... two is like having twenty! They were right. However, at long last, this project has been completed.

I would like to thank my thesis supervisors, Professors Barney Sneiderman and DeLloyd Guth, for their patience and quiet faith that I would complete my task. Together, they understood that sometimes you can push and sometimes you can't. I would like to thank Tim Caulfield for "adopting" me after my move to Alberta. Finally, I would like to recognize, with thanks, the late Samuel Freedman, whose family has been generous in the endowment of a scholarship to encourage students in the pursuit of their Master of Laws degree.

I would be remiss if I failed to thank my parents for the unwavering support that they have given me in this, and every, project that I have undertaken. In their own very different ways, they have each provided me with the confidence, momentum

and encouragement to produce. Thank you for being the spark (Dad) and the steadily burning flame (Mom) upon which I have drawn for strength all these years.

Lastly, and most importantly, I must thank the Maestro – my husband Richard. Richard has been everything for me: my biggest fan, my computer wizard, my reality check, my quiet supporter and my “frozen boot in the behind” throughout this endeavour. Richard has been a true Maestro, playing whichever tune was required to motivate me. I could not have finished this thesis without his steady hand on the baton. Through all of the ups and downs, you have never said “I wish you had not taken on this project”.

Thanks for understanding why I need to do what I do.

Thank you all.

DEDICATION

I have been taught that we exist on this earth to seek a true understanding of our souls. To do so, we must pursue knowledge in all of its forms. It is our duty to learn and to educate others. This thesis represents a small part of my search. I hope that it is of some value to others who will study in this area.

TABLE OF CONTENTS

ABSTRACT	i
ACKNOWLEDGMENTS	ii
DEDICATION	iv
TABLE OF CONTENTS	i
INTRODUCTION	1
THE SCOPE OF THIS THESIS	8
1 A WORD ABOUT WORDS	8
2 THE QUESTION AND THE ANSWER	13
3 THE STRUCTURE OF THIS ANALYSIS – THE LIMITS	13
WHAT IS FOETAL TISSUE?	19
1 THE PROPERTIES OF FOETAL TISSUE THAT MAKE IT UNIQUELY SUITABLE FOR TRANSPLANTATION	19
2 SUITABLE AND UNSUITABLE SOURCES OF FOETAL TISSUE	24
3 CONCLUSION	34
DISCUSSION OF THE FRAMEWORKS FOR ANALYSIS	36
1 INTRODUCTION	36
2 FRAMEWORK I - THE FOETUS IS A FULLY ENTITLED PERSON FROM CONCEPTION ONWARD	37
3 FRAMEWORK II – THE FOETUS HAS SOME STATUS DURING GESTATION	39
4 FRAMEWORK III - THE FOETUS HAS NO STATUS UNTIL AFTER IT IS BORN	42
5 CONCLUSION	43
CHOICE OF A FRAMEWORK FOR THE ANALYSIS OF THE PROBLEM	44
AREAS OF THE LAW THAT ADDRESS THE LEGAL STATUS OF THE FOETUS	48

1	INTRODUCTION	48
2	CRIMINAL CODE OF CANADA	52
3	HUMAN RIGHTS LEGISLATION	57
4	CHILD PROTECTION LEGISLATION	62
	<i>b) Canada:</i>	66
	<i>c) United States:</i>	69
	<i>d) England:</i>	72
	<i>e) Conclusion:</i>	74
5	CANADIAN CHARTER OF RIGHTS AND FREEDOMS	75
6	TORT LAW	84
7	DEVOLUTION OF ESTATES/PROPERTY LAW:	103
8	CONCLUSION:	107
	ETHICAL ISSUES.....	111
1	INTRODUCTION	111
2	ARGUMENTS IN OPPOSITION TO THE USE OF FOETAL TISSUE FOR TRANSPLANTATION:	122
	<i>a) The Complicity Argument:</i>	122
	<i>b) The Legitimation Argument</i>	129
	<i>c) The Effect on Foetal Welfare Argument:</i>	132
	<i>d) The Commodification/Creation of a Market in Foetal Tissue Argument:</i>	138
	<i>e) The Maternal Rights Argument:</i>	144
3	ARGUMENTS IN SUPPORT OF THE USE OF FOETAL TISSUE FOR TRANSPLANT PURPOSES:	149
	<i>a) The Utilitarian Argument:</i>	149
	<i>b) Respect for the Human Quality of the Foetal Tissue:</i>	153
	<i>c) The Redemption of Tragedy Argument:</i>	155
	<i>d) The Advancement of Technology Argument:</i>	157
4	CONCLUSION	159
	LEGAL ISSUES	162

1	INTRODUCTION	162
2	PROPERTY RIGHTS IN FOETAL TISSUE	163
3	THE DEVELOPMENT OF COMMERCIAL INTERESTS IN TISSUE AND THE <i>MOORE</i> CASE.....	171
4	INFORMED CONSENT	180
5	CONCLUSION	196
	CONCLUSION	200
	BIBLIOGRAPHY	205
	ARTICLES, TEXTBOOKS AND JOURNALS.....	205
	DICTIONARIES.....	216
	COMMISSION REPORTS AND GOVERNMENT PUBLICATIONS.....	216
	STATUTES	221
	CASES.....	224
	NEWSPAPER ARTICLES.....	229

INTRODUCTION

The discovery of antibiotics changed the way that physicians treated infection and medicine has never looked back. Today, there is a “new kid on the block” – a treatment that is easily administered, available in generous amounts, universally accepted by the human body and offers the potential of relief from the debilitating symptoms of many life-altering or life-ending diseases. Supporters say that the treatment is as good as spinning straw into gold - it utilizes a source that is presently discarded and turns it into a vector of great therapeutic potential. Objectors say that the acquisition of this treatment exacts an unacceptably high price - it cheapens life and is predicated upon death.

The treatment is the transplantation of foetal tissue into the human body for therapeutic purposes. In the same way that the advent of antibiotics revolutionized medical treatment protocols, foetal tissue transplantation may be capable of revolutionizing the treatment of many currently debilitating and ultimately fatal diseases.

The use of this technology is relatively rare and subject to great controversy¹. At this time, there is only one condition that has been treated consistently and successfully with foetal tissue transplantation. Since 1968, DiGeorge's Syndrome

¹ The very recent biomedical research into the use of stem cells harvested from umbilical cord or placental blood shows some promise of being an alternative to the widespread use of foetal tissue as a source of donor tissue. Research in this exciting area is ongoing and will undoubtedly attract significant interest in the biomedical world.

has been treated by transplanting into sufferers the thymus tissue harvested from aborted fetuses. It is the therapy of choice for sufferers of this devastating syndrome.² Attempts have been made since 1988 to treat Parkinson's Disease by transplanting foetal tissue into the brains of sufferers. The first Canadian trial began in June 1991 at Dalhousie University and Victoria General Hospital.³ Parkinson's Disease is a neurologic disorder that occurs when neurons in the *substantia nigra* fail to secrete a sufficient amount of dopamine – a chemical used by the body in regulating movement. Patients suffer from symptoms of rigidity, difficulty initiating movements, and tremors. The disease is debilitating and degenerative. Sufferers eventually become unable to walk, sit, stand, or feed themselves.⁴ The cause is unknown and there is no cure. Existing treatments have severe side effects. Some recipients have demonstrated improvement of their symptoms. The success in treating DiGeorge's Syndrome and Parkinson's Disease has led to consideration of the use of foetal tissue transplants in the treatment of Huntington's Chorea, Amyotrophic Lateral Sclerosis, Alzheimer's Disease, Multiple Sclerosis, Epilepsy, Diabetes Mellitus and other debilitating or fatal conditions. Sufferers of Thalassemia, Sickle Cell Anaemia and Chronic

² Arthur L. Caplan *et al.*, "The Use of Human Fetal Tissue: Scientific, Ethical and Policy Concerns – A report of phase I of an interdisciplinary research project conducted by the Center for Biomedical Ethics" (Minneapolis: University of Minnesota, 1990) 21 at 49.

³ Proceed With Care: Final Report of the Royal Commission on New Reproductive Technologies (Ottawa: Minister of Government Services Canada, 1993) Chapter 31 in Volume 2 [hereinafter "*Proceed With Care*"].

⁴ Alan Fine, "The Ethics of Fetal Tissue Transplants", (1988) 18:3 Hastings Center Report 5 at 5.

Granulomatous Disease may be the next beneficiaries of foetal tissue transplant therapy research.⁵

To appreciate the unique social impact of foetal tissue transplantation for therapeutic purposes, it is interesting to examine the development of this technology and the corresponding attention it has received from the world-wide community.⁶ The first report of an attempted tissue transplant into the mammalian brain was in 1890 by W.G. Thompson, an American researcher.⁷ He published a brief account of his animal experiments that year.⁸ The first human neuro-grafting experiments, the transplantation of mature human tissue to the human brain, occurred in 1982 in Sweden – almost one hundred years after Dr. Thompson's reports. Drs. Bjorklund and Stenevi implanted dopamine producing cells from a patient's adrenal gland into that patient's brain in order to treat severe Parkinson's Disease symptoms. Between 1982 and 1984, Drs. Bjorklund and Stenevi treated

⁵ Bone marrow transplantation has shown positive results in children suffering from these haematologic disorders. Because each of these disorders stems from abnormal blood cells, bone marrow transplantation seems to have been successful in normalizing the sufferer's blood chemistry. Conceptually, foetal tissue could be transplanted into the bone marrow of sufferers and should differentiate to take over the insufficient or defective function of the recipient's bone marrow. Rather than being limited by the availability of a compatible donor, foetal tissue is readily available and does not require tissue-type matching. Foetal tissue is immunologically neutral and does not provoke the Graft v. Host response of mature graft tissue. Foetal liver cells have been found to be the richest and most available source of haematopoietic stems cells: Sherman Elias, M.D. and George J. Annas, *Reproductive Genetics and the Law* (London: Year Book Medical Publishers, Inc., 1987) at 266; see also *supra* note 3.

⁶ *Supra* note 2 at Appendix B (pages B1-B5), for a detailed time line of the history of neurografting and foetal tissue transplantation up to 1989.

⁷ U.S. Congress, Office of Technology Assessment, *Neural Grafting: Repairing the Brain and Spinal Cord*, OTA – BA – 462 (Washington, DC: U.S. Government Printing Office, September 1990) 21.

⁸ A. Bjorklund and U. Stenevi, (eds.), *Intracerebral Neuro-Grafting: A Historical Perspective, Neural Grafting in the Mammalian CNS* (Amsterdam: Elsevier Science Publishers, 1985) as cited in *supra* note 7 at 21.

four patients in this manner and reported positive results.⁹ On 12 September, 1987, a team of Mexican physicians led by Dr. Ignacio Madrazo performed the first foetal tissue transplantation into human beings. In January of 1988, Dr. Madrazo and his team released information that there was "evidence of an objective improvement in the symptoms of Parkinson's Disease".¹⁰

Foetal tissue has been used for research purposes, other than transplantation into humans, since the turn of the century.¹¹ Many countries have guidelines for the use of foetal tissue for research purposes. Commissions and committees have been convened in many countries to study the use of foetal tissue for research and for other purposes:¹²

- 1) United Kingdom (1972 – The Peel Commission and 1984 – The Warnock Committee and the Polkinghorne Report);
- 2) Australia (1983 – The Walla Committee);
- 3) Canada (1993 - Royal Commission on New Reproductive Technologies¹³, 1998 – Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans¹⁴

⁹ *Supra* note 7 at 21.

¹⁰ J. M. Hillebrecht, J. D., "Regulating the Clinical Uses of Fetal Tissue – A Proposal for Legislation" (1989) 10:2 *The Journal of Legal Medicine* 269 at 276 - 277.

¹¹ *Supra* note 2 at 1.

¹² *Supra* note 1 at 2.

¹³ The Royal Commission on New Reproductive Technologies (Ottawa: Minister of Supply and Services, 1993) [hereinafter *The Royal Commission*] established by the Canadian Government was asked to do the following:

Footnote Continued on Next Page

and Proceed With Care: Final Report of the Royal Commission New Reproductive Technologies);¹⁵

4) France (1984 – The National Ethics Consultative Committee for Life and Health Science: Opinion on Removing Tissue from Embryos or Dead Human Fetuses for Therapeutic, Diagnostic and Scientific Purposes); and

5) United States (1974 – National Commission for the Protection of Human Subjects of Biomedical and Behaviour Research¹⁶ and 1988 – National Institutes of Health, Report of the Human Fetal Tissue Transplantation Research Panel).¹⁷

-
- a) Consider the impact of new reproductive technologies on society;
 - b) Consider the impact of new reproductive technologies on specific groups, *e.g.*, women and children;
 - c) Review the scientific and medical aspects of the new reproductive technologies;
 - d) Review the ethical, legal, social, economic and health implications of the new reproductive technologies;
 - e) Consider the current and future development in new reproductive technologies; and,
 - f) Discuss specifically assisted conception, prenatal diagnosis, causes and prevention of fertility, applications of other reproductive technology, embryo and foetal tissue research.

The Royal Commission addressed a significant number of issues, including the use of foetal tissue for general research purposes. Consideration of the use of foetal tissue for therapeutic transplantation was given some consideration. *The Royal Commission* found that it would appear that the public has a relatively low level of awareness of issues surrounding foetal tissue transplantation for therapeutic purposes, as compared to awareness of issues surrounding other reproductive technologies, such as infertility and prenatal diagnosis (page xiii). *The Royal Commission* indicated that there is a "pressing need for public regulation and accountability in the areas of embryo and foetal tissue research" (page xvii). *The Royal Commission's* report simply concluded that there is a "need for clear and accountable public policy in this area" (page xvii).

¹⁴ *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans* (Ottawa: Public Works and Government Services Canada, August 1998) [hereinafter *The Tri-Council Policy Statement*] which replaced the Medical Research Council of Canada *1987 Guidelines* and the *SSHRC Ethics Guidelines for Research with Human Subjects* (Ottawa, 1977).

¹⁵ *Supra* note 3.

¹⁶ The United States National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research (National Commission), *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research* (Washington, D.C.: Supt. Of Government Documents, 1979) at 15. Also see Title 45 *Code of Federal Regulations*, Part 46 (Section 46.102).

Each Commission/Committee concluded that it is morally “impermissible to conduct research on any living fetus *in utero* or *ex utero* unless the research is directed toward the benefit of the fetus. They all concluded that it is permissible to conduct research using dead fetuses or the tissue of dead fetuses”.¹⁸ The Commissions/Committees either ignored the question of using foetal tissue as graft tissue for therapeutic transplantation purposes or circumvented the issue by saying that more study was required. There are many sets of guidelines formulated in the industrialized world with respect to foetal tissue research. LeRoy Walters found that the guidelines in the United Kingdom, The United States, Australia, the Netherlands, France, Sweden, the Council of Europe and Canada were remarkably similar. He says there is an “impressive international consensus on the ethical standards that should govern the use of foetal tissue for research”.¹⁹

If there is a reasonable world wide consensus on the use of foetal tissue, why has there been so little focus on this technological development? My impression is that the fact that the source tissue is electively aborted first trimester foetuses makes people uncomfortable. This discomfort and the difficulty in rationalizing a laissez-faire attitude that the foetus is not a human being with the certain knowledge that,

¹⁷ National Institutes of Health, *Human Fetal Tissue Transplantation Research Panel*, Bethesda, Maryland, December, 1988.

¹⁸ *Supra* note 2 at 11.

¹⁹ LeRoy Walters, Ph.D., “Statement to the Advisory Committee to the Director, NIH” in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda Maryland, at C5.

if left alone, the foetus can become an independent, thinking, feeling individual, are the primary causes for this reluctance.

THE SCOPE OF THIS THESIS

1 A Word About Words

The conduct of a logical discussion of the legal and ethical issues surrounding the use of human foetal tissue requires a thorough understanding of the relevant terminology. It is critical to remove the emotional context from all terminology.²⁰ For example, to describe a first trimester elective abortion as the “murder of an unborn baby” imposes a moral, a criminal, and an emotional context on a medical procedure that does not aid a logical consideration of the issues.

Some of the most critical terminology is the following:

²⁰ In his article, “The Role of Emotion in Ethical Decisionmaking” (1988) 18:3 Hastings Center Report 9, Sidney Callahan identifies Joel Feinberg’s “completely rationalist view”, on the one hand, and proposes, in his own view, a model that integrates “thinking and feeling in ethical decisionmaking” (page 9). The following quotation from Feinberg and cited by Callahan clearly encapsulates the rationalist point of view: “arguments are one thing, sentiments another, and nothing fogs the mind as thoroughly as emotion”. I subscribe to Feinberg’s opinion up to a point. Certainly, when discussing the scientific basis of foetal transplantation technology and when analyzing arguments both legal and ethical, one must conduct the analysis in a rational way. In this particular situation, the time for integration of the emotional response is twofold: on an individual level when a pregnant woman decides whether she desires an elective abortion, and how she would like the foetal tissue treated, and on a societal level when the ethical status of the foetus is used to determine what the legal status of the foetus should be.

- 1) "Tissue"²¹ includes an organ, but does not include skin, bone, blood, blood constituents or other tissue that is replaceable by the natural process of repair;
- 2) "Organs"²² are non-replaceable bodily structures or solid organs, like kidneys and lungs;
- 3) "Zygote"²³ is a term that is applied generally to the product of the union between the human egg and sperm cell, and more specifically the organism that exists from conception to the second week after conception. This term can be used throughout the entire gestation period but is usually replaced by age specific

²¹ B. M. Dickens, "Legal Issues in Embryo and Fetal Tissue Research and Therapy" in *The Royal Commission* – Volume 15 at 44 - 45 refers to a distinction being drawn in law between "tissues" and "organs", whereby "tissue" is used to refer to "naturally replaceable body materials such as blood", and "organs" is used to refer to "non-replaceable bodily structures or solid organs such as kidneys and lungs"; all of the provincial Human Tissue Acts define "tissue" as "includ[ing] an organ, but not including skin, bone, blood, blood constituents, or other tissue that is replaceable by natural process of repair". The exact wording is found in *Human Tissue Gift Act* R.S.B.C 1996, c. 211; s. 1(b), *Human Tissue Gift Act*, R.S.A., c. H-12; s. 1, *Human Tissue Gift Act*, R.S.O. 1990, c. H.20, s. 2(c), *Human Tissue Gift Act*, R.S.N.S., c. 215; s. 8(1), *Human Tissue Act*, S.N.B., c. H-12. All provincial acts are based on the 1971 *Uniform Tissue Act*. Manitoba and Prince Edward Island specifically exclude fetuses from the definition of "tissue" as discussed in *supra* note 3 at 990 – 991.

²² *Ibid.* (Dickens) at 44.

²³ Ben Pansky, *Review of Medical Embryology* (Toronto: Collier MacMillan Canada, Inc., 1982) at 32 [hereinafter *Review of Medical Embryology*] as "the union of the male (sperm) and female (oocyte) gametes to form a zygote and marks the beginning of pregnancy"; and also Keith L. Moore and T. V. N. Persaud, *Before We Are Born – Basic Embryology and Birth Defects* (Toronto: W. B. Saunders Company, 1998) at 2 [hereinafter *Before We Are Born*] as a cell "formed by the union of an oocyte and a sperm . . . the beginning of a new human being (*i.e.*, an embryo)."

Black's Medical Dictionary, 27th ed., s.v. "zygote" at 642, as "This is the cell produced when an ovum is fertilized by a sperm. A zygote contains all the hereditary material for a new individual: half comes from the sperm and half from the ovum. After passing down the fallopian tube, when the zygote starts dividing, it becomes implanted in the uterus and develops into an "embryo".

Dorland's Illustrated Medical Dictionary, 27th ed., s.v. "zygote" as "the cell resulting from the union of a male and female gamete, until it divides; the fertilized ovum."

The Canadian Medical Association Home Medical Encyclopedia, Peter Morgan, M.D. (ed.), (London: Darling Kindersley Limited, 1992) defines "zygote" at 1091 as "The cell produced when a sperm fertilizes an ovum . . . the zygote travels down one of the woman's fallopian tubes toward the uterus, dividing as it does so. After about a week, the mass of cells (now called a blastocyst) implants into the lining of the uterus, and the next stage of embryological growth begins."

terminology like “embryo” and “foetus”, which are defined below. Sometimes a “zygote” is also called a “pre-embryo”;

4) “Embryo”²⁴ is the appropriate term to use for the organism between the second and eighth week after conception;

5) “Foetus”²⁵ is the appropriate term to describe the organism eight weeks and more after conception. Most organ systems development is initiated the

²⁴ *Black's Medical Dictionary*, 27th ed., s.v. “embryo” as the “fetus in the womb prior to the end of the second month”.

Dorland's Illustrated Medical Dictionary, 27th ed., s.v. “embryo” as “In man, the developing organism . . . from about two weeks after fertilization to the end of the seventh or eighth week.”

The Canadian Medical Association Home Medical Encyclopedia, *supra* note 23, defines “embryo” as “The unborn child during the first eight weeks of its development following conception.”

Before We Are Born, *supra* note 23, at 2 defines “embryo” as “the developing human during its early stages of development. The embryonic period extends to the end of the eighth week by which time the beginning of all major structures are present”. Moore provides an exceptional pictorial time table of human prenatal development from maturation of the follicle to birth at 4 to 7.

Review of Medical Embryology, *supra* note 23, at 58 describes the embryonic period as comprising weeks 4 to 8 of gestational age. During this period “one sees the beginnings of all major internal and external structural (organ and organ systems) develop during which time the 3 germ layers give rise to specific tissues and organs – organogenesis.” Although there appears to be a slight difference in the exact time that the embryonic period is said to commence, all sources reflect that this period ends at the 8th week as the foetal period begins. Also, see J. G. Moscoso, “Functional Aspects of Embryology” in E.R. Barnea, J. Hustin & E. Jauniaux (eds.), *The First Twelve Weeks of Gestation* (New York: Springer Verlag, 1992) at 169.

²⁵ *Black's Medical Dictionary*, 27th ed., s.v. “foetus” as “the name given to the unborn child after the eighth week of development”.

Dorland's Illustrated Medical Dictionary, 27th ed., s.v. “foetus” as “. . . in man from seven or eight weeks after fertilization until birth”.

The Canadian Medical Association Home Medical Encyclopedia, *supra* note 23, defines “foetus” as “the unborn child from the end of the eighth week after conception until birth”.

The Encyclopedia of Family Health, (Toronto: Marshall Cavendish, 1998) Volume 4, has an easy to read and well illustrated summary of foetal development.

Review of Medical Embryology, *supra* note 23, at 70 – 73 describes the “fetal period” as comprising weeks 9 to birth. The “fetal period is concerned with growth and differentiation of tissues and organs that began to develop in the embryonic period . . . and the embryo begins to make functional use of its organs for part of its needs.”

Footnote Continued on Next Page

embryonic stage. The elaboration of the organ system development occurs at the foetal stage. The transition from the embryonic stage to the foetal stage usually occurs at approximately the eighth week of pregnancy. After the eighth week of pregnancy, the appropriate term to use is foetus²⁶.

6) An "abortus"²⁷ is a pre-viable organism that is expelled or removed from the pregnant woman's body. An abortus can be either embryonic or foetal, and the expulsion can be either spontaneous or deliberate²⁸. The expulsion of the foetus from the uterus is called an "abortion"²⁹.

Before We Are Born, supra note 23, at 3 defines the foetus as "[a]fter the embryonic period (8 weeks), the developing human is called a fetus. During the fetal period (ninth week to birth), differentiation and growth of the tissue and organs formed during the embryonic period occur. Although developmental changes are not so dramatic during the embryonic period, they are very important because they make it possible for the tissue and organs to function. The rate of body growth is remarkable, especially during the third and fourth months . . . and weight gain is phenomenal during the terminal months."

²⁶ M. B. Mahowald, "Neural Fetal Tissue Transplantation – Should We Do What We Can Do?" (1989) 7:4 *Ethical Issues in Neurologic Practice* 745 at 746.

²⁷ *Dorland's Illustrated Medical Dictionary*, 27th ed. s.v. "abortus" at 5, as "a fetus weighing less than 500 gm (17 oz) or being of less than 20 weeks gestational age at the time of expulsion from the uterus, having no chance of survival". *Before We Are Born* at 3 defines an "abortus" as "an embryos or nonviable fetus and its membranes weighing less than 500 gm that is expelled from the uterus".

²⁸ *Supra* note 26 at 746.

²⁹ *Black's Medical Dictionary*, 27th ed., s.v. "abortion" as "the expulsion of a fetus showing no signs of life before the 28th week of pregnancy".

Dorland's Illustrated Medical Dictionary, 27th ed., s.v. "abortion" as "the premature expulsion from the uterus of the products of conception – of the embryo, or of a nonviable fetus . . . , a spontaneous abortion is an abortion occurring naturally . . . , a therapeutic abortion is an abortion induced to save the life or health (physical or mental) of a pregnant woman."

The Canadian Medical Association Home Medical Encyclopedia, supra note 23, defines "abortion" as "In medical terminology; a word denoting either spontaneous abortion (see miscarriage) or medically induced termination of pregnancy"; also miscarriage as the "loss of the fetus before the 28th week of pregnancy of before viability (the ability to survive outside the uterus without artificial support). The medical term for miscarriage is spontaneous abortion. *Before We Are Born*, supra note 23, defines "abortion" as "a premature stoppage in development and refers to the birth of an embryo or fetus before it is viable – mature enough to survive outside the uterus" and at 56 as "the termination of pregnancy before 20 weeks gestation, before the period of viability of the embryo or fetus."

7) A concept that has been discussed in case law and other writings, both medical and legal, is the point in time at which a foetus becomes “viable”. “Viability”³⁰ is the “ability to survive *ex utero*, albeit with artificial aid”.

8) The term “person” is very controversial as it seems to incorporate concepts of personality, uniqueness, and sentience. The term “human” is determined biologically and is less controversial.³¹

9) “Research”³² has been defined as “a systematic investigation designed to develop or contribute to generalizable knowledge”. The term “research subject”³³ refers to living individuals. Research is conducted with hope that the patient will

³⁰ *Supra* note 26 at 746; *Roe v. Wade*, 410 U.S. 113, 93 S.ct. 705 (U.S. Supreme Court); also see *Dorland’s Illustrated Medical Dictionary*, 27th ed., s.v. “viable” as being “capable of living especially said of a fetus that has reached such a stage of development that it can live outside of the uterus”; *Before We Are Born* defines “viability” as “mature enough to survive outside the uterus”.

³¹ *Supra* note 26 at 746.

³² *The Tri-Council Policy Statement* at Section 1, page 1 defines “research” as “involv[ing] a systematic investigation to establish facts, principles or generalizable knowledge”. In Kathleen Cranley Slass “Research Involving Humans” in J. Downie and T. Caulfield (eds.), *Canada Health Law and Policy* (Toronto: Butterworths Canada Ltd., 1999) at 376-377, the author discusses the importance of distinguishing between “research” and “therapy”. The law of consent and the applicable standard of care can be affected by the existence or absence of a therapeutic benefit. She states that “research” is often applied to the concept of the creation of “generalizable knowledge”. She refers to the definition by the Medical Research Council of Canada on human research subjects research as “the generation of data about persons, through intervention or otherwise, that goes beyond that necessary for the individual person’s immediate well-being”: Medical Research Council of Canada, *Guidelines on Research Involving Human Subjects* (Ottawa: Minister of Supply and Services, 1987) at 7. The U.S. National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research defines “research” as “an activity designated to test a hypothesis, permit conclusions to be drawn and thereby to develop or contribute to generalizable knowledge (expressed, for example, in theories, principles, and statements of relationships)”: National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research (National Commission), *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research* (Washington, D.C.: Supt. Of Government Documents, 1979) at 15. Also, see Title 45 *Code of Federal Regulations*, Part 46 (Section 46.102) for the current definition of “research”.

³³ *Tri-Council Policy Statement*, Section 1, at 2.

generally benefit but its true objective is to contribute to the scientific knowledge base. The target is all people with disease or disorder³⁴.

10) "Therapy" ³⁵ is distinct from research and is intended to benefit a particular patient. The target is the individual.

2 The Question and the Answer

Should tissue harvested from fetuses, electively aborted in the first trimester of gestation, be transplanted into humans in a *bona fide* effort to cure or control the symptoms of debilitating illness?

I believe that most uses of foetal tissue transplant technology should be supported and the systematic harvest of suitable tissue should be implemented.

3 The Structure of This Analysis – The Limits

There are several ways in which foetal tissue may be used that must be distinguished:

- 1) Use of foetal tissue for the benefit of a recipient individual other than the foetus (therapeutic purposes);
- 2) Use of foetal tissue for purposes not intended to benefit, but not intended to harm, the recipient individual (non-therapeutic purposes);

³⁴ F. Baylis & J. Downie, "An Ethical and Criminal Law Framework for Research Involving Children in Canada" (1993) 1 Health and Law Journal 39 at 41.

3) Use of foetal tissue for pure research that does not benefit a specified individual or the foetus but adds to the general body of scientific knowledge (pure research purposes); and,

4) Research conducted on the embryo or foetus for the benefit of that individual embryo or foetus (foetal treatment).³⁶

This paper will be limited to a consideration of the ethical and legal issues raised by the transplantation of human foetal tissue into a human being for the purpose of benefitting that particular recipient - that is, for therapeutic (non-research oriented) purposes. It will not discuss the use of foetal tissue for non-therapeutic purposes, pure research purposes, or foetal treatment.

To begin, a foundation of the properties of foetal tissue that make it uniquely suitable for therapeutic transplantation, the various sources of foetal tissue and the conditions that foetal tissue transplantation theoretically could alleviate, must be laid. The discussion of the issues raised by the use of foetal tissue for therapeutic transplantation begins with clarification of the legal status of the foetus, *in utero*, at the time of the abortion and, consequently, the legal parameters for the use of the foetal tissue. There are three points on the continuum of gestation (the beginning, the middle, and the end) at which the legal status of the foetus and foetal tissue can be considered:

³⁵ *Dorland's Illustrated Medical Dictionary*, 27th ed.. s.v. "therapy" as "the treatment of disease" and "therapeutic" as "pertaining to therapeutics, or to the art of healing, curative".

Framework 1: This framework considers the legal status of the foetus as arriving at the beginning of gestation. The foetus is as much a human being before birth as it is after birth. At the time of the elective abortion, it is a fully entitled human being. The elective abortion terminates the life of this human being. The resulting foetal tissue is the remains of a human being.³⁷

Framework 2: This framework considers the legal status of the foetus as arriving in the middle of gestation. The foetus has some legal status *in utero*, less than it would if it had been born alive but more than a simple tissue sample. Foetal tissue is the tissue of the foetus after death has occurred.³⁸

Framework 3: This framework considers the legal status of the foetus as arriving at the end of gestation. The foetus is a simple tissue specimen of the pregnant

³⁶ *The Tri-Council Policy Statement* discusses requirements for ethical research on embryos and fetuses at Section 9.

³⁷ *Supra* note 2 at 212; see also, Eike-Henner W. Kluge, *Biomedical Ethics in a Canadian Context* (Ontario: Prentice-Hall Canada Inc., 1992) at 279 - 280.

³⁸ *Supra* note 2 at 215; see also *Ibid.* (Kluge) at 280 - 281.

woman until it is born. The foetus has no independent legal status. The foetal tissue that results from the elective abortion is an excised tissue specimen.³⁹

Each of the foregoing three frameworks turns on the legal status of the foetus at the time of the elective first trimester abortion and, accordingly, determines the status of the foetal tissue at that point in time.

I believe that there is a gap between the **current** legal status and the **apparent** ethical status of the foetus. Various areas of the law have addressed the legal status of the foetus in an attempt to solve specific legal or ethical concerns raised in that specific context. The only relatively consistent position with respect to the legal status of the foetus that has emerged is the “born alive”⁴⁰ rule. Simply put, the born alive rule means that the foetus has no independent legal status while it is *in utero*. However, if it is born alive, the child can enforce its legal status as an

³⁹ *Supra* note 2 at 224; see also *supra* note 37 (Kluge) at 279 - 288 under the heading “The Ethical Status of the Human Fetus”. In this section, Kluge provides an excellent discussion of the ethical status of the foetus and how it is somewhat inconsistent with the legal status of the foetus. She points out at 286 “at some stage of development the fetus (normally) becomes a person, and that at that point it acquires rights in general and the right to life in particular”. She also highlights the position set out in the Criminal Code, Section 223 where it is clearly stated that a foetus does not become a person until “it has proceeded, in a living state, from the body of its mother”. The interesting example of the dilemma that Kluge chooses to highlight the gap between the ethical and the legal status is the foetus who is removed from the uterus alive, for the purpose of undergoing foetal surgery, has the surgery, and is then replaced in the uterus to continue the remainder of its gestation normally. According to law, the foetus would become a person when it is removed for its surgery and then would remain a person because that personhood cannot be removed unless the foetus dies. The conflict is apparent with the comparison to a foetus of the same gestational age who does not undergo foetal surgery and is not a person at law. Ethically, Kluge points out that there should not be a distinction between the fetuses because both should be considered to be persons at some point in time *in utero*.

independent entity retroactively to address events that occurred during its gestation.⁴¹

In my opinion, the born alive rule is insufficient to protect the foetus. I believe that the trend in the law is toward greater protection of the foetus, which can only be accomplished by extending the legal status of the foetus more clearly into its gestation. The impact of this recommendation must be considered in the context of as many areas of the law as possible, including the transplantation of foetal tissue.

The discussion of the ethical issues raised by foetal tissue transplantation will consider the basic ethical arguments both in favour of and in opposition to the use of foetal tissue for therapeutic transplantation. Finally, within the framework chosen for this analysis, critical legal issues will be discussed.

It is important to realize that this topic provokes a very personal, emotional response to particular foundation questions. One of those foundation issues is whether the elective abortion that is necessary to provide the appropriate foetal

⁴⁰ The “born alive rule” is the general description given to the common law position that a human entity does not acquire any enforceable rights at law unless and until it is “born alive”. After achieving this milestone, even if only for a brief period of time, the child’s status to be a plaintiff crystallizes and it, or its legal representative, can enforce its legal position retroactively with respect to actions that occurred during its gestation. However, if the human entity is not “born alive”, then its rights do not crystallize and no status exists for anyone to pursue the cause of action. The “born alive” rule is most clearly stated in Section 223 of *The Criminal Code of Canada* where it says that a “human being” does not exist unless and until it has proceeded fully in a living state from the body of its mother.

⁴¹ *The Criminal Code of Canada*, Section 223, clearly states that the foetus has no status at law as a “child” until it has proceeded fully and alive from the body of the pregnant woman. The balance that is being struck is to give autonomy to the pregnant woman while acknowledging the foetus’s **potential** to achieve independent life only after the point of live birth.

tissue for transplantation is inherently moral or immoral. Personal opinions about this issue will colour one's view about the entire discussion of foetal tissue transplantation. This paper will be presented from the *pro-choice viewpoint*. While the *pro-life* view is equally valid and held by many people, I have chosen to express the *pro-choice* view in this paper.

WHAT IS FOETAL TISSUE?

1 The Properties of Foetal Tissue that Make it Uniquely Suitable for Transplantation

In 1990, the American Medical Association identified the following general characteristics of foetal tissue that make it uniquely suitable for transplantation:⁴²

- 1) foetal tissue is immunologically neutral⁴³ compared to other sources of mature graft (or transplantable) tissue or organs;
- 2) foetal tissue has the ability to proliferate⁴⁴ very quickly and to differentiate⁴⁵ based upon its environment;
- 3) foetal tissue can survive the stresses of a low oxygen environment;

⁴² Alan Fine, "Human Fetal Tissue Research: Origins, State of the Art, Future Applications, and Implications" in *The Royal Commission – Volume 15* at 58; see also Mary B. Mahowald, *et al.*, "The Ethical Options in Transplanting Fetal Tissue", (1987) 14:1 *Hastings Center Report* 9 at 10; see also *supra* note 3 at 975 that identifies foetal tissue's capacity for growth and differentiation, its ability to survive culture and manipulation *in vitro*, its different immunological properties and its potential to restore function in a transplant recipient as qualities that make foetal tissue valuable as a transplant material. A discussion of each quality follows at pages 975 – 977 of *Proceed With Care*.

⁴³ All cells are covered with a coating of protein molecules. All of the cells within an organism have certain combinations of protein "flags" that allow other cells to identify that they come from the same organism. Each organism has different "flags". When foreign cells are detected by the host organism, they are identified as foreign and are rejected by the host cells. This rejection is called, generally, an immune response. In the context of organ transplantation it can also be called the Host versus Graft reaction. Foetal tissue is too "young" to have developed its own set of unique protein "flags". Therefore, it does not provoke an immune response from the host because the host does not identify it as foreign. Thus, it is called "immunologically neutral".

⁴⁴ Proliferation describes the rate of cell multiplication. When cells divide, they increase in number. The rate of proliferation is important with respect to the speed at which the tissue develops.

- 4) foetal tissue is capable of producing very high levels of particular hormones;
- 5) foetal tissue is relatively sterile when harvested from elective first trimester abortions;
- 6) foetal tissue is easier to culture than adult tissue;
- 7) foetal tissue is easier to transplant than whole organs or mature tissue;
- 8) at present, there is an effectively unlimited supply of foetal tissue; and,
- 9) foetal tissue is uniquely human.

First, one of the most significant obstacles to the successful transplantation of adult tissue is the recipient's immune response to the donor tissue. The recipient's body identifies the donor tissue as genetically distinct from the recipient and initiates the same destructive responses that it would against any foreign entity, like a virus or bacteria⁴⁶. Accordingly, very substantial regimens of immunosuppression drugs at the time of transplantation have been the only solution to controlling the Graft versus Host response of the recipient to the donor tissue. Unfortunately, substantial immunosuppression has many serious side effects. The key to the desirability of foetal tissue for transplantation is that the

⁴⁵ At the very beginning of cell division, foetal cells are identical or "totipotent". As the process of development continues, the cells become different (differentiate) to become different parts of the body and to perform different functions. The hormonal cues given in the uterine environment provoke this differentiation, initially. As development progresses, the surrounding cells also assist in causing cell differentiation. When transplanted, foetal tissue can adopt the function of the missing or damaged cells in the recipient body and differentiate to fulfil the function of those missing or damaged cells, because of the cues that the surrounding host cells provide.

immunological immaturity⁴⁷ of foetal tissue elicits a very weak, practically non-existent, immune or Graft versus Host response from the recipient body.⁴⁸

Secondly, and almost as important as the immuno-neutrality of foetal tissue, is its ability to differentiate⁴⁹ into a variety of different types of cells which are similar to the damaged or absent recipient body cells and to proliferate rapidly.⁵⁰ The potential for differentiation of foetal tissue cells is directly related to the fact that, at the time of being collected, the embryo or foetus is comprised of many relatively undifferentiated cells.⁵¹ The ability of foetal tissue to proliferate varies inversely with gestational age. Therefore, the younger the foetal tissue, the greater is its ability to proliferate. Foetal tissue shows a unique ability to grow and to migrate to areas of recipient body cell insufficiency and to establish functional connections to the other cells in the environment.⁵² For example, foetal cells can migrate to

⁴⁶ This response is the same as your body fighting exposure to the common cold or a flu virus.

⁴⁷ M.A. Mullen, "The Use of Human Embryos and Fetal Tissues: A Research Architecture" in *The Royal Commission – Volume 15* at 8.

⁴⁸ *Supra* note 7 at 5; *supra* note 42 at 59.

⁴⁹ Differentiation is the process of becoming different. In this context, cells that were once identical (and in the case of foetal cells – totipotent), reach the stage where they become different from each other and begin to form the various parts of the embryo. The process of changing into the final form that the cell will achieve is cell differentiation; *supra* note 44; and *supra* note 10 at 271 - 272.

⁵⁰ Proliferation is the process of multiplying. As cells grow, they reach a stage when they divide and multiply. This is known as cell division. In this context, proliferation refers to the rate at which the cells are multiplying. Foetal cells proliferate at a much faster rate than mature cells; and *supra* note 36, (Kluge).

⁵¹ *Supra* note 47 at 6.

⁵² *Supra* note 42 at 58.

particular locations in the brain that are damaged.⁵³ When the foetal cells arrive at the damaged site, they are more likely to form functional connections to the recipient tissue than adult tissue grafts. Successful engraftment occurs when the transplanted or donor tissue connects to the recipient tissue and functions as an integrated part of the recipient.⁵⁴ Transplanted foetal tissue cells have demonstrated clinically significant growth and functional recovery post-transplantation.⁵⁵

Thirdly, foetal cells have a low demand for oxygen and are able to survive at lower oxygen levels than mature tissue. Therefore, they are more resistant than mature tissue to ischaemic⁵⁶ damage during the transplantation process.⁵⁷

Fourthly, foetal tissue cells produce high levels of particular hormones and other substances, including angiogenic factors that induce blood vessel formation and neurotropic factors that facilitate regeneration of surrounding tissues.⁵⁸ Mature

⁵³ *Supra* note 34 at 58.

⁵⁴ *Supra* note 10 at 271; see also *supra* note 4 at 5 - 6 where Fine explains how engraftment occurs. He notes that the ability of neurons to survive transplantation is greatest at the point where the cells have stopped dividing but before they begin to grow their "long, fibrous axon". If the cells are harvested after the axons have begun to grow, then the cells will not survive. If they are harvested too early, growth may be erratic. For transplantation of dopamine producing cells, foetal age of less than 12 weeks has been found to be the most successful. At this point, cell division is controlled and axon development has not begun. Transplantation at this time permits axon growth to occur after transplantation so that the graft "hooks in" to the host most effectively. This "hooking in" process is called engraftment.

⁵⁵ *Supra* note 47 at 7.

⁵⁶ "Ischaemic" means insufficient oxygen.

⁵⁷ *Supra* note 42 at 59.

⁵⁸ *Ibid.*

tissue does not react similarly, thereby decreasing the likelihood of successful engraftment.

Fifthly, because of the sterility of the uterine environment and the controlled harvest conditions created by elective abortion, foetal tissue is relatively uncontaminated.⁵⁹

Sixthly, foetal cells can be cultured easily and survive cryo-preservation.⁶⁰

Seventhly, for successful transplantation to occur, the transplanted foetal tissue must survive the physical and metabolic disruption of removal from the uterus and the subsequent incorporation into the recipient body. Because of its immaturity, foetal tissue survives the physical stresses of removal and transfer more readily than mature tissue.⁶¹ In addition, the mechanics of transplantation are dramatically easier with foetal tissue than with mature tissue or whole organs. Foetal tissue can be dissected by cell type, then suspended in solution. Transplantation occurs by injection of a slurry into the recipient's brain rather than by suturing a mature tissue patch into place.⁶²

⁵⁹ *Ibid.*

⁶⁰ *Supra* note 47 at 6.

⁶¹ *Supra* note 7 at 5.

⁶² *Supra* note 47 at 7. A "slurry" is a solution of individual or small groups of cells suspended in a liquid medium. In this context, the foetal tissue cells could be injected into the recipient's brain using a long needle rather than physically attached with sutures. Mature tissue must be sewn into place like a patch.

Finally, the most unique property of foetal tissue is that it is uniquely human. Unlike the insertion of a mechanical replacement part or inert substance, foetal tissue that is suitable for transplantation has been acquired from a foetus that was otherwise normal and could have matured to become a living child in the ordinary course. But for the abortion, a child could have been born. I believe that it is this humanity that creates the greatest comfort and the greatest obstacle to the use of foetal tissue for transplant.

2 Suitable and Unsuitable Sources of Foetal Tissue

It is undisputed that the tissue obtained from elective abortions performed in the first and early second trimester of gestation is the best source of foetal tissue for transplant purposes.

At the time when most elective first trimester abortions occur, that is between six and twelve weeks gestational age, neurological and other tissue are developed sufficiently to be retrieved and transplanted successfully while immuno-neutrality and the potential for differentiation and proliferation are maintained.⁶³

⁶³ John A. Robertson, "Fetal Tissue Transplants" (1988) 66:3 Washington University Law Quarterly 443 at 446; and also see *Review of Medical Embryology* at 60 – 71 for a good summary of embryonic development from weeks 7 to 20; and *Before We Are Born* at 4 - 7 for an excellent, easy to understand, pictorial summary of embryonic and foetal developments.

Although there is no specific law permitting abortion in Canada, first trimester elective abortions are performed legally in Canada⁶⁴.

Currently, the resultant foetal tissue is discarded as surgical waste. There is no consensus among hospitals with respect to the collection and disposal of foetal tissue resulting from elective first trimester abortions.⁶⁵ There is a potentially vast pool of tissue available from this source.⁶⁶ In 1994, approximately 106,225 abortions were performed on Canadian women.⁶⁷ Approximately eighty-five

⁶⁴ See *Dobson v. Dobson*, [1999] 2 S.C.R. 753 at 807 (per Major J. dissenting on other points) where his Lordship says “[i]n Canada, a pregnant woman has an unrestricted legal right to an abortion from conception to the time of birth, but once the child is born alive he is a legal person with all the rights that accompany that status”.

Also recall that in 1988, the Supreme Court of Canada in *R. v. Morgentaler*, [1988] 1 S.C.R. 30, also known as the *Morgentaler (No. 2)* decision, struck down Section 251 of the *Criminal Code of Canada* as infringing on the rights and freedoms set out in the *Canadian Charter of Rights and Freedoms* and, for the purposes of this part of the discussion, specifically Section 7. The old Section 251 set up an administrative process which was very onerous and made obtaining an abortion very difficult. Thus, the level to which it infringes upon the Section 7 *Charter* right to life, liberty and security of the person exceeded the threshold of fundamental justice, according to the Supreme Court of Canada. The Supreme Court of Canada stated that the primary objective of Section 251 of the *Criminal Code of Canada* was the protection of the foetus but that the method chosen in Section 251 was not reasonable. Also note that Sections 287 and 288 of the *Criminal Code* address the issue of abortion. Although these sections remain in the *Criminal Code* they are of no force of effect as a result of the aforementioned decision of the Supreme Court of Canada in *Morgentaler (No. 2)*.

For excellent thumbnail sketches of the historical and current state of abortion law see H. E. Emson, *The Doctor and the Law – A Practical Guide for the Canadian Physician* (Third Edition) (Ontario: Butterworths Canada Ltd., 1995) at 199 – 202 and Sandra Rodgers, “State Intervention in the Lives of Pregnant Women” in *Canada Health Law and Policy*, Jocelyn Downie and Timothy Caulfield (eds.) (Ontario: Butterworths Canada Ltd., 1999) at 275 – 287.

⁶⁵ *Supra* note 47 at 9.

⁶⁶ *Supra* note 60 at 8; see also *supra* note 4 at 6.

⁶⁷ Statistics Canada, *1994 Report on Therapeutic Abortions* (Minister of Industry: 1996) ISSN 1195-4078. Statistics Canada produces a very detailed and thorough report of relevant data regarding therapeutic abortions. The Statistics Canada Report on Therapeutic Abortions was updated for 1995 prior to being taken over by the Canadian Institute for Health Information. A copy of the Statistics Canada Report on Therapeutic Abortions, 1994 is attached hereto as Appendix One.

percent of these abortions occur within the first trimester of gestational age.⁶⁸ In 1985, over 35 million legal abortions and 50 million illegal abortions were performed world-wide.⁶⁹

One preliminary question that must be addressed is whether the debate with respect to the morality of abortion should or should not have a significant role in determining whether the foetal tissue obtained as a result of elective first trimester abortions should be used for transplantation. There are two valid positions with respect to the question of elective abortion; first, that abortion is moral (a woman should not be compelled to remain pregnant against her will); and, second, that abortion is immoral (the fertilized egg and foetus have an absolute claim to life).⁷⁰ While this debate is an ongoing one, the fact remains that first trimester abortions are available in Canada. Re-arguing the morality of elective abortion ignores this fact. Therefore, I will not discuss the question of the morality of elective abortion. The fact is, in Canada and many countries around the world, elective first trimester abortions are generating a supply of foetal tissue that needs to be disposed of or used in some fashion. This is the starting point for this discussion. A supply of

⁶⁸ *Ibid.*, Table 13 "Selected Demographic Characteristics of Canadian Resident Women Who Obtained Therapeutic Abortions in Canada, 1975 – 1994" and Table 15 "Percent Distinction, by Gestation Period (in Weeks) at Pregnancy Termination and by Age of Woman, in Canada, 1975 – 1994".

⁶⁹ *Supra* note 2 at 139.

⁷⁰ Kenneth J. Ryan, "Statement to the Advisory Committee to the Director, NIH" at C3 in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda Maryland at C3. Dr. Ryan also notes that the panel considered the "morality of separating the abortion itself from the use of foetal remains".

suitable foetal tissue exists. Should it be incinerated or transplanted? I believe that the foetal tissue should be transplanted rather than simply discarded.

However, there remains a strong voice of opposition to the harvest of foetal tissue for therapeutic transplantation that rests on the argument that elective abortion is immoral. In order to avoid the negative impact of this argument on the use of foetal tissue, I will consider, briefly, other sources of foetal tissue.

Spontaneously aborted fetuses, still births, ectopic pregnancies, cultivated cell lines, and tissue purchased from other countries are additional potential sources of foetal tissue. The suitability of each of these options is discussed below:

1) A spontaneous abortion is defined as an interruption of pregnancy before the end of the twentieth week of gestation. Ordinary causes include chromosomal or other lethal defects of the foetus, infections and various maternal diseases⁷¹. The lower the gestational age of the foetus when the abortion occurs spontaneously, the more likely there is to have been a foetal chromosomal abnormality.⁷² Many spontaneous abortions are preceded by foetal death *in utero* and expulsion from

⁷¹ *Supra* note 3 at 985 – 986.

⁷² Moore and Persaud suggests that most spontaneously aborted embryos that are recovered from women who were known to be pregnant are abnormal. He suggests that approximately 15% have chromosomal abnormalities: *Before We Are Born*, *supra* note 23, at 3, 43 - 45 and 57.

Pansky supports Moore's statistics. He says "[a]bout 25% of early aborted embryos (days 7 to 17) have abnormal chromosomes and are lost during the menstrual flow, which occurs later than usual and the woman may not even be aware of the fact that she had ever been pregnant.": *Review of Medical Embryology*, at 42.

Footnote Continued on Next Page

the uterus can occur as much as two to three weeks later. Because of lack of control over the foetal death and the timing of the spontaneous abortion, tissue necrosis can occur, rendering the tissue unusable. This factor contributes to the lack of suitability of spontaneously aborted foetal tissue as graft or donor tissue.⁷³ This tissue is unreliable in its growth and development. Spontaneous abortions often occur in an uncontrolled and non-sterile environment. Accordingly, the harvest volume is unreliable and the tissue harvested is not sterile. In addition, there is a significant concern about using tissue harvested from a spontaneous abortion caused by infection. Infections that cause spontaneous abortion include syphilis, rubella and mycoplasma. Any of these conditions would render the tissue recovered from spontaneous abortion **unsuitable for transplantation**.

2) Another potential source of foetal tissue is still births. A still birth is defined by the U.S. National Centre for Health Statistics as foetal death at or after the twentieth week of gestation.⁷⁴ At this stage, foetal tissue has lost a great deal of its immuno-neutrality and its ability to differentiate. Therefore, it is **unsuitable for transplantation** regardless of whether or not it was harvested under controlled circumstances.

3) Another possible source of foetal tissue is the result of the surgical reduction of ectopic pregnancies. An ectopic pregnancy is defined as an extra-uterine implantation of the fertilized egg or occurrence of the zygote. The occurrence of ectopic pregnancy is quite low which restricts its practicality as a source of foetal

Oelsner, Bider and Mashiach provide a series of slightly different statistics. In their article, they report that the incidence of "clinical, spontaneous abortions is approximately 10% - 15% of all pregnancies." They also refer to a recent report showing a total abortion rate of 31%, 22% of the pregnancies ending before clinical detection and 9% of pregnancies ending after the pregnancy was detected clinically. G. Oelsner, D. Bider, and S. Mashiach, "Pregnancy Rate and First-Trimester Outcome Following Ovulation Induction" in E. R. Bamea, J. Hustin, and E. Jauniaux (eds.), *The First Twelve Weeks of Gestation*, *supra* note 24, at 2.17.

⁷³ *Supra* note 2 at 138 - 139.

⁷⁴ *Supra* note 2 at 138.

tissue. The harvest of ectopic foetal tissue is a potential source because it is unlikely to have a significantly increased incidence of chromosomal abnormality.⁷⁵ The approximate occurrence rate is fourteen ectopic pregnancies in one thousand live births. Forty to sixty four percent of ectopic pregnancies abort spontaneously early in the first trimester.⁷⁶ If an ectopic pregnancy does not abort spontaneously, surgical removal is required to save the life of the pregnant woman.⁷⁷ Because the pregnancy is not supported by the appropriate uterine structures, it will not survive and will rupture, causing severe peritoneal infection.⁷⁸ The surgical removal results in a sterile harvest environment and would be beneficial in maintaining the sterility and integrity of the foetal tissue. Unfortunately, ectopic pregnancies rarely produce foetal tissue that is recognizable or viable in culture. Anoxia or inadequate blood supply because of the extra-uterine implantation often results in non-viability of this source of tissue.⁷⁹ Therefore, it is **unsuitable for transplantation purposes**.⁸⁰

4) Another option to using foetal tissue harvested from elective abortions is to develop a foetal cell line in culture. This solution may reduce the need to harvest

⁷⁵ Kathleen Nolan, "Genug ist Genug: A Foetus Is Not a Kidney" (1988) 18:4 Hastings Center Reports at 13 - 19; and *supra* note 26 at 750; and *Before We Are Born* at 55 to 57 defines an "ectopic pregnancy" as the "extrauterine implantation of the blastocyst".

⁷⁶ *Supra* note 2 at 135; and in *supra* note 60 at 10.

⁷⁷ *Before We Are Born*, *supra* note 23, at 56 says that "[e]ctopic tubal pregnancies usually result in rupture of the uterine tube and hemorrhage into the peritoneal cavity during the first 8 weeks, followed by death of the embryo. Tubal rupture and hemorrhage constitute a threat to the mother's life . . . [t]he affected tube and conceptus are usually surgically removed".

Dr. Ben Pansky discusses ectopic pregnancy in the context of abnormal implantation sites of the embryo. He suggests that "death of the embryo and severe hemorrhage of the mother during the second month of pregnancy . . . rarely does an extrauterine embryo come to full term.": *Review of Medical Embryology*, *supra* note 23, at 30.

⁷⁸ *Supra* note 60 at 10.

⁷⁹ *Supra* note 2 at 135; and in *supra* note 60 at 10.

⁸⁰ *Supra* note 3.

fresh tissue on an ongoing basis⁸¹. This option is promising but may be insufficient to maintain an adequate supply of foetal tissue. Cell lines must use, at some point in time, freshly harvested tissue in order to exist and do require the infusion of fresh cells on a periodic basis to prevent erratic or tumourous growth. However, use of suitable tissue as the foundation of the cell line would result in tissue that is **suitable for transplantation** purposes.⁸²

5) The final alternative is to purchase foetal tissue. One could look to countries that perform large numbers of first and second trimester abortions. For example, the USSR performs approximately 11,000,000 legal abortions per year. China performs approximately 14,000,000 legal abortions per year.⁸³ However, the fact that the foetal tissue was purchased internationally rather than being harvested locally is unlikely to overcome the reluctance to use foetal tissue acquired by elective first trimester abortions. This is an **unsuitable solution** to acquiring a **suitable source** of foetal tissue.

First trimester electively aborted fetuses produce the foetal tissue source of choice.⁸⁴

It is important to recall that elective first trimester abortions are permissible at law. Halting research and development of foetal tissue transplantation technology will

⁸¹ John A. Robertson, "Fetal Tissue Transplants" (1988) 66:3 Washington University Law Quarterly 443 at 446.

⁸² *Supra* note 3 at 987 – 988.

⁸³ *Supra* note 2 at 200.

⁸⁴ *Supra* note 2 at 9; see also *supra* note 3 at 967 where *The Royal Commission* goes so far as to say that the "only reliable source of fetal tissue for transplantation is elective abortions." It is also possible that stem cell research could provide an additional source of transplantable cells for the treatment of certain conditions.

not change the fact that elective first trimester abortion exists and will continue to exist. The question is whether to make use of the foetal tissue or to discard it.

The next logical question to ask is whether foetal “death” by abortion affects the quality and usefulness of the foetal tissue. To be useful, foetal tissue must be alive, it must be functioning normally, it must be free of significant genetic abnormalities and it must be free of viral, fungal and bacterial infections.⁸⁵ These criteria are not inconsistent with foetal death. Foetal tissue can remain alive and functional, at a cellular level, for a period of time after the coherence of the foetus has been disrupted by an abortion or the foetus as a complete entity dies.

Should the method or timing of an abortion be manipulated to enhance recovery of tissue? An abortion can be performed using a variety of methods. Vacuum aspiration⁸⁶ is the most common method used in first trimester abortions. Vacuum aspiration has replaced dilation and curettage as the method of choice for first trimester abortions. Dilation and evacuation is sometimes used for second trimester abortions. Using the latter method, whole foetus recovery is possible.⁸⁷ Occasionally, saline and prostaglandin installations are used for second trimester abortions. However, this method is not popular, as it requires the woman to

⁸⁵ *Supra* note 2 at 135; see also *supra* note 60 at 9.

⁸⁶ Statistics Canada, *Report on Therapeutic Abortions 1994*, Table 14 “Selected Medical Characteristics of Canadian Resident Women Who Obtained Therapeutic Abortions in Canada, 1975 – 1994”.

⁸⁷ *Supra* note 60 at 10.

undergo labour to expel the foetus.⁸⁸ Furthermore, saline injection and prostaglandin inductions rarely yield viable foetal cells.⁸⁹

In most cases, there should be no reason to modify the standard vacuum aspiration method, because it is sufficient for obtaining appropriate foetal tissue and does not compromise its viability. The concern raised by the question of modifying the standard abortion techniques to obtain more tissue in a more optimal state raises the concern over the exploitation of women for purposes of obtaining better tissue samples.⁹⁰ When considering the modification of abortion techniques, one must consider the increased risk of harm, discomfort and inconvenience to the pregnant woman.⁹¹ Although it is recommended by the United States National Institute of Health's Panel on Foetal Tissue Transplantation Research that no modifications to abortion procedures be permitted that entail greater risk to pregnant women, there is no single standard for the performance of an abortion. Therefore, the procedure may be modified to obtain better tissue without the procedure being found to be "non-standard" or "modified".⁹² Researchers in Sweden have modified the standard first trimester vacuum abortion techniques "to

⁸⁸ *Supra* note 2 at 140 to 143.

⁸⁹ *Supra* note 3 at 986 – 987.

⁹⁰ *Supra* note 2 at 112.

⁹¹ *Supra* note 2 at 113.

⁹² *Supra* note 2 at 195 to 196.

obtain less damaged fetal tissue"⁹³, by performing hysterotomies or using forceps or manual syringe extraction under ultrasound guidance.⁹⁴ In the United States, the vacuum abortion techniques have been modified specifically to obtain foetal tissue for research.⁹⁵ While this modification may pose no additional risk to the mother, it does blur the line between the abortion and transplant teams.

This issue, of "blurring the line" between the abortion and transplant teams, is another concern in implementing a foetal tissue transplantation program.

It seems logical that there must be a separation between the concerns of those individuals performing the abortion and those individuals maintaining the supply of tissue,⁹⁶ to ensure that the woman's well being is the most important concern of the relevant health professionals at every stage. In the *Tri-Council Policy Statement*, repeated reference is made to research being "guided by respect for the woman's dignity and integrity".⁹⁷ If the health interests of the patient are to be sacrificed, then the patient should be advised of the competing interests and be requested to

⁹³ *Supra* note 2 at 83.

⁹⁴ Peter McCullaugh, "Some Ethical Aspects of Current Fetal Usage in Transplantation" in Peter Byrne, (ed.), *Ethics and Law in Health Care and Research* (Toronto: John Wiley & Sons, 1990) at 25; and also see *supra* note 2 at 83; and also *supra* note 3 at 986.

⁹⁵ Gina Kolata, "More U.S. Curbs Urged in the Use of Fetal Tissue", *New York Times* (19 November, 1989); and see *supra* note 2 at 83.

⁹⁶ *Supra* note 2 at 84 - 85; Great Britain's major supplier of tissue is the Medical Research Council, established in 1957. Similar to the Canadian model, no payment is accepted other than transportation and out-of-pocket costs. In the United States, most researchers obtain foetal tissue through private arrangements with local abortion clinics. Some clinics follow guidelines set up by the National Abortion Federation; others do not. Neither the physicians nor the patients involved in the abortion process are paid. The clinics are reimbursed for the cost of supplies used.

offer her consent. The *Tri-Council Policy Statement* states “the requirement in both ethics and law: is to protect and promote human dignity. Ethical research involving humans requires free and informed consent.”⁹⁸ Jovanovic-Peterson, *et al.*, report that 90% or more of pregnant women agree to donate foetal tissue when approached to do so for the purpose of research or transplantation⁹⁹. Therefore, the concerns of respect and dignity are going to impact on most potential participants in the donation process.

3 Conclusion

The *Uniform Anatomical Gift Act*¹⁰⁰ enacted in the United States provides some guidance, particularly insofar as it exempts physicians from criminal liability with respect to involvement in foetal tissue transplantation. At present, countries that have enacted guidelines touching on the transplantation of tissue do not seem to address directly the transplantation of foetal tissue for therapeutic purposes. The exception is the Swedish Society of Medicine, which adopted provisional guidelines for the use of foetal tissue in transplantation therapy in November

⁹⁷ *Tri-Council Policy Statement*, Section 9D.

⁹⁸ *Tri-Council Policy Statement*, Article 2.1(a), Commentary.

⁹⁹ *Supra* note 2 at 199.

1995¹⁰¹. The Canadian guidelines crafted in 1987 by the Medical Research Council of Canada in the context of research involving human subjects treated foetal tissue as pathological waste¹⁰² and, accordingly, are of little value in developing a scheme to regulate the use of foetal tissue for transplantation purposes. The *Tri-Council Policy Statement* dealt briefly with the issue of foetal tissue research in Section 9D.

¹⁰⁰ *Uniform Anatomical Gift Act*, 8A U. L. A. 15 – 16 (West 1983 & Supp. 1987) (Table of Jurisdictions Wherein Act Has Been Adopted); 45 CFR 46.207(b). In general terms, the Uniform Anatomical Gift Act was drafted to facilitate organ harvest. Of interest is that everyone who acts in good faith is exempt from civil or criminal liability and the purchase/sale of any body part is specifically prohibited. The Uniform Anatomical Gift Act does not address foetal tissue explicitly. A couple of States, like Georgia, North Carolina, and North Dakota, have enacted specific foetal tissue legislation. This legislation tends to prohibit the use of foetal tissue for any purpose or it may make specific exemptions for diagnostic or pathological investigations or foetal therapy.

¹⁰¹ *Supra* note 2 at 181.

¹⁰² *Ibid.*

DISCUSSION OF THE FRAMEWORKS FOR ANALYSIS

1 Introduction

There is no consensus as to the appropriate starting point for analyzing the ethical and legal issues raised by the use of human foetal tissue for the purpose of transplantation. The concern that must be addressed is at what point in time does it become socially mandatory to treat a foetus as a part of society? Rosemary Anton addressed this issue clearly in the 18 March, 1998 *National Catholic Reporter*¹⁰³ where she says:

Fundamental to most bioethical problems are the questions: What does it mean to be a human being? Whom shall we admit into human society on an equal basis with ourselves, protected by the same rights, entitled to the same opportunities?

For the purpose of this paper, I will consider three basic frameworks that may be used to address this situation. Two of the frameworks represent more extreme views and one represents a middle ground.

At the foundation of each framework is the legal status of the foetus. Each framework endows the foetus with some standing as an independent legal entity at a different point in its gestation. As noted earlier in this paper, the three basic frameworks located themselves in gestational time according to the three stages at

¹⁰³ As cited in "The Nazi Analogy in Bioethics" (1988) 18:4 *Hastings Center Reports* 29 at 29.

which legal and ethical statuses combine for recognition: conception, viability, or birth.

2 Framework I - The Foetus is a Fully Entitled Person from Conception Onward

The foundation of this framework is that the foetus, from the point of conception onward, should be treated the same as a living person, comparable to a newborn child. Patricia Marten and Martin Lagged take an interesting tack on this distinction. They say that the pre-embryo (being up to approximately 14 days old) must be given some legal status. They suggest that it be given a *sui generis* status. They conclude that the pre-embryo is not property subject to ownership not is it a person with full moral and legal rights. It is unique and should be treated with respect.¹⁰⁴ If the foetus is an unborn child, the use of foetal tissue for transplantation purposes should be considered in the context of the protocols for research involving human research subjects, particularly research involving living children.¹⁰⁵

¹⁰⁴ Patricia A. Martin and Lagod L. Martin, "The Human Preembryo, the Progenitors and the State: Toward a Dynamic Theory of Status, Rights and Research Policy", 5 High Tech. L. J. 257 at 276 - 279.

¹⁰⁵ *The Tri-Council Policy Statement* is the most recent statement of the Canadian position regarding the use of human beings as research subjects. Similarly, the United States National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research (National Commission), *supra* note 16 is a comprehensive report about the United States position on these issues.

Regulations governing research on human subjects were established to minimize the chance that harm would befall a subject as a result of the individual's altruistic participation in research and to ensure that research subjects are treated with dignity and respect. There are two safeguards that ensure that these goals are recognized and satisfied:

Footnote Continued on Next Page

In the context of this framework, one must accept that an abortion is as much the killing of a human being as simply killing a person who has already been born. Whether that act is otherwise justifiable is the second step in the argument.

To apply this framework to the transplantation of foetal tissue, one must identify the specific wrongs or harm against which the foetus needs protection. If the foetus is seen as a person about to become the subject of a medical experiment that will end its life, then it must be protected.¹⁰⁶ Is it necessary to protect the foetus from exploitation by its parent or parents who have decided to end its possibility for life, in any event, through abortion?

Some critics of this position say that there is a finer distinction to be made between living foetuses and dead foetuses/tissue than the analogy will permit. The policies commenting on research with human subjects specifically address living subjects. However, until it achieves viability, the foetus does not have the capacity for

Research proposals and consent forms must be reviewed by and approved by an Research Ethics Board or a Human Experimentation Committee prior to consent being sought from the experimental subject; and

The subject, or a proxy for the subject, must give fully, free and informed consent prior to participating in the research.

Article 1.5 and Section C1 says that the "Research Ethics Board shall satisfy itself that the design of a research project that poses more than minimal risk is capable of addressing the questions being asked in the research." Commentary C "Analysis Balance and Distribution of Harms and Benefits" describes the standard of minimal risk as "if potential subjects can reasonably be expected to regard the probability and magnitude of possible harms implied by participation in the research to be no greater than those encountered by the subject in those aspects of his or her everyday life that relate to the research then the research can be regarded as within the range of minimal risk. Above the threshold of minimal risk, the research warrants a higher degree of scrutiny and greater provision for the protection of the interests of prospective subjects."

independent life, it only has the potential to achieve independent existence. Cadavers and cadaver parts are excluded from the human research subject regulations because of the underlying assumption that cadavers are dead and cannot be harmed physically as a result of being the subject of research. Accordingly, after the foetus is aborted, it can be considered to be dead, regardless of one's position as to whether it has attained personhood or was ever alive. Once aborted, is it possible to cause it any further physical harm?¹⁰⁷

3 Framework II – The Foetus Has Some Status During Gestation

Here, one must acknowledge that the foetus grows through many stages in the course of gestation. Until viability, it is incapable of sustaining independent life. After viability, it is possible for the foetus to survive. In this framework, the foetus's development is used as a threshold for the attaching of specific rights at law.¹⁰⁸ Ian

¹⁰⁶ Research Ethics Boards (Canada) are implemented to oversee the use of human subjects before and during research functions, as a means of ensuring that the subject is not harmed. The purpose of a Research Ethics Board in the context of foetal tissue transplantation is unclear if the foetus is incapable of being harmed because it is dead - regardless of whether it was ever alive - by the time that it is available for use in research or for transplantation.

¹⁰⁷ *Supra* note 2 at 213.

¹⁰⁸ Margery W. Shaw, "Conditional Prospective Rights of the Fetus" 5:1 *The Journal of Legal Medicine* 63 at 88 says that the "state's interest in the fetus becomes compelling after viability". Abortions may be prohibited after viability except to protect the life or health of the mother (*Roe v. Wade*, 410 U.S. 133 at 183). The "mother's duties to protect the fetus from harm also increase because she has forgone her right to choose abortion". Also see Patricia A. King, "The Juridical Status of the Fetus: A Proposal for the Legal Protection of the Unborn" 77 *Michigan Law Review* 1647 at 1653 - 1667 where the author highlights the distinction between the State's interest in the pre-viable and post-viable foetuses. At 1673, she expresses the opinion that the "fetus should be entitled to the same degree of protection at every stage of development. We should distinguish between the legal protection afforded the viable and the previable fetus just as we once distinguished between the legal protection furnished before and after birth." Her discussion of this point continues at 1678 - 1687.

Kennedy discusses this particular issue.¹⁰⁹ He acknowledges the pregnant woman's right to autonomy, privacy and freedom from bodily interference. He also states that those rights must give way under certain circumstances to the rights of others. Kennedy opines that the foetus is a relevant "other" and that it does have rights. He acknowledges that those rights might be "weak" rights:

. . . since they may pertain to an entity not yet independent of its mother and whose fate is inextricably connected to hers. We may also recognize that they are rights which grow stronger as the fetus develops, since at some point, although still *in utero*, the fetus becomes capable of independent existence.¹¹⁰

The donation of cadaveric tissue is well established, whether that donation is made by an adult or a child. Protocols have been established and implemented

¹⁰⁹ Ian Kennedy, "A Woman and Her Unborn Child: Rights and Responsibilities" in Peter Byrne, (ed.), *Ethics and Law In Health Care and Research* (Toronto: John Wiley & Sons, 1990) at 161.

¹¹⁰ *Ibid.* at 172. Interestingly, St. Augustine (5th century A.D.) and St. Thomas Aquinas (13th century A.D.) wrote that early Christianity "maintained that one has to distinguish between the earlier and the later stages of fetal development. Their reasoning was simple and to the point. To kill a living being is not in and by itself murder. It becomes murder only when the living thing is a human being or person. However, something is a person not because it has a certain type of body What makes it a person is that it has a human soul. A fetus does not have a soul from its very beginning. It acquires a soul only after it has developed sufficiently to be capable of sensation and medical activity. Until it has reached that point, therefore, to abort it is not to commit murder". Also, in Roman and Greek times, the law permitted abortion at the behest of the head of the household: Kluge, *supra* note 37 at 276.

throughout Canada and the United States of America.¹¹¹ The existing *Human Tissue Gift* legislation is flexible enough to accommodate the inclusion of foetal tissue. The protocols and administration that are in place could be modified as well. If the foetal tissue is donated, the traditions and protocols governing the way in which bodily remains are collected and used for transplant purposes could be applied to foetal tissue.¹¹²

The critical moral values associated with the donation of human remains are autonomy and individuality, familial interests and obligations, altruism, and the transformation and redemption of tragedy. It is essential to provide the individual donor with the autonomy to make a decision as to whether to donate tissue. Familial interests and sensitivities must be respected. Altruism should be lauded

¹¹¹ The various *Human Tissue Acts* in Canada (*supra* note 21) all address the methodology of harvesting human tissue and organs for transplantation purposes including obtaining consent when the donor is unable to provide that consent himself. The various Canadian *Human Tissue Gift Acts* do not yet deal with the donation of human foetal tissue directly. However, I believe that the *Human Tissue Acts* could be used as a foundation to deal with the mechanics of the foetal tissue harvest. The *Uniform Anatomical Gift Act* reflects the moral position that the individual should have autonomous control of the disposition of his body after death. The pre-eminent values of the *Uniform Anatomical Gift Act* are individuality, freedom and autonomous choice. Some of the other key values are the recognition of the interests, rights and obligations of family members with respect to the disposition of the remains of their next-of-kin. The *Uniform Anatomical Gift Act* permits the family to donate the body of a deceased relative for education, research or therapy if no direct opposition by the deceased is known. In fact, the next-of-kin acquires a quasi-property right in the remains of the deceased in order to ensure that appropriate disposition occurs (*supra* note 2 at 216). In practice, the family can override a deceased's wishes with respect to the disposition of his remains and can exercise a veto with respect to the individual's desire to donate his remains. At present, the medical and legal professions have chosen to honour the wishes of the surviving family members rather than to permit the deceased's wishes to override the sensibilities of the survivors (*supra* note 2 at 216).

The *Uniform Anatomical Gift Act* specifically permits the donation of foetal tissue and organs. Either parent may donate the foetal tissue and organs as long as the other parent does not object (*supra* note 2 at 216). 8A U.L.A. 15 – 16 (West 1983 and Supp. 1987) (Table of Jurisdictions Wherein Act Has Been Adopted); 45 CFR 46.207(b).

¹¹² *Supra* note 2 at 215

and encouraged. Transformation and redemption of tragedy must be acknowledged.¹¹³

One of the key dilemmas that must be addressed by this argument is the conflict between the embryo/foetus having no rights and being entitled to “special respect”. To rationalize this position, Framework II establishes a threshold, viability, as being the time when respect as a human being becomes necessary.

Special respect but no rights for embryos makes sense if one views the underlying ethical and policy question as one of demonstrating respect for human life. If the embryo is too rudimentary in development to have interests, it may nevertheless be a potent symbol of human life.¹¹⁴

4 Framework III - The Foetus Has No Status Until After It Is Born

In this framework, the foetus and its remains would have the same status as any other tissue sample removed during surgery.¹¹⁵ This framework is based on the assumption that personhood is not attributable to the foetus and, if there are any uniquely human qualities possessed by foetal tissue, as compared to any other tissue, then those qualities are irrelevant. Critics¹¹⁶ say that this framework is inappropriate because it does not recognize the independent moral status of the

¹¹³ *Supra* note 2 at 215.

¹¹⁴ John A. Robertson, “Symbolic Issues in Embryo Research” (1995) 25:1 *Hastings Center Report* 37 at 37; see also Daniel Callahan “The Puzzle of Profound Respect” (1995) 25:1 *Hastings Center Report* 39 at 39.

¹¹⁵ *Supra* note 2 at 224.

¹¹⁶ James Burchaell, among others, is a vocal objector to the use of foetal tissue for any purpose on the basis that it is derived from abortion and abortion is immoral.

foetus.¹¹⁷ Furthermore, it does not recognize any of the potential for human life that is possessed by the foetus. In this framework, the foetus is relegated clearly to being a non-person.

5 Conclusion

Each of the three frameworks identifies a different point at which the foetus becomes “human enough” to deserve treatment as a human being is the threshold determination. Framework I identifies this point as being the time of conception. Framework II says that somewhere during gestation, likely at viability, the “status” of the foetus changes. Framework III suggests that birth is the earliest time that the foetus deserves consideration as an independent human being. Regardless of how you view each different framework, the time at which the foetus becomes “human enough” is the threshold.¹¹⁸ Even if many would say, the coming of a new human being is biologically a gradual process, it still remains true that at some point in this process the stage is reached where there can be no doubt that this new life is now fully human. A line still needs to be drawn somewhere.

I will draw my line in the sand in the next section.

¹¹⁷ *Supra* note 2 at 226.

¹¹⁸ M. C. Shea states this position quite clearly in the article, “Embryonic Life and Human Life” *Journal of Medical Ethics* 11 (1985) at 205 – 209 as cited in Mario Moussa and Thomas A. Shannon, “The Search for the New Pineal Gland: Brain Life and Personhood” (1992) 22:3 *Hastings Center Report* 30 at 33. This article deals with the potential for using various stages of brain development to determine the point in time when a foetus acquires the necessary “humanness” to be dealt with as such. However, the argument remains the same – at some point on the development continuum, the foetus becomes more human than not and deserves to be recognized as human.

CHOICE OF A FRAMEWORK FOR THE ANALYSIS OF THE PROBLEM

The three frameworks outlined in the foregoing section represent the two extremes of the scale (Framework I and Framework III) and, in my opinion, a reasonable midpoint (Framework II). It is the extreme positions of any argument that suffer from the greatest risk of inconsistency and impracticality.

With respect to Framework I, the sentiment expressed is a laudable one. To respect and revere the zygote-foetus to the extent of equating it with a fully entitled, aware human being is to focus on the emotional hinge of the foetus's humanity. While respect for the life of others is commendable, there is a certain naivete and lack of practicality about the position. This framework creates a situation where any abortion, whether therapeutic or elective, is murder. It fails to recognize the medical necessity of some abortions (ectopic pregnancy reductions, for example) and the reality of specific developmental milestones of the foetus (the fact that differentiation does not begin until approximately two weeks after fertilization). When conception occurs, a miniature baby does not simply pop into existence in the uterus. Conception and embryonic development is a biological process. Many people create a nexus between conception and spiritual awakening. However, this is a religious or moral platform and, in all good conscience, cannot be imposed upon others in the same way that uniform religion cannot be imposed upon the global population. Furthermore, Framework I, while it purports to suggest that life is priceless, sacrifices life at the end of the cycle in favour of life at the beginning of the day. I suggest that it is hypocritical to refuse

potentially life-saving treatment to an elderly person in the name of preservation of a life from the point of conception to the point of birth when the life of that foetus is going to be terminated in any event. This discrepancy cannot be reflected in the rose-coloured spectacle view of the sanctity of the “life” of the embryo and the foetus. Therefore, I do not subscribe to the view that Framework I is the best model within which to address these issues.

With respect to Framework III, the opposite extreme is expressed. This framework represents the truly pragmatic, non-emotional position. In this framework, until birth occurs, the embryo/foetus is simply a collection of cells. No personality, other than the fact that the foetus is chromosomally human, is imputed to the embryo/foetus. No potential to develop into a human being is recognized. In this framework, there is no distinction to be made in the way that a foetus, like any organ or body part, is treated. While I can appreciate the clarity and simplicity of this position, it leaves unresolved the fact that the particular cell group under consideration, the foetus, could develop into a thinking, feeling, sentient human being if it remained for an appropriate amount of time in a basically undisturbed state in the uterus. A kidney or a lung, no matter how long it may remain in one’s body, will never achieve independent, rational humanity. At first blush, this framework seems to depreciate the value of human life by adopting a “wait and see” approach to the foetus. As discussed above regarding Framework I, life at both ends of the spectrum needs to be included in this analysis. In minimizing or denying the potential for life of the foetus by treating it as a cell collection,

researchers are free to conduct their research using foetal tissue in an effort to improve the quality of life of people of all ages; and to transplant foetal tissue in a final humanitarian attempt to alleviate many devastating symptoms of incurable disease and slow, or even halt, the progress of potentially life threatening diseases. In my opinion, although the “coldness” of this framework may be overstated, it remains insufficiently comprehensive and inclusive to be a good solution to the analysis of the issue at hand.

Framework II, which represents the middle ground, recognizes the sanctity of human life at all points in its full circle – at the beginning (prior to birth), and at the end (when transplantation can improve quality of life dramatically). The biological reality of conception and foetal development is acknowledged and landmarks of foetal development are identified. In recognition of the potential for fully independent human life to emerge from the pregnant woman, a balance is struck based upon the stages of development. That balance describes the foetus prior to approximately 24 weeks¹¹⁹ gestational age as more like a cell collection than a human being and the foetus after 24 weeks gestational age as more like a human being than a collection of cells. Based upon this distinction, the foetus is treated differently at each stage. Prior to 24 weeks, an elective abortion may be

performed without moral condemnation and the cells used for transplantation. The trade is the loss of the potential for life in exchange for the betterment of the living. However, after the 24th week of gestation, the foetus's development has advanced to the point where the potential for human life must be acknowledged and the abortion may be for therapeutic reasons only. Foetal tissue of this advanced gestational age is unsuitable for transplantation. At this point, the improved quality of life for the living is sacrificed for the hope of a new life. In my opinion, this framework strikes a workable balance between biology, morality, reality and the respect of the unique potential of the foetus to achieve independent life. It is this framework that will form the basis for the analysis of the current state of the law, and the specific ethical and legal issues that arise from this potential use of foetal tissue.

¹¹⁹ Recall that medical science currently defines viability as occurring anywhere between 23 and 26 weeks of gestation. Prior to this point of development, even the most sophisticated medical technology cannot preserve the life of the foetus *ex utero*. However, after this milestone of development is reached, there is a possibility, which improves as *in utero* gestational age increases, that medical technology could sustain the life of the foetus. The foetus may suffer from severe physical or mental deficits but has a chance, albeit slim, of survival. The point of viability as determined by medical technology can shift without impacting on the argument because it is the fact that viability has been achieved that is determinative, not the specific gestational age at which viability occurs.

AREAS OF THE LAW THAT ADDRESS THE LEGAL STATUS OF THE FOETUS

1 Introduction

Historically, reliance has been placed on live birth as the critical point in time when a human being becomes capable of independent existence. Live birth was an adequate and uncomplicated standard.¹²⁰ It was rarely necessary for the courts to consider the significance of the choice of a time when the child became worthy of independent rights.¹²¹ Live birth was significant because of the opportunity for verification of the foetus's capacity for independent life - not because it was a sign of the physical separation between the mother and the child¹²², but because live birth was the only criterion that could be measured. When live birth at or near term

¹²⁰ *Supra* note 108 (King) at 1657.

¹²¹ *Supra* note 108 (King) at 1649 - 1657. At page 1659, the ordinary indices of live birth are said to be: independent circulation; severance of the umbilical cord; and physical expulsion from the uterus. The secondary signs of live birth are: vocal cries and independent heartbeats. The single most commonly used criterion of live birth is independent respiration. The newly developing standard of death, the irreversible cessation of all functions of the entire brain, including the brain stem, is becoming more relevant in the world of sophisticated medical technology. Alexander Morgan Capron, "Anencephalic Donors: Separate the Dead from the Dying" (1987) 17:1 *Hastings Center Report* 5 at 6; also see Martha Jackman, "The Status of the Foetus Under Canadian Law" (1995) 15 *Health Law in Canada* 83 at 83 where Jackman refers to the *Paton v. British Advisory Services Trustees*, [1979] Q.B. 276 case cited in *Tremblay v. Daigle* at 567 to 568 where the English Court of Queen's Bench held that "[t]he foetus cannot, in English law . . . have a right of its own at least until it is born and has a separate existence from its mother." Jackman also refers to the *Dehler v. Ottawa Civic Hospital* (1979), 101 D.L.R. (3d) 686; aff'd (1980), 117 D.L.R. (3d) 512 (Ont. C.A.) case which said at 699 of the Ontario High Court decision, that "the law has selected birth as the point at which the foetus becomes a person with full and independent legal rights." Finally, Jackman also refers to the *Medhurst v. Medhurst* (1984), 9 D.L.R. (4th) 252 Ontario High Court case also cited by the Supreme Court of Canada in *Tremblay v. Daigle* where the Court reiterated that the foetus was not a legal person, and that any rights accorded to the foetus were contingent on legal personality acquired at birth.

¹²² *Supra* note 120 at 1657 - 1663.

was synonymous with viability¹²³, birth was a reasonable time at which to bestow full legal protection on a foetus. In today's technologically advanced hospitals, live birth at or near term is not exclusively determinative of viability and, accordingly, the use of live birth at or near term as a threshold for the independent legal status of the foetus should be abandoned.¹²⁴ Live birth and viability, with the assistance of intensive medical intervention, can occur as early as 23 weeks gestational age, but more often is identified as occurring between 24 and 28 weeks gestational age.

Medical science has progressed to the point where the foetus delivered after the point of viability, approximately 24 weeks gestational age, can survive independently, albeit with extensive medical assistance. In my opinion, the born alive rule does not protect the foetus sufficiently during the post-viability stages of gestation¹²⁵.

¹²³ Unfortunately, viability is not as objective as it might seem. It can be affected by factors such as medical care, nutritional health of the pregnant woman and foetus, genetic composition and availability of neonatal facilities – *supra* note 108 (King) at 1654 and 1663. King cites North & McDonald, "Why Are Neonatal Mortality Rates Lower in Small Black Infants Than in White Infants of Similar Birth Weight?" (1977) 90 J. Pediatrics 809, as suggesting that black babies are genetically endowed with greater capacity to survive than white babies, and females are more likely to survive than males. Based on this article, she adds race as a factor affecting viability. The issue that must be considered is whether the foetus, at any stage prior to birth, should have some protection. Also see *supra* note 120 at 1649. Viability seems to be emerging as a common middle ground for resolving this question.

¹²⁴ *Supra* note 108 (King) at 1663.

¹²⁵ In the *Winnipeg Child and Family Services v. D.F.G.*, *sub. case*, Major, J. and the late Sopinka, J. found in their joint dissent that the born alive rule was an anachronism and that the common law should expand to permit intervention on behalf of the foetus. Refer to Colin Feasby and Stuart Chambers (eds.) "Introduction: Comments on *Winnipeg Child and Family Services (Northwest Area) v. D.F.G.*" 36:3 Alberta Law Review 707 at 708.

The law in Canada, with relative consistency, tries to uphold the concept that a foetus has no rights unless and until it is “born alive”. If it is ultimately born alive, then certain areas of the law permit the child to claim rights for events that occurred during gestation. However, if the foetus is not born alive, its next-of-kin cannot claim any rights for events that occurred during gestation. This is commonly called the “born alive rule”.

Protecting the foetus can be seen as more of a statement of society’s general regard for human life than as an overriding concern about the individual foetus. The amount of protection afforded to the foetus is symbolic of the treatment which vulnerable groups can be accorded. The foetus can be seen as a symbol of the most vulnerable of human lives in this context. Lori B. Andrews says:

The underlying assumption of this view is that the conceptus, though it may not be a person, nevertheless, has a special status; it is symbolic of human life, or represents life in a way which makes its destruction symbolic of the destruction of persons. Persons who hold this view claim that harm to conceptuses may influence our attitudes toward and treatment of real people – that we may come to treat the symbolized no better than we have treated the symbol. In short, the notion is that proscribing procedures which are potentially to conceptuses is a symbolic expression of our interest in human life, an expression which may be necessary for sustaining the level of respect for persons.¹²⁶

There have been attempts in certain types of situations, notably when a pregnant woman’s conduct during pregnancy creates known risks for the foetus, to extend

¹²⁶ Lori B. Andrews, *Medical Genetics: A Legal Frontier* (Chicago: American Bar Foundation, 1987) at 91.

the born alive rule to address the potential harm that could be caused to the foetus prior to its live, or dead, birth. Child protection legislation has been the method of choice in these cases. Unfortunately, the Courts have found their hands tied by legislation that is based on the born alive rule.

I believe that the born alive rule needs to be extended to address circumstances that occur during gestation, including abortion and subsequent tissue donation for therapeutic transplantation. Because every foetus that is aborted is, by definition, not born alive (although its tissue is still alive), none of the protections awarded to children who are born alive regardless of prematurity apply. Furthermore, the born alive rule creates an unsolvable dilemma with respect to the questions of ownership of the foetus's tissue, informed consent and maternal/foetal conflict insofar as the born alive rule confers retroactive rights on the foetus if it is permitted to opportunity to be born. Abortion unilaterally removes those rights because it removes the foetus's opportunity to be born and to enforce its rights. That is, foetuses of the same gestational age acquire different rights based on whether they are born alive or not and, therefore, must have a different legal status *in utero* based on whether they are born alive or born dead or aborted.

In this section, I will examine various areas of law as representative of the discrepancy that the born alive rule creates and explain why the law should go beyond the born alive rule to encompass the spirit of Framework II, in order to provide a logical base for the transplantation of foetal tissue for therapeutic purposes. Recall that according to Framework II, the foetus acquires some legal

status at the point of viability (whenever that may be, as medical science develops) rather than at live birth when rights and considerations can be retroactively granted to a foetus. In essence, the born alive rule says that personhood is acquired by the foetus *in utero* as long as it is born alive. If it is not born alive, personhood did not exist. From the point of view of the born alive rule, one foetus may be endowed with personhood while another of equal gestational age may not be so endowed depending upon whether live birth occurs. Framework II says that personhood, or some modified legal status, is superimposed on all fetuses at the point of viability regardless of whether live birth is ever achieved. Framework II may provide different or fewer rights to the post-viable foetus than the born alive rule does, but it provides them equally regardless of live birth.

2 Criminal Code of Canada

The area of law that has made the clearest comment on the legal status of the foetus is criminal law.

Section 223 of *The Criminal Code of Canada*¹²⁷ defines when a foetus becomes entitled to the rights of a human being:

223(1) A child becomes a human being within the meaning of this Act when it has completely proceeded, in a living state, from the body of its mother whether or not

a) it has breathed,

¹²⁷ R.S.C. 1985, c. C-46.

b) it has independent circulation, or

c) the navel string is severed.

223(2) A person commits homicide when he causes injury to a child before or during its birth as a result of which the child dies after becoming a human being.

The *Canadian Criminal Code* is unequivocal in its definition of a human being as coming into existence only when the child has fully proceeded from the body of its mother in a living state.

In the case of *R. v. Prince*¹²⁸, Sandra Prince stabbed Bernice Daniels in the abdomen when Bernice Daniels was six months pregnant. The amniotic sac surrounding Bernice Daniels' male foetus was punctured and an infection developed which provoked a premature delivery. The foetus was delivered, lived for approximately 19 minutes and then died because of its immaturity. Prince was convicted of assault causing bodily harm to Daniels and charged with manslaughter regarding the unnamed male child. Although this matter was heard by the Supreme Court of Canada, the only issue before that Court was the

¹²⁸ [1986] 2 S.C.R. 480, [1987] 1 W.W.R. 1, 54 C.R. (3d) 97, 30 C.C.C. (3d) 35, 33 D.L.R. (4th) 724, 45 Man. R. (2d) 93, 70 N.R. 119.

application of the *Kienapple*¹²⁹ principle. The Manitoba Court of Appeal heard the substantive issues, in as far as they are relevant to this paper. Counsel for the accused argued that Sandra Prince did not commit an offence because the foetus was not a “person” at the time of the wrongful act. The Court of Appeal side-stepped the question of whether the foetus was a person when Bernice Daniels was stabbed. The Court relied on the former section 206 of the Criminal Code, which has become Section 223(2) of the present Criminal Code, to find that Sandra Prince was guilty of manslaughter because the foetus was born alive and died from injuries occasioned by the attack. If the foetus had died *in utero*, no crime would have been committed.

The infamous case of *R. v. Sullivan and Lemay*¹³⁰ brought the Criminal Code threshold of when a human being comes into existence to the foreground. This case involved two lay midwives who delivered a baby that was born dead after suffering anoxia during the birth process. However, they were not convicted of criminal negligence causing the death of the infant because it died before it had

¹²⁹ *Kienapple v. R.* (1974), 15 C.C.C. (2d) 524, 44 D.L.R. (3d) 351, [1975] 1 S.C.R. 729, 26 C.R.N.S. 1, 1 N.R. 322. The *Kienapple* principle, simply put, is that an accused cannot be convicted of included offences with respect to a single incident. In the *Kienapple* case itself, the accused was charged with non-consensual sexual intercourse with a 13 year old girl who was not his wife and with unlawful carnal knowledge of a female under 14 years of age with respect to a single act of non-consensual intercourse. In the end, the Supreme Court of Canada held that the accused could only be convicted of one or the other of the offences because the incident occurred only once. The charges, because they involved a single incident, had to be viewed as alternative charges. There has been extensive commentary about the *Kienapple* case and many subsequent cases have considered the *Kienapple* case to be the foundation of the theory that prohibits an accused from being convicted, as distinct from charged, with a multiplicity of included offences all relating to a single fact scenario. The *R. v. Prince* decision, Supreme Court of Canada reasons, gives an excellent “thumbnail sketch” of the *Kienapple* principle at 728 to 732 of the 33 D.L.R. (4th) report.

¹³⁰ (1986) 31 C.C.C. (3d) 62 (B.C.S.C.); (1988), 43 C.C.C. (3rd) 65, (B.C.C.A.); [1991] 1 S.C.R. 489; see also *supra* note 121 at 84 for a good abstract of this case.

fully proceeded from the body of its mother; that is, before it had become a “human being” pursuant to s. 223(1), rather than afterward, as provided in s. 223(2). This case acknowledged that the midwives in question were negligent in the performance of their duties. However, they were not guilty of the commission of a criminal offence because the acts of negligence occurred before the foetus proceeded fully from the body of the pregnant woman and, thus, there was no crime because there was no human being.

While these cases may seem harsh, they make a clear statement as to when a foetus acquires the rights of a legal person.

Recently, Section 223 was considered in the *R. v. Drummond*¹³¹ case. In this case, Brenda Drummond attempted to kill her foetus by inserting a pellet rifle into her vagina 48 hours before giving birth to a male child. A pellet lodged in the head of the foetus. He was born alive and the pellet was successfully removed approximately 90 hours after his birth. The question before the Court was whether Brenda Drummond was guilty of attempted homicide. The Court found that there could be no finding of homicide because the child was born alive and remained alive. For a finding of homicide to have been made, the child would have had to die as a result of its injuries after having been born alive. With respect to the attempted homicide, the Court accepted the law cited by the defence that suggests that the

¹³¹ (1996) 143 D.L.R. (4th) 368, (1996) 112 C.C.C. (3d) 481, (1996) 5 C.R. (5th) 380 (Ontario Court – Provincial Division).

foetus is an extension of the pregnant woman until it is fully delivered.¹³² If the fetus is an extension of the pregnant woman, it is not possible to meet the technical requirements for attempted homicide because there is no other "person" against whom the attempt is committed.

The foregoing cases clearly illustrate the consistency with which the Courts will apply Section 223. These cases illustrate the born alive rule with stark reality and also highlight the reason for my opinion that the born alive rule creates discrepant treatment of the fetus based upon the contingency of live birth. In the extreme interpretation, the rule permits someone to do anything to a fetus in a deliberate effort to harm it and then not be held criminally accountable if they ensure that by their acts the fetus is not born alive. However, if the attempt only harms the fetus and it is born alive (even if it only lives for a short period of time), then the person who attempted to kill the fetus will be guilty of a crime. This inconsistency is unfortunate. The criminal law would be more consistent by the application of a Framework II analysis. In this way, every post-viable fetus would have some rights, perhaps not all the rights of a child, but at least enough to ensure that any

¹³² The Court in this case relied upon the *Tremblay v. Daigle*, [1989] 2 S.C.R. 530, 62 D.L.R. (4th) 634 case in which Mr. Tremblay sought injunctive relief to prevent his girlfriend Ms. Daigle from undergoing an abortion. In that case the Supreme Court of Canada ultimately refused to grant Mr. Tremblay's request for a number of reasons; one was that the fetus must be considered to be a physical extension of Ms. Daigle's body until such time as it is born and has proceeded fully in a living state from her body. The fetus's potential to achieve independent life if not aborted was found to be insufficient grounds to justify imposing the pregnancy upon her. It would be an unreasonable limitation of Ms. Daigle's right to bodily integrity and self-determination. Another case that preceded *Tremblay v. Daigle* but was settled at lower levels of court was *Murphy v. Dodd* (1989), 63 D.L.R. (4th) 515 (Ont. H.C.J.), where the Courts refused to uphold the "rights of the father".

attempt to harm it *in utero* would be punished regardless of whether it achieves live birth or dies as a result of the attempt.

3 Human Rights Legislation

There are two important areas of human rights legislation relevant to the question whether the born alive rule is sufficient, legally and morally, to provide a logical framework for transplantation of foetal tissue for therapeutic purposes. They are the *Universal Declaration of Human Rights*¹³³ and the *United Nations Declaration of the Rights of the Child*¹³⁴, which address the basic rights that ought to be upheld for the benefit of all human beings.

Article One of the *Universal Declaration of Human Rights*¹³⁵ says that:

All **human beings** are born free and equal in dignity and rights and that they are endowed with reason and conscience.(emphasis added)

It also uses the term "members of the human family" in its description of the rights of all human beings. It would appear that the *Declaration* assumes members of

¹³³ G.A. Res. 217(II), U.N. GAOR, 3d Sess., Supp. No. 13, UN Doc. A/810 (1948) 71

¹³⁴ G.A. Res. 1386, 14 U.N. GAOR Supp. (No. 16) at 19, U.N. Doc. 4249 (1959) as cited in *supra* note at 98.

¹³⁵ Article One of the *Universal Declaration of Human Rights* as cited in B. Wennergren, "Human Rights of an Embryo" (1991) 2:1 *International Journal of Bioethics* 46 at 46.

the human family to be those members who are living rather than dead or, arguably, not yet born.¹³⁶

The *Universal Declaration of Human Rights* is consistent with the born alive rule. In essence, human rights exist only for living entities. If a foetus ultimately dies *in utero* for whatever reason, it does not come within the scope of the *Declaration*. Although it characterizes the living entity as a “human being”, there is absence of consideration given to the human foetus which carries the potential to become a human being.

Arguably, a foetus is encompassed within the concept of *human* because its genetic composition is human. Accordingly, it is scientifically accurate to state that a foetus is a human organism. However, because a foetus has no independent existence, it is incorrect to say that it is a human *being* in the context of the *Universal Declaration of Human Rights*.

The preamble to the *Universal Declaration of Human Rights* emphasizes the inherent dignity attributable to all members of the human family. Perhaps the foetus should be given recognition after the point of viability to express the understanding that it would achieve independent human life if it remained undisturbed.

¹³⁶ *Ibid.* at 46.

According to the preamble to the *United Nations Declaration of the Rights of the Child*, its purpose is to ensure that all children have "a happy childhood".¹³⁷ It provides that the child:

by reason of his physical and mental immaturity, needs special safeguards and care, including appropriate legal protection, **before as well as after birth.**¹³⁸ (emphasis added)

This *Declaration* goes well beyond the scope of the *Universal Declaration of Human Rights* in that it specifically contemplates the protection of the child both before and after its birth. This broad assumption, that a foetus should be included in a *Declaration* involving the rights of children, leaps over legal and ethical boundaries. It creates the need to rationalize the inclusion of the foetus in the concept of the child.

By stating that the "child" requires safeguards and protection both before and after birth, the *United Nations Declaration of the Rights of the Child* implies an equality of rights between the foetus and the child. This concept is inconsistent with the born alive rule and somewhat consistent with Framework I. Certainly, the *United Nations Declaration* does not only apply to the foetus upon the occurrence of live

¹³⁷ United Nations Declaration of the Rights of the Child, as cited in *supra* note 108 (Shaw) at 98.

¹³⁸ *Ibid.* at 98; see also Margery Shaw, "Should Child Abuse Laws be Extended to Include Fetal Abuse" in Aubrey Milunsky and George J. Annas, (eds.), *Genetics and the Law III* (New York: Plenum Press, 1985) 309 at 312. In this article, Shaw reviews the series of cases where pregnant women endangered their foetuses by conduct such as substance abuse. She refers at 313 to an article by John A. Robertson, "Procreative Liberty and the Control of Conception, Pregnancy and Childbirth", (1983) 69 Va. L. Rev. 405 (1983) wherein he reviewed the rights of the state to intervene during pregnancy to provide the foetus with necessary medical and surgical care. Shaw suggests that the state's interest in protecting the foetus crystallizes at viability and that it will incur a duty to the foetus to protect it if it can do so without harm to the pregnant woman. Shaw also projects that prenatal torts will become more acceptable in the future (at pages 314 to 315).

birth. However, it does not seem to restrict the endowment of the rights to any particular gestational time frame, such as after viability (Framework II theory). This position does not assist with the concept of transplantation of foetal tissue unless one suggests that it is appropriate to terminate the life of a "child" at any time prior to birth. Furthermore, the general all-inclusive wording leads to conflict with the whole concept of elective abortion. In my opinion, the draftsmen of the *United Nations Declaration of the Rights of the Child* were moving in the right direction by attempting to recognize the foetus as an entity that would become a living child if left undisturbed. Unfortunately, they sacrificed the practical application of their *Declaration* by being overly general in their wording. Similar protection and respect could have been provided to the foetus through the use of Framework II language and concepts rather than Framework I language and concepts.

There are two other sources of law that deal with research on human beings and emphasize that human beings must be treated with utmost respect and dignity when being used as research subjects.

The *Nuremberg Code*¹³⁹ was created in response to the abuses suffered by many human research subjects at the hands of German physicians in concentration camps during the Second World War. The experiments have become infamous for their brutally scientific approach to any research problem at hand. Pain, suffering and loss of life were irrelevant to Nazi medical scientists. These atrocities were

revealed in the Nuremberg trials and directly led to the *Nuremberg Code*. Its goal is to protect the rights of human research subjects.

There is also the *Helsinki Declaration*¹⁴⁰, which deals with the protection afforded to research subjects, in particular the right of the subject to give free and fully informed consent to participating in the study and the right to withdraw from the study at any time. The *Helsinki Declaration* is only intended as a guideline to researchers but does provide a useful perspective on the acceptable boundaries of conduct. While these two international documents do not deal with the legal status of the foetus directly, they do give important guidance that more, rather than less, respect and dignity should be given to vulnerable entities, like human research subjects and, arguably, foetuses.

Clearly, the two Declarations are not consistent in recognizing the legal status of the foetus. This has a direct impact on the question of whether the born alive rule is sufficient to provide a logical foundation for the application of Framework II to the transplantation of foetal tissue for therapeutic purposes. The *Universal Declaration of Human Rights* expresses the same viewpoint as the born alive rule. The United Nations Declaration of the Rights of the Child goes too far. The *Nuremberg Code* and the *Helsinki Declaration* lean towards the position of erring on the side of the

¹³⁹ German Military Tribunals, *Trial of War Criminals Before the Military Tribunals: The Medical Cases*, vols. I and II (Washington, D.C.: U.S. Government Printing Office, 1948).

protection of vulnerable groups. Framework II provides a reasonable middle ground by accepting that the foetus deserves respect but that it does not attain any significant rights at law until it has matured to the stage where the possibility for independent life exists. This position permits unimpeded access to tissue of foetuses aborted electively in the first trimester which is the point at which the tissue is suitable for transplantation.

4 Child Protection Legislation

In most areas of the law, the born alive rule has been applied consistently, even to the point of very difficult and unpopular decisions being made in the criminal law area.

Most provincial child protection legislation does not include the foetus within the definition of a "child".¹⁴¹ The exception to this statement is the New Brunswick *Family Services Act*¹⁴², which defines "child" as:

¹⁴⁰ World Medical Association, *Declaration of Helsinki*; Adopted at the 18th World Medical Assembly in Helsinki, Finland in June 1964) Amended at the 19th World Assembly in Tokyo, Japan in October 1975; the 35th World Medical Assembly in Venice, Italy in October, 1983; and the 48th World Medical Assembly, Somerset West, republic of South Africa, 1996.

¹⁴¹ *Children's Law Reform Act*, R.S.O. 1980, c. C-8, s. 1; *Children and Family Services Act*, R.S.N.S. 1990, c.5, s.1; *Child Welfare Act*, R.S.A. 1980, c. C-8, s. 1; *Family Services Act*, R.S.S. 1978, c. F-7, s. 1; *Child, Family and Community Service Act*, R.S.B.C. 1996, c.46, s.1; *Child and Family Services Act*, C.C.S.M. c. C80, s.1; *Child Welfare Act*, R.S.Nfld. 1990, C-12, s.1; *Child Welfare Act*, R.S.N.W.T. 1988, c. C-6, s.1; *Children's Act*, R.S.Y.T. 1986, c. C-22, s.104; see also P. G. Kirman, "Four Dialogues on Fetal Protection" (1993) 2:2 Health Law Review 31 at 38.

¹⁴² S.N.B. 1980, c. F2.2.

a person actually or apparently under the age of majority unless otherwise specified or prescribed in this Act or the regulations and includes:

- a) an unborn child;
- b) a stillborn child;
- c) a child whose parents are not married to one another;
- d) a child to whom a person stands in loco parentis, if that person's spouse is a parent of the child; or
- e) when used in reference to the relationship between an adopted person and the person adopting or the relationship between a person and his birth mother or birth father, a person who has attained the age of majority.

Attempts to protect the foetus from conduct of the pregnant woman that has the clear potential to be harmful to the foetus are often routed through child protection legislation rather than addressing the policy issues created by the born alive rule. The fact that the born alive rules fail to provide the foetus with any protection from obvious harm within the control of the pregnant woman has created the phenomenon of well-wishers trying to apprehend the foetus through the vehicle of child protection legislation despite the obvious inability of the definition of "child" to extend to the foetus. Another potential route to pursue is the criminalization of

conduct by a pregnant woman that results in prenatal injuries to the foetus. There is some precedent in the United States for this result.¹⁴³

At present, there is no legislative mechanism to permit this to occur, as *Winnipeg Child and Family Services (Northwest Area) v. D.F.G.*¹⁴⁴ demonstrated. In the *George* case, Schulman, J. ordered the drug-addicted pregnant woman, who had a lengthy history of substance abuse during pregnancy, to attend a treatment centre. The trial decision was struck down at both the Manitoba Court of Appeal and the Supreme Court of Canada levels.¹⁴⁵ In the alternative, a supervision order requiring the director of the appropriate child welfare agency to supervise the foetus by controlling the pregnant woman potentially could keep the foetus from physical harm. The logical extrapolation of the trial judge's argument would be that

¹⁴³ Tracy Dobson and Kimberly K. Eby review this concept in detail in their article, "Criminal Liability for Substance Abuse During Pregnancy: The Controversy of Maternal v. Fetal Rights", 36:3 Saint Louis University Law Journal 655.

¹⁴⁴ [1997] 3 S.C.R. 925, (1997) 152 D.L.R. (4th) 193 (S.C.C.). This case has unfortunate facts as set out in *infra* note 145. However, similar facts have existed in other cases. The *D.F.G.* case somehow became a spearhead for the Courts (Manitoba Q.B., C.A. and the S.C.C.) to consider the juristic status of the foetus and the extent to which the legal system is prepared to intervene in the private lives and bodily integrity of an individual. The extent of the uproar that resulted from this case indicated that simply applying the law that says that the foetus is not a human being until it has been born alive was unacceptable. Clearly, the push was on toward recognizing that the foetus was being harmed by D.F.G.'s conduct and deserved the protection of the Court. A significant amount of academic writing was generated to deal with this case. Thankfully, the best articles have been collected together in Volume 36, No. 3 of the Alberta Law Review.

¹⁴⁵ The facts of this tragic case are set out in detail by Major, J. in *supra* note 144 at 962 – 971. Briefly, the pregnant woman was known to the Winnipeg Child and Family services agency as being addicted to sniffing glue. She had a history of substance abuse during pregnancy. Several other children borne to her had been apprehended by the agency and suffered a variety of medical conditions as a result of the substance abuse of their mother during their gestation period. The agency sought an order requiring the pregnant woman to refrain from the consumption of intoxicating substances during her pregnancy. The agency requested a mandatory injunction to oblige the woman to enter a treatment program for the remainder of her pregnancy. Ultimately, the Court held that the foetus did not have legal rights. There was no legal "person" in respect of whom the agency could exert its protective jurisdiction. The Court held that there was no right to sue until the child was born alive. The Court had no *parens patriae* jurisdiction over the foetus. Thus, the Court could not oblige the pregnant woman to enter treatment for the protection of the foetus.

a pregnant woman could be incarcerated, obliged to take particular treatment or even obliged to undergo surgical intervention in order to protect her foetus. Should this extreme situation occur, the pregnant woman's interest in her own privacy and self-determination would be completely subjugated to the right of the foetus to have an "ideal" environment in which to develop.¹⁴⁶

In The Yukon, forced medical intervention was specifically legislated¹⁴⁷ and struck down for violating Section 7 of the *Charter of Rights and Freedoms*,¹⁴⁸ because it was drafted to deal specifically with excessive alcohol consumption during pregnancy leading to foetal alcohol syndrome and was used to require a pregnant woman to undergo supervision and counselling for substance abuse. The legislation was struck down because the description of the particular abuse,

¹⁴⁶ The Canadian Medical Association Code of Ethics, Article 6 makes an explicit exception to the rule against divulging patient information in the situation where a child is being harmed. However, extending Article 6 to situations involving the foetus may discourage pregnant women from seeing their doctor for help with problems such as alcohol abuse, if they know that the doctor will report them to the police and that they could be held responsible for harm occurring to the foetus (*supra* note 141 at 39). Assuming that Article 6 includes the foetus in the scope of its definition of a child, physicians will be placed in the untenable position of making value judgments about their pregnant patients' conduct. To fail to report conduct harmful to the foetus would be a violation of Article 6 of the Canadian Medical Association Code of Ethics. The assurance of privacy between a physician and a patient is a necessary foundation of the physician – patient relationship. However, to condemn a pregnant woman for missing her vitamin pills or having a glass of champagne would test the physician – patient bond of trust to its limit.

It may be overly simplistic to say that any conduct which could cause harm to a foetus is against the best interests of the foetus and will be a failure of the pregnant woman's obligations at law to protect the foetus; see also Sanda Rogers, "State Intervention in the Lives of Pregnant Women" in Jocelyn Downie and Timothy Caulfield, eds., *Canadian Health Law and Policy* (Toronto: Butterworths Canada Ltd., 1999) at 275 for an excellent review of the cases relevant to the potential basis for intervention by the government in an effort to protect a foetus perceived to be in danger under the heading "Judicial Interference With Pregnant Women in the Alleged Interest of the Fetus" at 287 – 301.

¹⁴⁷ *The Yukon Children's Act*, S.Y.T. 1984, c.2, pt.4, s.134(1)

¹⁴⁸ *Canadian Charter of Rights and Freedoms*, Part I of the *Constitution Act*, 1982, being Schedule B to the *Canada Act*, 1982 (U.K.), 1982, c.11, Section 7.

namely, consumption of excessive amounts of alcohol by a pregnant woman, was too general to meet the requirement of certainty in proper legislative drafting.

There have been a series of cases in Canada, England and the United States that have dealt with situations in which a pregnant woman's conduct during pregnancy put the foetus's health and welfare at risk.¹⁴⁹ The cases have discussed the use of the child protection legislation to intervene in the situation. Except for the *Belleville Re Baby R.* and *Re A. (in utero)*, cases, these were living children in need of protection because of the effects of prenatal substance abuse.

b) Canada:

In the case of *Re Children's Aid Society for District of Kenora and J.L.*¹⁵⁰, a pregnant woman refused to seek alcohol treatment during pregnancy and failed to obtain proper remedial care for the foetus after its birth. The court found that she was guilty of prenatal abuse against the foetus and held that the child was a "child in need of protection".

¹⁴⁹ In Diana E. Ginn, "Pregnant Women and Consent to Medical Treatment" (1994) 15 Health Law in Canada 41. Ginn addresses the pertinent cases in Canada, the United States and Britain that deal with the situation where a Court has been asked to order treatment of a pregnant woman or to apprehend the foetus (which can not be accomplished without apprehending the woman). After a thoughtful analysis, she concluded that there are no legal or ethical justifications for dispensing with the general rule that consent to treatment ought to be obtained in cases involving pregnant women.

¹⁵⁰ (1981), 134 D.L.R. (3rd) 249 (Ont. Prov. Ct.).

In the case of *Re Superintendent of Family & Child Services and MacDonald*¹⁵¹, a child, born alive but suffering from methadone addiction as a result of the pregnant woman's conduct during pregnancy, was found to be a "child in need of protection". At the hearing conducted after the birth, the mother was found to be guilty of abuse of her foetus during its gestation.

In the case of *Re Children's Aid Society of City of Belleville, Hastings County and Trenton v. T. (L) (No.2)*¹⁵², the Children's Aid Society requested wardship of a foetus based upon the pregnant woman's refusal to "seek, maintain or accept any form of medical assistance which is clearly necessary for the delivery of the child". In this particular case, it was suspected that the pregnant woman's membranes had ruptured creating a risk to the foetus and suggesting that birth was imminent. The pregnant woman agreed to undergo a medical examination but then withdrew her consent prior to the said examination taking place. In this case, the Court felt it had the authority to declare an "unborn child" to be a child in need of protection.

[The pregnant woman] . . . refuses to seek, maintain or accept any form of medical assistance which is clearly necessary for the delivery of the child, particularly where there is a fear that the child could be born in an unhealthy state or in a situation where the child's life is at risk. [The Judge is] . . . satisfied that Linda's attitude, whatever may be the cause, is one which is not conducive to the safe and healthy

¹⁵¹ (1982), 135 D.L.R. (3rd) 330 (B.C.S.C.).

¹⁵² (1987), 59 O.R. (2nd) 204 (Prov. Ct.).

delivery of the child. For those reasons, [the Judge is] finding this child to be one in need of protection.¹⁵³

The Court ordered a three-month wardship of the foetus and an involuntary committal of the pregnant woman to receive a mental health assessment.

In the case of *Re Baby R.*¹⁵⁴, a mother refused to consent to a caesarean section that her physician considered necessary for the health and safety of the foetus. The British Columbia Provincial Court apprehended the 34 week old foetus to protect the "safety and well being" of the child pursuant to the British Columbia *Family and Child Services Act.*¹⁵⁵ On appeal, the B.C. Supreme Court found that there was no basis in law for the apprehension because a foetus does not fall within the definition of "child" or "person". The B.C. Supreme Court concluded that specific legislation would be required to authorize the level of interference with a pregnant woman's rights that apprehension of a foetus would entail.¹⁵⁶

In the case of *Re A. (in utero)*¹⁵⁷, there was a similar application for a foetal apprehension order. The Ontario United Family Court refused and relied upon the

¹⁵³ *Supra* note 152 at 206.

¹⁵⁴ (1988), 53 D.L.R. (4th) (B.C.S.C.).

¹⁵⁵ S.B.C. 1980, c.11.

¹⁵⁶ Reviewed in depth in T. B. Dawson, "Re Baby R: Comment on Fetal Apprehension" (1990) 4 C.J.W.L. 265; also see Martha Jackman, "The Canadian Charter as a Barrier to Unwanted Medical Treatment of Pregnant Women in the Interests of the Foetus" (1993) 14 Health Law in Canada 49 at 50; also see *supra* note 109 at 165 - 166.

¹⁵⁷ (1990), 75 O.R. (2nd) 82 (U.F.C.).

Re Baby R. case and the *Child and Family Services Act of Ontario*¹⁵⁸ that did not recognize the foetus's right to protection. The court held that its *parens patriae* jurisdiction did not authorize judicial intervention on behalf of the foetus pursuant to Section 134(1), which provides supervision and counselling with respect to the use of addictive or intoxicating substances during pregnancy.

c) United States:

In the 1980 Michigan case, *Re Baby X*¹⁵⁹, the Court held that an addicted new-born could be considered to be a neglected child based upon prenatal drug abuse. One must consider if this is a “too little, too late” solution. Protecting the child after it has been born harmed seems to be pointless when earlier intervention might have solved the problem, yet earlier intervention means granting legal recognition to the foetus.

A compromise has been reached from time to time by appointing a guardian *ad litem* to protect the interests of unborn children.¹⁶⁰

In *Jefferson v. Griffin Spalding County Hospital*,¹⁶¹ case, the Court found that:

¹⁵⁸ R.S.O. 1990 c. C-11.

¹⁵⁹ 97 Mich. App. III, 293 N.W. (2d) 736 (1980).

¹⁶⁰ *Wayne Right v. Moore*, 374 So. 2d 586 (Florida Appeals 1979); *Hatch v. Riggs National Bank*, 284 F. Supp. 396 (D.D.C.) 1968; *Jefferson v. Griffins Spalding County Hospital Authority*, 247 Ga. 86 274 S.E. 2d 457 (1981) *Contra Brady v. Doe*, 598 S.W. 2d 338 (Texas Civil Appeals 1980); and in *supra* note 137, page 87.

. . . [the d]efendant is in the thirty-ninth week of pregnancy The examining physician has found and the defendant has been advised that she has a complete placenta previa; that the afterbirth is between the baby and the birth canal; that it is virtually impossible that this condition will correct itself prior to delivery; and that it is a 99 per cent certainty that the child cannot survive natural child birth (vaginal delivery). The chances of the defendant surviving vaginal delivery are no better than 50 per cent. The examining physician is of the opinion that a delivery by caesarean section prior to labour beginning would have an almost 100 per cent chance of preserving the life of the child, along with that of the defendant . . . defendant has advised the Hospital that she does not need surgical removal of the child and will not submit to it. . . . the Georgia Department of Human Resources . . . petitioned the Juvenile Court of Butts County for temporary custody of the unborn child, alleging that the child was a deprived child without proper parental care necessary for his or her physical health . . . Court concludes and finds as a matter of law . . . this child is a viable human being and entitled to the protection of the Juvenile Court Code of Georgia. The Court concludes that this child is without the proper parental care and subsistence necessary for his or her physical life and health. . . . The Court finds that the State has an interest in the life of this unborn living human being. The Court finds that the intrusion involved . . . is outweighed by the duty of the State to protect a living, unborn human being from meeting his or her death before being given the opportunity to live . . .¹⁶²

The Court granted temporary custody of the foetus to the State for the purpose of performing a caesarean section, if medically necessary, against the pregnant woman's refusal based on the assessment that the woman presented with a complete placenta previa. The Court balanced the State's compelling interest in

¹⁶¹ 247 Ga. 86, 274 S.E. 2d 457 (1981); also see a discussion of the facts in *supra* note 108 (Shaw) at 115.

¹⁶² *Supra* note 109 at 161 - 163.

the foetus, which was deemed to be viable, with the mother's religious liberty rights and found that there were no less intrusive means to protect the foetus.¹⁶³

In the case *In Re A.C.*¹⁶⁴, the Lower Court imposed a caesarean section on an unconsenting woman dying of cancer. In this case, A.C. was dying of metastatic oxygenic carcinoma. She was pregnant. Shortly before her death, she was hospitalized knowing that she would lapse into a coma and die. She instructed that her doctors should do whatever was possible to save the child. There was some evidence to suggest that at one point in time she may have revoked that instruction. In any event, the physicians performed a caesarean section to deliver A.C.'s premature foetus (26 weeks old) at the point when they felt that A.C. had a very short life left. Unfortunately, the child died shortly after its birth and A.C. died two days later. The District of Columbia Court of Appeals held that every person has a right to accept or refuse treatment. The Appellate Court stated, at page 1252, that it is "extremely rare and truly exceptional for a conflicting state interest

¹⁶³ In this case, the conduct of the mother was seen as being a threat to the "potential for life" of the foetus which was deemed to be viable. Because the foetus was viable, the Court upheld the State's interest in protecting the foetus: M. N. Coleman, "Embryo Transplant, Parental Conflict, and Reproductive Freedom: A Prospective Analysis of Issues and Arguments Created by Forthcoming Technology" 15 Hofstra Law Review 609 at 623. This article also discusses the *People v. Stewart* No. M508197 (San Diego Mun. Ct. Feb. 26, 1987) case whereby the California courts enlarged the basis upon which state intervention could occur. In this case, Pamela Rae Stewart took drugs during her pregnancy, engaged in sexual intercourse against specific medical advice and failed to seek medical attention when she experienced bleeding. Stewart was charged with foetal abuse pursuant to Penal Code 270. She was convicted. The baby was born with severe brain damage and died within two months of its birth. The Court side-stepped the issue of viability by accessing the Penal Code for actions of Stewart both before and after the foetus was viable. This article provides an intriguing look at these issues in the context of American law. Although the social mores of Canada and the United States may be distinct in many ways, the Canadian courts must consider the treatment of these leading edge issues in all common law jurisdictions because there are so few relevant cases that are actually litigated; see *Ibid.* for additional commentary about the *Rae* case.

¹⁶⁴ 573 A. 2d 1235 (1990).

to be sufficiently compelling to justify overriding a patient's wishes". The Court also stated, with reference to pregnant women, that it "need not decide whether, or in the circumstances, the state's interests can ever prevail over the interests of a pregnant patient." The Appellate Court proceeded to reverse the Lower Court's decision and to uphold the patient's right to refuse medical treatment.¹⁶⁵

d) England:

There are three British cases dealing with similar circumstances. *D. v. Berkshire CC*,¹⁶⁶ where the House of Lords held that the Berkshire Social Services Department was entitled to take the child into care at birth because of the mother's prior neglect and the threat of future neglect. This mother was addicted to drugs and continued to take drugs during the pregnancy. In a summary of the case, Fortin writes:

Whilst doctors will be unperturbed by the suggestion that a child's existence does not commence at birth and that its antenatal development should not be ignored, it is a well-established principle of law that a child does not obtain an independent legal status until it is born. Nevertheless, the House of Lords' willingness to consider the mother's antenatal behaviour was a clear acknowledgement that in certain circumstances, the laws may quite properly concern itself with the appropriate treatment of unborn children.¹⁶⁷

¹⁶⁵ *Supra* note 109 at 165; see also George J. Annas, "She's Going to Die: The Case of Angela C.", (1988) 18:1 *Hastings Center Report* 23.

¹⁶⁶ [1987] 1 All E.R. 20.

¹⁶⁷ J. Fortin, "Legal Protection for the Unborn Child", (1988) 5 *Modern Law Review* 54; and J. Fortin, "Can You Ward a Foetus" (1988) 51 *Modern Law Review* at 768 as cited in *supra* note 109 at 166-167.

In the case of *Re F. (in utero)*¹⁶⁸, a social service department tried to get the court to place a foetus into its wardship, because the pregnant woman was known to them to have a history of mental illness and drug abuse. She also had a previous child that was subject to a care order and was placed with foster parents. When she disappeared, the agency tried to obtain wardship of the foetus but was denied. May L.J. said at page 196 of the decision: "this is a case in which, on the facts, I would exercise the jurisdiction if I had it, [but] in the absence of authority I am driven to the conclusion that the court does not have the jurisdiction contended for".¹⁶⁹ In the *Re F. (in utero)* case, the Court referred to *Paton v. United Kingdom*¹⁷⁰, a decision of the European Commission of Human Rights. At page 1304 of *Re F. (in utero)*, the Court said: "the life of the foetus is intimately connected with, and cannot be regarded in isolation from, the life of the pregnant woman".

In the case of *Re P.*¹⁷¹, the pregnant woman was known to the local authority. She had five children, four of whom were in care. The fifth died shortly after birth. The mother took proactive steps to try to keep the sixth child by bringing her own wardship application when told that the child would be placed in care upon its birth. The Court dismissed the mother's application stating that "as a matter of principle

¹⁶⁸ [1988] 2 All E.R. 193.

¹⁶⁹ *Supra* note 109 at 167 - 168.

¹⁷⁰ (1980) 3 E.H.R.R. 408 as cited in [1988] 2 W.L.R. 1288 (C.A.).

¹⁷¹ Unreported, as cited in *supra* note 109 at 167.

there is no jurisdiction at the present time in the High Court to make an unborn child a ward of the court".

e) Conclusion

Child protection legislation is the instinctive reaction to the problem that arises when a pregnant woman is creating an obviously dangerous situation for her foetus. However, despite the laudable mandate of this type of legislation, the only province that addressed the situation raised by the definition of "child" is New Brunswick. Having been in Winnipeg when the furor of the *George* case erupted, it seems apparent to me that there is significant dissatisfaction with the strict application of child protection legislation to exclude protection for the foetus from obvious harm. However, despite public sentiment, the strict application of the born alive rule has been upheld.

There is an increasing demand to make pregnant women accountable for conducting themselves in a way that is known to be harmful to the foetus. This sentiment speaks to the need to acknowledge that the foetus, particularly in the later stages of pregnancy, is viewed more as a human being than as a tissue collection. In other words, the born alive rule premise (that is, there is no offence for conduct during gestation of the foetus unless and until a live birth occurs) is not sufficient to deal with the need to recognize that the foetus is a "child in the making" and that it deserves respect and protection as a vulnerable member of our society. In this regard, the movement to expand the boundaries of the definition of

“child” is a step toward recognition of the foetus as a potential human being. The question then becomes: should the foetus be treated the same as a child from the moment of conception or is that point in time too remote? I believe that dealing with the foetus as Framework II suggests is the most practical. In this case, the foetus is given some recognition after it reaches the stage where it is scientifically possible for it to sustain its own life independent of its mother.

5 Canadian *Charter of Rights and Freedoms*

In considering the impact of a Framework II analysis on the law as it exists, and in particular the born alive rule, one must address the very real conflicts that arise in the context of the *Charter of Rights and Freedoms*¹⁷².

"Section 7 of *The Charter of Rights and Freedoms* guarantees every individual a degree of personal autonomy over important decisions intimately affecting their private lives". This finding was made by Madam Justice Wilson in the *R. v. Morgentaler* case.¹⁷³ Section 15¹⁷⁴ provides every individual with the right to liberty

¹⁷² Canadian *Charter of Rights and Freedoms*, Part I of the *Constitution Act, 1982*, being Schedule B to the *Canada Act, 1982* (U.K.). 1982, c.11.

¹⁷³ [1988] 1 S.C.R. 30, 63 O.R. (2d) 281, 260 O.A.C. 1, 44 D.L.R. (4th) 385, 82 N.R. 1, 3 C.C.C. (3d) 449, 62 C.R. (3rd) 1.

¹⁷⁴ Section 15 of the *Charter*, *supra* note 172, reads as follows: "15(1) Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability."

and security of the person. These concepts should be addressed in the context of the transplantation of foetal tissue.¹⁷⁵

The general right of a competent adult to refuse life-saving medical treatment has been recognized under Section 7¹⁷⁶ of the *Charter*. Many cases have upheld the individual's right to refuse medical treatment even if that treatment is the only possible way to preserve life.

To apply the born alive rule to this area of the law, the refusal of treatment by a pregnant woman should be treated exactly the same way as the refusal of treatment by a non-pregnant woman. The fact that the woman may be pregnant is irrelevant to the application of the born alive rule because the foetus is not endowed with any rights unless and until it is born live. As the law exists today, the foetus has as much right to contend that the pregnant woman be treated involuntarily as her lungs or liver do. The difference between her lungs or liver and

¹⁷⁵ *Supra* note 231 at 124.

¹⁷⁶ Section 7 of the *Charter*, *supra* note 172, reads as follows: "Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice". Section 7 of the *Charter* is consistent with the common law principles of bodily self-determination and the right to have or to refuse life-saving medical intervention. For example, in *Malette v. Schulman* (1990), 72 O.R. (2d) 417 (C. A.), a physician was sued in battery for administering life saving blood transfusions to a Jehovah's Witness patient against her stated wishes. The Court reviewed the American and Canadian case law establishing the principle that a competent adult has the right to bodily self-determination, including the right to informed consent and the right to refuse life-saving medical treatment:

Recognition of the right to reject medical treatment cannot, in my opinion, be said to depreciate the interest of the State in life or in the sanctity of life. Individual free choice and self-determination are themselves fundamental constituents of life. To deny the individual's freedom of choice with respect to their health care can only lessen, and not enhance, the value of life.

The right to refuse unwanted medical intervention even if the inevitable result is death, has been incorporated into the law as an extension of the *Charter* right to security of the person.

the foetus is that the foetus has the potential to achieve independent human life in a very short time frame, whereas a person's lungs and liver will never be capable of independent existence. This scenario leads to an obvious conflict between the pregnant woman's common law and *Charter* rights to autonomy, self-determination, and security of the person, on the one hand, and the potential for the government, or someone acting on behalf of the foetus, to supersede those rights in favour of the foetus's future independent life, on the other hand¹⁷⁷ The result of extending the born alive rule to create rights for the foetus could lead, in extreme cases, to the imposition of unwanted medical treatment upon the pregnant woman in an effort to protect the foetus's life.

In the *Morgentaler*¹⁷⁸ case, the Supreme Court of Canada came close to dealing with this difficult issue. The Court struck down Section 251 of the *Canadian Criminal Code* which prohibited abortion without approval of a medically

¹⁷⁷ *Supra* note 156 (Jackman). This article is an excellent review of the Canadian, American and British cases of the unwanted treatment of pregnant women in the best interests of the foetus. It also discusses the distinction between the rights of the non-pregnant people (both male and female) to refuse even life-saving medical treatment; whereas there seems to be a strong inclination to subrogate the same expressions of intent by a pregnant woman if she tries to refuse treatment of herself that would negatively affect the welfare of the foetus. Even though Section 7 of the *Charter* has been used to recognize the right to refuse treatment, the minute a woman becomes pregnant, she seems to stop being a person from the point of view of being able to assert her *Charter* rights without interference.

¹⁷⁸ [1988] 1 S.C.R. 30, 63 O.R. (2d) 281, 26 O.A.C. 1, 44 D.L.R. (4th) 385, 82 N.R. 1, 3 C.C.C. (3d) 449, 62 C.R. (3rd) 1, 31 C.R.R. at pp. 56 to 57; also see *supra* note 37 (Kluge), at 277 for discussion of this portion of the *R. v. Morgentaler* decision. Kluge also discusses the case of *Canada (A.G.) v. Borowski* [1989] 1 S.C.R. 342, affirming on other grounds (1987) 33 C.C.C. (3d) 402 and notes that the Supreme Court of Canada was "very careful in its ruling. It declined to decide the question whether the fetus was a human being or person in the eyes of the law. Instead, it said that this was a matter not strictly covered by existing legislation; and that rather than being a matter for the Court to decide, it was more properly the prerogative of Parliament to determine in a legislative fashion".

constituted hospital therapeutic abortion committee. In that case, the Honourable Mr. Justice Dickson said, at pages 56 to 57:

Forcing a woman, by threat of criminal sanction, to carry a foetus to term unless she meets certain criteria unrelated to her own priorities and aspirations, is a profound interference with the woman's body and that's a violation of security of the person.

In the *Morgentaler* case, Madam Justice Wilson said that S. 251 was inconsistent with human dignity, self-respect and personal security and a *Charter* violation of a pregnant woman's rights to liberty and to security of the person.¹⁷⁹ She also characterized Section 251 of the *Criminal Code* as a violation of a woman's section 7 *Charter* rights on the basis that:

In essence, what it does is assert that the woman's capacity to reproduce is not to be subject to her own control. It is to be subject to the control of the state. She may not choose whether to exercise her existing capacity to not to exercise it. This is not, in my view, just a matter of interfering with her right to liberty in the sense (already discussed) of her right to personal autonomy in decision making, it is a direct interference with her physical "person" as well. She is truly being treated as a means – a means to an end which she does not desire but over which she has no control.¹⁸⁰

In so finding, the Supreme Court of Canada was upholding the view that the foetus has a lesser right to personal security than the pregnant woman. The potential of the foetus to achieve independent life was insufficient to deprive the pregnant woman of her *Charter* Rights. This analysis is consistent with the application of

¹⁷⁹ *Supra* note 173 at 53, of *R. v. Morgentaler*, per Wilson J.

¹⁸⁰ *Morgentaler* as cited and discussed in *supra* note 177 at 53.

the born alive rule. However, one must bear in mind that the elective abortions that are the subject of this analysis occur in the first or early second trimester. At that time, the foetus has no ability to exist independently. It only has the potential to achieve independence if left undisturbed *in utero*. This case fits into the Framework II analysis in first or early second trimester elective abortions, which generate suitable transplant tissue and, at that stage, the foetus is totally dependent on the pregnant woman. After viability, the tissue is suitable for transplantation and the check to balance the foetus's potential independent existence with the pregnant woman's *Charter* rights becomes more relevant.

In *Tremblay v. Daigle*¹⁸¹, the Supreme Court of Canada focused on the "personhood" of the foetus pursuant to English and Canadian law. The Court looked at the relationship in that case and said:

. . . the foetus would appear to be a paradigmatic example of a being whose alleged rights would be inseparable from the rights of others, and in particular, from the rights of the woman carrying the foetus.¹⁸²

In *Tremblay v. Daigle*, the Supreme Court of Canada found that the foetus does not possess legal status pursuant to Quebec civil law. There is no evidence in

¹⁸¹ *Tremblay v. Daigle*, [1989] 2 S.C.R. 530.

¹⁸² *Ibid.* at 554.

Quebec's *Charter of Human Rights and Freedoms* to demonstrate a legislative interest in recognizing the foetus as a legal person.¹⁸³

In *Borowski v. A.G. Canada*,¹⁸⁴ the Saskatchewan Court of Appeal had broached the issue of whether the foetus was entitled to Federal *Charter* rights. The Supreme Court of Canada did not address the issue directly. In this case, Borowski attacked the therapeutic abortion provisions of the *Canadian Criminal Code*, as a violation of the foetus's right to life under Section 7 of the *Charter* and of its right to equality under Section 15 of the *Charter*. The foetus is not recognized as a separate legal person under Canadian common law or civil law. The Court showed no inclination to change the foetus's legal status. The foetus does not appear to be included in the terms "everyone" or "every individual" in the *Charter*.¹⁸⁵ In the August 1999 case of *R. v. Demers*¹⁸⁶, Mr. Demers appealed his

¹⁸³ *Supra* note 121 (Jackman) at 83. In the *Tremblay v. Daigle* case, Mr. Tremblay relied on the provision of the Quebec *Charter of Human Rights and Freedoms*, to prevent his girlfriend, Ms. Daigle, from having an abortion. Even in the face of the clear opportunity to find that the foetus was a person pursuant to Quebec *Charter*, the Supreme Court declined to do so. "The Supreme Court of Canada found that the foetus does not possess legal status or personality under Quebec civil law" says Martha Jackman at 83 - 84. The Quebec *Charter of Human Rights and Freedoms*, R.S.Q., c. C-12, says in Section 1 that: "Every human being has a right to life, and to personal security, inviolability and freedom. He also possesses juridical personality." Section 2 provides that: "Every human being whose life is in peril has a right to assistance. Every person must come to the aid of anyone whose life is in peril, either personally or calling for aid, by giving him the necessary and immediate physical assistance, unless it involves danger to himself or a third person, or he has another valid reason."

Mr. Tremblay relied upon the Quebec *Charter of Human Rights and Freedoms*. The Supreme Court of Canada said at 552 to 553 of [1989] 2 S.C.R. 530, that: "The task of properly classifying a foetus in law and in science are different pursuits. Ascribing personhood to a foetus in law is a fundamentally normative task. It results in the recognition of rights and duties – a matter which falls outside the concern of scientific classification. In short, this Court's task is a legal one."

¹⁸⁴ (1984), 4 D.L.R. (4th) 112 (Sask. Q.B.); *aff'd* (1987), 39 D.L.R. (4th) 731; *aff'd* (1987), 33 C.C.C. (3d) 402 (Sask. C.A.); [1989] 1 S.C.R. 342.

¹⁸⁵ *Supra* note 183 at 84.

conviction under the British Columbia *Access to Abortion Services Act*. He was convicted of sidewalk interference outside a clinic. He argued that Section 7 of the *Charter*, the right to life, liberty and security of the person, applied to the foetus. His counsel argued that international law that protects the rights of the unborn child to life should be applied. The British Columbia Supreme Court held that Canadian Law governed the situation, not international law. The common law, *Charter* interpretation, Supreme Court of Canada decisions and international law were held to support overwhelmingly the conclusion that Section 7 did not apply to the foetus. The pregnant woman has an absolute and unrestricted right to an abortion. The right to life cannot co-exist with her right to terminate the pregnancy. If the competing interests are to be re-balanced, the job must be done by the legislature, not the courts.

Clearly, the born alive rule is the law in Canada. However, the nature of these seminal cases leads to the conclusion that there is some dissatisfaction with the limits placed upon foetal rights created by the born alive rule.

In the *Morgentaler* case, both the Honourable Justice Dickson and the Honourable Madam Justice Wilson agreed that the protection of the foetus was a valid legislative intent. A way to give effect to the option of implementing some protection of the foetus is to adopt the sentiment expressed by Framework II. It would provide an opportunity to balance the *Charter* rights of the pregnant woman

¹⁸⁶ (1999), 176 D.L.R. (4th) 741 (B.C.S.C.).

against the potential slate of rights to be given to the post-viable foetus. In this regard, Framework II is much more practical than Framework I in that it acknowledges the balance to be sought. Providing some rights to the foetus after the point of viability is to acknowledge that the foetus has achieved the amount of development that would permit it to have a chance at survival if it was delivered at that time. In a way, the balance can be struck by saying to the pregnant woman who is refusing medical treatment: “Your foetus can survive independently. Let it be delivered so it has a chance at life and then you can refuse life-saving medical treatment for yourself”. This scenario, in theory, still permits the pregnant woman to exercise her *Charter* rights to her own detriment. However, the difference would be that if the foetus is viable, she would not be able to refuse treatment to its detriment. If the foetus is not viable, then no amount of technology can permit it to have independent existence; like lungs and liver, and it must be considered more an extension of the pregnant woman's body than an independent entity that is, at that time, physically dependent on the pregnant woman.

Very little change in the law would be required because the *Charter* provides for the “overriding” of an individual's *Charter* rights pursuant to the “reasonable limitations” provisions. It must be accepted that involuntary medical treatment is a violation of an individual's Section 7 and Section 15 *Charter* rights in all situations.

In order to follow this analysis, one has to return to the foundation Section 1 case, *R. v. Oakes*.¹⁸⁷ For a limitation on a *Charter* right to fall within Section 1:

- 1) The need for the limitation must be sufficiently important;
- 2) The means chosen must be reasonable and demonstrably justified, fair and not arbitrary, carefully designed to achieve the objective in question and rationally connected to the objective; and
- 3) The limitation must impair the right of freedom as little as possible and must be proportionate, to the government objective being pursued, insofar as its effect upon the protected rights is concerned. Only under these circumstances will an act that is a violation of the Charter be permitted as a “reasonable limitation” pursuant to Section 1 of the Charter.

This possibility was considered in the *Morgentaler* case. The Honourable Mr. Justice Dickson and the Honourable Madam Justice Wilson agreed that protection of the foetus was a valid legislative intent. Both found that the second element of the *Oakes* test was not met, in that there was a failure to establish a fair and non-arbitrary standard procedure whereby the government’s interest in the safety of the

¹⁸⁷ (1986), 26 D.L.R. (4th) 200, [1986] 1 S.C.R. 103.

foetus might prevail over the pregnant woman's interests, but still impair her rights as little as possible.¹⁸⁸

In the context of harvesting foetal tissue for transplantation, Framework II provides a workable framework because the tissue that is most suitable for transplantation is first trimester tissue. By the time the foetus has developed to the point of viability, the tissue is unsuitable for transplantation because it has differentiated and has begun to lose its immuno-neutrality. Imposing a Framework II analysis does give respect and recognition to the very special nature of the foetal tissue rather than applying the born alive rule.

6 Tort Law

In the area of tort law, the born alive rule has been applied with reasonable consistency. The tortfeasor can be either the physician or the pregnant woman. The cause of action is structured in negligence alleging damages caused to the foetus by the conduct of the tortfeasor. The plaintiff is the child, after it has been born and the damages are manifest. There is not much dispute that a third party, such as a physician, can be held liable for damages caused to the foetus at the instance of the born alive child. There are two significant hurdles to overcome when trying to hold a pregnant woman liable for prenatal injuries to her foetus: first,

¹⁸⁸ P. A. Marten and M. L. Lagged, "Biotechnology and the Commercial Use of Human Cells: Toward an Organic View of Life and Technology" (1989) 5 Santa Clara Computer and High Tech. L. J. 211 at 261. For a thorough discussion of how Canadian law, particularly constitutional and charter laws, might protect reproductive rights and potential limitations on the applicability of other laws, see Martha Jackman, "The
Footnote Continued on Next Page

the question of the legal status of the foetus at the time of the injury and, secondly, the fact that the courts have not been inclined to hear cases where the child has not been born alive.¹⁸⁹

*Bonbrest v. Kotz*¹⁹⁰ in 1946 was the landmark case that changed the law in the United States with respect to allowing recovery for foetal injuries caused by negligence. In 1960, the Supreme Court of New Jersey held that “the child has a legal right to begin life with a sound mind and body”.¹⁹¹

In the case of *Cherry (Guardian ad litem) v. Borsman*¹⁹², a physician performing an abortion was found to owe a duty of care to the foetus as well as to the pregnant woman. In this case, the physician performed the abortion negligently and failed to ensure that all foetal material was removed. The infant was born and suffered from severe and permanent disabilities. Damages were awarded in favour of the mother and the infant plaintiff. In this case, the Court found a specific duty of care to the foetus. The Court recognized the fact that the foetus is not legally entitled to be treated as a “person” until it is born alive. He referred to the *R. v. Sullivan and*

Constitution and the Regulation of New Reproductive Technologies” in *The Royal Commission, supra* note 13 Volume 3 at 1.

¹⁸⁹ *Supra* note 143 at 655; also, *supra* note 108 (Shaw) where she says at 91 it is “well-established that acts of negligence that result in a liveborn infant with injuries, are recognized by the courts.”

¹⁹⁰ 65 F. Supp. 138 (D.D.C. 1946) as cited in *supra* note 108 (Shaw) at 95.

¹⁹¹ *Smith v. Brennan* 31 N.J. 353. 157 A. 2d 497 as cited in *supra* note 108 (Shaw) at 95.

¹⁹² (1990), 75 D.L.R. (4th) 668 (B.C.S.C.), affirmed (1992), 94 D.L.R. (4th) 487 (B.C.C.A.), to S.C.C. refused (1993), 99 D.L.R. (4th) vii (S.C.C.).

*Lemay*¹⁹³ case which cites with approval Robins, J.'s comments in the *Dehler v. Ottawa Clinic Hospital*¹⁹⁴:

While there can be no doubt that the law has long recognized foetal life and has accorded the foetus various rights, those rights have always been held contingent upon a legal personality being acquired by the foetus upon its subsequent birth alive and, until then, a foetus is not recognized as included within the legal consent of "persons". It is only persons recognized by law who are the subject of legal rights and duties.¹⁹⁵

The Honourable Mr. Justice Robins describes the duty of care to the infant plaintiff as arising when she was born and became entitled to claim compensation for the injuries she sustained *in utero*, not for the fact that the abortion failed to terminate her life. He makes the analogy to the infamous thalidomide babies cases. These children suffered injuries *in utero* as a result of their exposure to thalidomide. The injuries became compensable only when they were born alive and not if they were stillborn or miscarried.¹⁹⁶ His Lordship says that the duties of care are not inconsistent because the infant's cause of action arises because of the injuries done to her. If the abortion had been performed properly, no cause of action would have arisen. In this case the distinction between negligence and wrongful life is clearly made. Wrongful life cases deal with the physician's failure to diagnose severe disabilities *in utero* resulting in the birth of a child that would

¹⁹³ Supra note 130.

¹⁹⁴ (1979) 101 D.L.R. (3d) 686; aff'd 117 D.L.R. (3d) 512n, (1990), 29 O.R. (2d) 677n (C.A.); leave to appeal to S.C.C. dismissed on February 3, 1981 at 117 D.L.R. (3d) 512n.

¹⁹⁵ (1979) 101 D.L.R. (3d) 686 at 695.

otherwise have been aborted. The argument upon which this analysis rests is that the disabled person would be better off dead. The Courts in Canada have denied this type of claim because in the words of Stephenson L.J. in *McKay v. Essex Area Health Authority*¹⁹⁷:

To impose such a duty . . . would . . . make a further inroad in the sanctity of human life which would be contrary to public policy. It would mean regarding the life of a handicapped child as not only less valuable than the life of a normal child, but so much less valuable that it was not worth preserving . . .

Of course, the difficulty in these situations is proving the causal link between the alleged tortfeasor's action and the damages. It is difficult to prove that a child would have been born undamaged but for the interference of the tortfeasor's conduct. The principle of foreseeability and causation, as set out in *McGhee v. National Coal Board*,¹⁹⁸ resulted in the finding that the physicians should have foreseen that negligence in the treatment of the pregnant woman could cause harm to the foetus.¹⁹⁹

At the present time, the born alive rule limits any claims for damages to children who must be born alive. The right to recover for damages suffered is not conferred

¹⁹⁶ *Distillers Co. (Bio-Chemicals) Ltd. v. Thompson*, [1971] 1 All E.R. 694, [1971] A.C. 458 (P.C.).

¹⁹⁷ [1982] 2 All E.R. 771 at 781.

¹⁹⁸ [1972] 3 All E.R. 1008 (H.L.).

¹⁹⁹ With respect to the question of remoteness, an exception would have to be made for damage caused to the foetus before the mother was aware of the pregnancy.

on the foetus *per se* but rather on the child that lives after birth.²⁰⁰ Clearly, the born alive rule has granted the survivor of negligent conduct by a physician the right to claim damages inflicted prior to its "life" as long as it is born alive. In considering whether a pregnant woman can cause harm to the foetus, one need only attend a basic prenatal class. There is no dispute that certain conduct can be very harmful to the foetus because of the direct physiological connection to the pregnant woman. The foreseeability test is that much easier to meet. The problem in establishing maternal responsibility for foetal development lies in developing a reasonable standard of care.²⁰¹ The risk of holding a pregnant woman responsible for some minor infraction is a real concern. The foreseeability test in tort law is measured by what a "reasonably prudent" person would do, rather than by the probability of damage occurring. Defining a standard of care depends on the state of medical knowledge and on how the community views that knowledge, so there could easily be dramatic ranges of thought within the community as to the appropriate standard of care to which a foetus is entitled during gestation.

Chernaik would limit the liability of the pregnant woman to gross negligence - a conscious disregard for the welfare of the foetus or conduct representing a high risk of serious injury to the foetus. In other words, conduct which exemplifies conscious and reckless disregard for the welfare of the foetus would result in

²⁰⁰ M. M. Litman and G.B. Robertson, "Reproductive Technology: Is A Property Law Regime Appropriate?" in *The Royal Commission* Volume 3 of the Research Studies *supra* note 12, 233 at 237.

liability.²⁰² Robertson says that a state could prohibit actions by a pregnant woman that might reasonably be thought to kill a viable foetus or cause it to be born in a damaged state.²⁰³

An interesting twist on the application of the born alive rule is that the statutory compensation of a dependent for the loss of life of the person upon whom he is dependent includes recognition of the right of a foetus to make a claim after it is born.²⁰⁴ This is with respect to an accident that occurred while it was *in utero* which resulted in death of the person upon whom the foetus, and subsequently the child, was dependent. It would be unjust to dismiss the child's claim for compensation simply because it was not born at the time of the accident. For example, in the case of *Montreal Tramways Co. v. Leveille*²⁰⁵, the Supreme Court of Canada held

²⁰¹ R. H. Blank, "Emerging Nations of Women's Rights and Responsibilities During Gestation" (1986) 7:4 *The Journal of Legal Medicine* 441 at 443.

²⁰² Chernaik, "Recovery for Prenatal Injuries: The Right of a Child Against its Mother" 10 *Suffolk U.L. Review* 582 at 607 as cited in *supra* note 201 at 446.

²⁰³ John A. Robertson, "Procreative Liberty and the Control of Conception, Pregnancy, and Child Birth" 69 *Va. L. Rev.* 405 at 442; and in *supra* note 201 at 446. In B. Shelley, "Fetus as Patient – A Philosophical and Ethical Perspective" 317 in A. Milunsky & G. J. Annas, eds., *Genetics and the Law III*, (New York: Plenum Press, 1985), Shelley opines that viability is not a good choice for determining the legal status of the foetus because it is a precise indication of the potential for extrauterine survival. Furthermore, the point of viability changes as science changes. Shelley believes that this flexibility is negative. Shelley also highlights the fact that six states have provided protection, and 30 jurisdictions in the United States have recognized a claim by the foetus for wrongful death cases by injuries incurred during gestation. The article is very thorough and provides an excellent review of the principles in the context of American Law.

²⁰⁴ *Fitz Simmonds v. Royal Insurance Company of Canada* (1984), 29 *Alta L.R. (2d)* 394 (C.A.); and in *supra* note 200 at 236.

²⁰⁵ [1933] *S.C.R.* 456 at 464; [1933] *D.L.R.* 337; 41 *C.R.C.* 291 (S.C.C.)

that "it is but natural justice" that, under these circumstances, the child's claim be upheld.²⁰⁶

The foregoing discussion provokes the obvious question: should a pregnant woman be held liable in damages for conduct causing harm to the foetus at any time in the pregnancy, or just in the first trimester (what if she did not realize she was pregnant?), or perhaps only after viability? There is a real overlap between this concept and the concepts set out in discussing the potential applicability of child protection legislation to the foetus.

The July 1999 decision by the Supreme Court of Canada in the *Dobson v. Dobson*²⁰⁷ case was the first decision in Canada to deal with the issue of the potential for tort liability to flow from a pregnant woman to her born alive child who had sustained prenatal injuries as a result of her negligence. In the *Dobson* case, the Defendant was operating her motor vehicle in a negligent manner, had an accident and later that day, delivered her son prematurely. In the result, the child suffers from a number of serious and permanent disabilities.

Nine members of the Court sat in judgment on this important appeal from the New Brunswick Court of Appeal; seven (Lamer C.J., L'Heureux-Dube, Gonthier, Cory,

²⁰⁶ *Supra* note 200 at 237. In this case, the railway was found to be negligent in the maintenance of its premises resulting in a slip and fall of the pregnant woman which accident caused her to spontaneously abort her foetus.

²⁰⁷ [1999] 2 S.C.R. 753 reversing (1997), 189 N. B. R. (2d) 208 (N.B.C.A.) reversing (1997), 186 N.B.R.. (2d) 81 (N.B.Q.B.).

Iacobucci, Binnie and McLachlin) ultimately ruled that the appeal should be allowed and two (Major and Bastarache) dissented.

The relationship between the pregnant woman and the foetus is completely unique. There is no other relationship of such intimate proximity and physical dependence. There is also no other relationship that is as biologically unique as the child-bearing relationship - simply put, only women bear children. Without the bearing of children, the human species will cease to exist.

The law, as it stands, recognizes the independent personality of the foetus only after it has been born alive. The ability of a person to exercise its rights at law is predicated on its existence at the time that the cause of action arose. In certain circumstances, if the cause of action arises at a time prior to live birth, the law may apply a fiction whereby those rights become exercisable upon the incident of live birth but not in the absence of live birth: *Montreal Tramways Co. v. Leveille*²⁰⁸.

In the *Dobson* case, the New Brunswick Court of Queen's Bench (per Miller, J.) held that the infant Dobson had the legal capacity to sue his mother for the injuries that he sustained prior to his birth that resulted from her negligent driving. In reaching his conclusion, Justice Miller addressed two important principles of tort law; first, that there is no doctrine of parental tort immunity in Canadian law and second, that the juridical personality of the foetus *in utero* is an accepted legal

²⁰⁸ Supra note 205.

fiction that permits the accrual of certain legal rights that are exercisable upon live birth.

At the Court of Appeal level (per Hoyt C.J.N.B.), the legal fiction that the foetus did not have juridical personality at the time of the accident but that the right to sue for prenatal injury accrued and became exercisable at the time of live birth was accepted by the Court. Chief Justice Hoyt also noted that it was common ground between the parties that a child could sue his parents in tort and that a child could sue a third party for prenatal negligence. His Lordship made a marked distinction between an action brought by or on behalf of a foetus (such as in *Tremblay v. Daigle*²⁰⁹ and *Winnipeg Child and Family Services (Northwest Area) v. D.F.G.*²¹⁰ cases) and an action brought by or on behalf of a subsequently born child. His Lordship found that the former group of cases were of no application to the case at Bar. His Lordship also distinguished between the damages that could result from lifestyle choices made by the pregnant woman and simple negligent conduct.

His Lordship suggested that the pregnant woman has a general duty of care to drive carefully and that driving could not be characterized as a lifestyle choice which was "peculiar to parenthood". In coming to this conclusion, he relied upon the *Congenital Disabilities (Civil Liability) Act*²¹¹ which exempts a mother from tort

²⁰⁹ [1989] 2 S.C.R. 530, 62 D.L.R. (4th) 634 (S.C.C.).

²¹⁰ [1997] 3 S.C.R. 925, (1997) 152 D.L.R. (4th) 193 (S.C.C.).

²¹¹ 1976 (U.K), 1976, c. 28.

liability for prenatal negligence to her born alive child unless she is in breach of her general duty to drive carefully.

At the Supreme Court of Canada, the appeal was narrowed to a single issue: Should a pregnant woman be liable in tort for damages to her child that arose from a negligent act that occurred prior to the birth of that child?

The majority reasons reflect back on the cases that have permitted compensation to run to children born alive after an incident of prenatal negligence against them. In the *Montreal Tramways* case, the child was found to have the right to sue for prenatal injuries suffered by him as a result of the negligence of the tramcar company. The infant Dobson relied on that case to suggest that he had the right to sue for all prenatal injuries causing damages regardless of the identity of the tortfeasor. Justice Cory, writing for the majority of the Supreme Court of Canada, notes that there is nothing in the *Montreal Tramways* decision to suggest that the Court turned its mind to the very sensitive issue of maternal tort liability for prenatal injury. In the *Duval v. Seguir*²¹² case, the pregnant woman was involved in an automobile accident caused by the negligence of a third party. The child was born alive three weeks later with injuries found to have been caused by the accident. In this case, the result was that the infant plaintiff was permitted to maintain its action against the third party tortfeasor on the basis that it is reasonably foreseeable that if one drives negligently, a potential victim of that negligence could be a pregnant

²¹² [1972] 2 O.R. 686, 26 D.L.R. (3d) 418; aff'd (1973), 1 O.R. (2d) 482 (C.A.).

woman and that damages to the foetus could occur. Thus, when the child is born alive, the cause of action crystallizes and the infant plaintiff is entitled to compensation for his injuries.

Although the reasoning in the foregoing two cases is different, the result is that the infant plaintiff who is born alive with injuries attributable to the negligence of a third party which occurred prior to his birth, is entitled to maintain an action in negligence against the third party to seek compensation for those injuries. However, neither of those cases dealt with the unique situation of the pregnant woman as the tortfeasor.

When considering whether a duty of care can be imposed the well accepted two-fold test in *City of Kamloops v. Neilser*²¹³ must be met. The test set out in *Kamloops* is; firstly, that there must be a sufficiently close relationship between the parties to give rise to the duty of care and, secondly, that there are no overriding public policy reasons to limit or negative the scope of the duty, the class of people to whom it is owed and the amount of damages.

In its analysis, the majority found that the relationship between the pregnant woman and the foetus is totally unique. Cory, J. acknowledged that the pregnant woman and her foetus can be treated as distinct legal entities but notes that McLachlin, J. held in the *Winnipeg v. D.F.G.* case at 945 that "the law has always treated the mother and unborn child as one". Cory, J. says that he assumes for

the purpose of his decision that the pregnant woman and the foetus can be treated as separate legal entities without deciding that point because he finds that the more relevant analysis centres on the second branch (the public policy grounds branch) of the *Kamloops* test.

In considering the second branch, Cory J. finds that the pregnant woman should not be held responsible in tort to the subsequently born child for her acts of prenatal negligence. He states that the policy concerns relate primarily to the privacy and autonomy rights of women and the difficulties inherent in defining a judicial standard of conduct for pregnant women. He specifically states that the case "need not, and should not" be decided on *Charter* grounds because no argument was made on the *Charter* except by one intervenor.

The foremost public policy reason for refraining from imposing a duty of care on the pregnant woman toward her foetus is that it would result in "very extensive and unacceptable intrusions into the bodily integrity, privacy and autonomy rights of women"²¹⁴. The relationship between the foetus and the pregnant woman is particularly unique and cannot be equated to the relationship between the foetus and a third party tortfeasor. At page 769, Cory, J. says that:

Pregnancy represents not only the hope of future generations but also the continuation of the species. It is difficult to imagine a human condition that is more important to society. From the dawn of history,

²¹³ [1984] 2 S.C.R. 2, 66 B.C.L.R. 273, [1984] 5 W.W.R. 1, 10 D.L.R. (4th) 641, 29 C.C.L.T. 97, 54 N.R. 1.

²¹⁴ *Supra* note 209 at 768 - 769.

the pregnant woman has represented fertility and hope. Biology decrees that it is only women who can bear children. Usually, a pregnant woman does all that is possible to protect the health and well-being of her foetus. On occasion, she may sacrifice her own health and well-being for the benefit of the foetus she carries. Yet it should not be forgotten that the pregnant woman - in addition to being the carrier of the foetus within her - is also an individual whose bodily integrity, privacy and autonomy rights must be protected.

The unique and special relationship between a mother-to-be and her foetus determines the outcome of this appeal. There is no other relationship in the realm of human existence which can serve as a basis for comparison. . . . The inseparable unity between an expectant woman and her foetus distinguishes the situation of the mother-to-be from that of a negligent third-party. The biological reality is that a pregnant woman and her foetus are bonded in a union.

As far as the foetus is concerned, the relationship is one of complete physical dependence. The pregnant woman's entire existence, 24 hours a day 7 days a week, is connected to the foetus from conception until birth and must be distinguished from the interaction of a third party with the pregnant woman and the foetus. It is the far-reaching implications for the privacy and autonomy rights of the pregnant woman that may have caused the Royal Commission on New Reproductive Technologies, to recommend specifically that "civil liability never be imposed upon a woman for harm done to her fetus during pregnancy"²¹⁵.

In his reasons for the majority, Cory J. also reviews the position in the United Kingdom and the United States. Generally, in the United Kingdom, the concern for the autonomy of the pregnant woman has resulted in a rule of maternal tort

²¹⁵ Supra note 3 at page 964.

immunity for prenatal negligence with a limited exception for negligent driving based upon the fact that insurance for drivers is mandatory. In the United States, there is no judicial consensus on the issue of maternal tort liability for prenatal negligence.

The most critical consideration raised by the majority of the Supreme Court of Canada is the consideration of the social consequences of recognizing a cause of action by the born alive child against his mother for prenatal negligence (the public policy grounds). Cory, J. acknowledges that:

Women alone bear the burdens of pregnancy. Our society collectively benefits from the remarkably important role played by pregnant women. The impositions by courts of tort liability on mothers for prenatal negligence would restrict a pregnant woman's activities, reduce her autonomy to make decisions concerning her health, and have a negative impact upon her employment opportunities. It would have a profound effect upon every woman, who is pregnant or merely contemplating pregnancy, and upon Canadian society in general. Any imposition of such tort liability should be undertaken, not by the courts, but by the legislature after careful study and debate.²¹⁶

Cory, J. also accepts that there would be "psychological and emotional repercussions for a mother who is sued in tort by her newborn child"²¹⁷. He finds that the "judicial recognition of a cause of action for maternal prenatal negligence

²¹⁶ Supra note 209 at 780 – 781.

²¹⁷ *Ibid.* at 781.

is an inappropriate response to the pressing social issue of caring for children with special needs"²¹⁸.

The other major consideration that Cory, J. addressed in his analysis was the difficulty associated with defining a standard of care and conduct for pregnant women. The New Brunswick Court of Appeal distinguished between a "general duty of care" and "lifestyle choices peculiar to parenthood"²¹⁹. Cory, J. found that the "reasonable pregnant woman" standard was inappropriate because it raised the spectre of judicial scrutiny and potential liability being imposed for "lifestyle choices"²²⁰. This standard would permit the court to determine whether a pregnant woman was conducting herself in accordance with acceptable norms. This could lead to an unfair application of a single standard. The infant Dobson argued that his case is limited to maternal liability for negligent driving and, thus, is more limited than a general standard of conduct. Hoyt, C.J.N.B. accepted the general duty of care owed to the public is also owed to the foetus. However, if the activity is "peculiar to parenthood" or involves a "lifestyle choice" then the subsequently-born child should not be in a position to maintain an action against its mother²²¹. Cory, J. does not accept this position because it "fails to consider the scope of the

²¹⁸ *Ibid.* at 781.

²¹⁹ *Ibid.* at 780.

²²⁰ *Ibid.* at 784.

²²¹ *Ibid.* at 786.

role of a parent. Driving is an integral part of parenting in a great many families"²²². He finds that the "peculiar to parenting" classification of activities would lead to inconsistent results. To impose the general duty of care suggested by the Court of Appeal would be to impose a very broad duty on pregnant women for many activities which are not protected by insurance. Finally, Cory, J. deals with the analogy to the United Kingdom's concept of a motor vehicle exception by stating that the liability is statutorily imposed and is not a function of the common law. In the United Kingdom, insurance for motor vehicle negligence is mandatory. The rationale behind the legislation is to decrease the anxiety of pregnant women who must drive during their pregnancy. The Australian High Court in *Lynch v. Lynch*²²³ accepted the same insurance-based rationale. The problem with this superficially attractive solution is that it makes recovery in tort dependent upon access to insurance. Generally, the existence of insurance should be irrelevant to the determination of liability for negligence. Cory, J. finds that the existence of insurance is not an appropriate basis for the determination of tort liability.

As Viscount Simonds noted in *Lister v. Romford Ice & Cold Storage Co.*, [1957] 1 All E.R. 125 (H.L.) at p. 133: 'As a general proposition it has not, I think, been questioned for nearly two hundred years that, in determining the rights *inter se* of A and B, the fact that one or other of them is insured is to be disregarded'²²⁴

²²² *Ibid.* at 787.

²²³ (1991), 25 N.S.W.L.R. 411 (H.C.).

²²⁴ *Supra* note 209 at 796.

In writing supporting reasons for the majority, McLachlin acknowledges that the goal of those who advocate liability is not to penalize the mother but to permit subsequently-born children with injuries caused by maternal negligence while driving to recover under the mother's liability insurance policy. Unfortunately, the impact of the solution is to create broad-reaching liability for pregnant women with the certain result of unreasonably restricting their privacy and autonomy or accepting category-based distinctions that run contrary to the common law.

The dissent distinguishes between the cases that deal with actions brought by or on behalf of the foetus (like *Winnipeg v. D.F.G.*) and actions brought by or on behalf of a subsequently-born child. The foetus has no cause of action but the subsequently-born child has a cause of action against third party tortfeasors if that child sustained prenatal injuries. The dissent accepts the position that it is a natural progression to permit the born alive child to have an action against its mother just as it would against a third party. Major, J. acknowledges that there are no restrictions on abortion in Canada but "once the child is born alive he is a legal person with all the rights that accompany that status"²²⁵. In dealing with the second branch of the *Kamloops* test, Major, J. states that there is an important legal distinction between the foetus and the born alive child. This distinction is the same distinction recognized by the majority. However, Major, J. states that there are conflicting legal interests in this case – those of the pregnant woman and those of

²²⁵ *Ibid.* at 807.

the born alive child. He disagrees with the majority position that the policy concerns are sufficient to resolve the conflict in favour of negating the born alive child's ability to sue. Major, J. suggests that the duty of care owed by the pregnant woman would be the same duty she owes to everyone to drive carefully. Major, J. takes the position that the pregnant woman's autonomy interests are not restricted because she never had the right to operate a motor vehicle carelessly. Thus, finding her liable for injury to her subsequently-born child is reasonable. Major, J. says that the distinction between negligent driving and life style choices is clear and resolvable based on the fact that driving puts the pregnant woman in contact with the public whereas smoking, drinking, dietary and health-care decisions only impact upon her health. He dismisses the slippery slope arguments as being based on an emotional response.

Major, J. does recognize that:

The special relationship between a pregnant woman and her foetus is a biological fact. This biological fact is significant for the mother-defendant. But it is also deeply significant for the born alive child-plaintiff. The legal or social policy implications to be drawn from that biological fact cannot be ascertained in the absence of equal acknowledgement of the rights of the child.²²⁶

Major, J. concludes that the denial of infant Dobson's right to sue in tort should be rectified legislatively to provide for a born alive child to commence an action in tort against his mother for prenatal injuries caused by her negligent driving.

²²⁶ *Ibid.* at 814.

If the law is to move toward a foetal claim for damages against the pregnant woman for her conduct during the pregnancy, the issue of the legal status of the foetus, at various times during gestation, must be met head on. To allow a child to hold its mother liable for her conduct during the early stages of the pregnancy is inconsistent with the pregnant woman's constitutional right to autonomy and bodily integrity.²²⁷ At common law, there is no duty or responsibility to act or intervene on behalf of the foetus despite its vulnerability to the conduct of the pregnant woman. Until it is born alive, it has no right to hold the pregnant woman accountable for harmful conduct. In the Framework II analysis, the pre-viable foetus does not have sufficient independence to justify giving it separate legal existence. This position is consistent with the common law. Thus, the pre-viable foetus would not have a remedy for negligent conduct by the pregnant woman. However, the same conduct would be negligent conduct during the post-viability stage of gestation based on the theory that, if the foetus has been delivered prior to the negligent conduct, it might have lived and would have escaped the impact of the pregnant woman's conduct. However, the fact that it was *in utero* and unable to avoid the impact of the conduct leads to the conclusion that perhaps the pregnant woman should be liable in damages. The overlap with the concept of extending child protection legislation to cover the post-viability stage of gestation is clear. The theory of Framework II, if applied, leads to a consistent result in these areas of the law.

²²⁷ *Supra* note 201 at 441.

It does seem inconsistent that the law of negligence will hold a third party liable for damages inflicted on the foetus at any time during gestation, but fail to hold the pregnant woman responsible for her negligent conduct that inflicts damage on the foetus during its gestation. The implementation of Framework II would address these apparent contradictions. The effect of a Framework II analysis would be to hold any party, including the pregnant woman, responsible for any negligent (or worse, deliberate) acts that cause damage to the post-viable foetus after it is delivered, albeit early.

7 Devolution of Estates/Property Law:

Another area of law where the legal status of the foetus and its rights at law are discussed, and the born alive rule applied, is the area of the devolution of property upon death.

Since the seventeenth century, unborn and even unconceived children have had a prospective right to inherit property, contingent upon livebirth.²²⁸

The following hypothetical situation is not unforeseeable. The husband of a woman who is pregnant dies. His will provides for the residue of his estate to be divided equally "among his children". Is the foetus one of "his children" for the purpose of identifying the members of this class? If the foetus has no rights or personhood until it becomes a human being, according to the clear wording of s.

²²⁸ *Supra* note 108 (Shaw) at 90 - 91.

223 of the *Criminal Code*, then only the living children of the man would inherit from his estate. However, over time, the law has determined that if the foetus his wife carried at the time of death was born the day before the testator's death, it would have inherited from the estate in the same way as its siblings. To deny the foetus, which the law presumes the man intended to include as one of his children by relying on the general statement about "children", rather than naming them, the right to inherit simply because of the fact that it was not born at the time of death was seen to be unfair. Therefore, the born alive rule has been applied in all provincial dependants' relief legislation in Canada, by including in the definition of "child" a child "*en ventre sa mere*" or "conceived before and born after the testator's death", as is the typical wording. Ontario actually says "conceived before and born alive after the testator's death".²²⁹

²²⁹ *Dependants Relief Act*, R.S.N.W.T. 1988, c. D-4, s.1 "child" includes "a child of the deceased en ventre sa mere at the date of the death of the deceased".

Dependants Relief Act, R.S.Y.T. 1986, c. 44, s.1 "child" includes "a child of the deceased en ventre sa mere at the date of the death of the deceased".

Family Relief Act, R.S.A. 1980, c. F-2, s.1(b), as amended by 1984, c. 55; 1985, c. 21; 1990, c. P-0.7, 1991, c. 11; 1992 c. 21 "child" includes "a child born after the death of a deceased".

The Dependants' Relief Act, C.C.S.M., c. D37 as amended by 1992, c. 46; 1993 c. 29; 1993, c. 48, s. 1(a) child includes "a child conceived before and born alive after the parent's death".

Provision for Dependants Act, R.S.N.B. 1973, c. P-22.3, as amended by 1979, c. 41; 1986, c. 4; 1987, c. 6; 1991, c. 62 child includes a "child en ventre sa mere".

Family Relief Act, R.S.N. 1990, c.F-3, s. 2(a)(ii) child includes "a child of the deceased which is in the mother's womb at the date of the deceased's death".

Testators' Family Maintenance Act R.S.N.S. 1989, c. 465, s. s(a)(ii) child includes "child of the testator not born at the date of the death of the testator".

Footnote Continued on Next Page

The result of the application of the born alive rule in these circumstances is that, if and when the foetus is born alive, it is entitled to inherit as a member of its class of beneficiaries. The same result would occur if the mother died in childbirth, the foetus was delivered alive and her disposition was to her "children".

The logic behind the application of the born alive rule is clear: if the testator or testatrix used general inclusive language to describe the class to which the foetus will belong after its birth, regardless of whether that class is children, girls, boys, redheads or brown eyed blond haired children, the law must presume that the foetus was intended to be a member (depending on its qualifications) of the class. If the testator or testatrix wanted to exclude the foetus, the will could have been worded differently and the exclusion made apparent. Therefore, the intention must be respected.

Is there any need in estate law to go beyond the born alive rule? What would the testator have wanted if the foetus was never born alive, for example, if it was stillborn? There seems to be no need to permit a foetus that does not survive its gestation to inherit because, practically speaking, there is no-one to accept the bequest. It would be an unusual circumstance where a testator desired a share of his estate to go to a foetus that was never born. Under those circumstances, an

Dependants of a Deceased Person Relief Act, R.S.P.E.I. 1988, c. D-7, s.1 includes a "child of the deceased conceived but not born at the date of the deceased's death".

The Dependants' Relief Act, S.S. 1996, c. D-25.01, s.1 includes "a child born after the death of a deceased".
Footnote Continued on Next Page

alternative bequest or gift-over would have to be made in any event. There is no real need, for testamentary purposes, to go beyond the born alive rule.

If a Framework II analysis was applied to the area of estate law, the decision would be whether to give the foetus the right to inherit after the point of viability, and to maintain that inheritance if live birth never occurred. Such an expansion of the law would create confusion because, if the bequest was perfected at viability, then the personal representative of the testator would have to determine the next-of-kin of the dead foetus. In Canada, that next-of-kin would have been the surviving parent, if there is one, or the surviving siblings. These would have been the ordinary beneficiaries in most situations in any event. In most wills, the residue of the estate is left to any or all of the surviving spouse and children.

However, the application of a Framework II analysis does not need to create the aforementioned mischief. In providing the post-viable foetus with same rights at law, one need not provide the post-viable foetus with all the rights of a fully-entitled human being. Those rights could reasonable exclude the right to own property. Certainly, a Framework I or Framework III analysis would create even greater mischief.

Thus, the area of estate law and the testamentary disposition of property has been governed by the born alive rule, consistently. The application of a Framework II

Succession Law Reform Act, R.S.O. 1990 c. S26; 1994, c.27; 1997, c.25, Sched. E; 1999, c. 6, s. 1 includes a "child conceived before and born alive after the parent's death".

analysis, that would provide testamentary rights to the post-viable foetus, would create technical difficulties and would not result in a greater recognition of the foetus's potential to achieve independent human life. The application of a Framework II analysis to the rights of the foetus should, in my opinion, leave the born alive rule intact in its application to the testamentary disposition of property.

8 Conclusion:

Historically, live birth was the earliest time in the reproductive process that the existence of a child could be verified. Therefore, there was no basis upon which the foetus could be endowed with any of the attributes identified with "humanness" prior to that time. For example, quickening (the spontaneous beating of the foetal heart) and viability (the point in gestational development when a foetus could survive independently of the woman) were unidentifiable gestational milestones. Science has begun to de-mystify the process of gestational development. Now, the various milestones can be identified, observed and compared to other foetuses. The development of the foetus can be viewed by ultrasonography and the exact extent of the physical resemblance or lack thereof of the foetus to a baby can be noted.

The law has adapted to this change. Originally, the law could only give legal consideration to the child after it was born. With improvements in science that have revealed the "humanness" of the foetus and the advent of earlier viability dates, the law has responded by implementing the born alive rule. Simply put, the

born alive rule permits a child, having been born alive, to enforce its rights at law with respect to circumstances that occurred while it was in *utero*, as a foetus.

The born alive rule is a move towards the recognition of some form of foetal rights. It acknowledges that the foetus is human and entitled to the rights of a living human being, but only as long as it is born alive at some time. The born alive rule makes sense with respect to the foetus coming forward and enforcing its own rights. Unfortunately, the foetus cannot come forward to address its legal concerns if it is not permitted the chance to be born alive. But it has been recognized retroactively to enforce its rights.

In the context of the transplantation of foetal tissue for therapeutic purposes, the born alive rule is not particularly helpful in determining the ethical and legal issues that arise because the foetus/donor is never born alive. The ordinary scenario for the use of foetal tissue for transplantation is that the elective abortion occurs in the first trimester and the tissue is harvested from that process. Therefore, consideration must be given to the three frameworks of analysis discussed earlier. Framework III is the most consistent with the born alive rule in this context, because the foetus is never born alive and therefore requires no special consideration. Framework I is the most difficult analysis to reconcile with the born alive rule. It is somewhat consistent with the born alive rule insofar as the foetus, if born alive, retroactively enforces the rights of a fully entitled human being. However, it is difficult to reconcile the legality of elective abortion with Framework I. In a Framework I analysis, elective abortion is murder and, therefore, not only

prohibited but punishable. Without elective first trimester abortion, there would be no source tissue for transplantation.

Beyond the legal considerations, one must consider the impact of the law on society and the morals espoused by that society.²³⁰ Bernard M. Dickens, a prolific and thoughtful writer in the field of bioethics, concludes that:

Human rights relate morals to law, since the origin of human rights expressed in laws lies in a moral version of human status and interactions . . . [H]uman rights therefore symbolize morality and commerce represents markets.²³¹

Bertil Wennergren makes an interesting observation with respect to the relationship between morals or values and the establishment of social norms.

The creation of an ethical norm or principle does not always happen through a conscious effort. But when it does, the process differs scarcely from that of legislation. On the basis of relevant facts, you assess what is desirable and not desirable and then formulate the

²³⁰ The Warnock Committee: Department of Health and Social Security, *Report of the Committee of Enquiry into Human Fertilization and Embryology* @ 11.2 at 66 (1984); and *supra* note 126 at 85. The Warnock Committee drew an arbitrary line at 14 days post-conception based upon a general understanding of basic embryology. Prior to implantation, the zygote is a collection of identical totipotent or undifferentiated (identical cells capable of differentiation to become distinct and different) cells. At implantation - 14 days after conception - the zygote begins to differentiate and is called an embryo. The embryo has achieved a level of individuality based upon its unique genetic makeup. However, until implantation of the zygote into the uterine wall has occurred, the potential for life is undetermined. In drawing an arguably arbitrary line in time, the Warnock Committee was seeking to establish a state of development when the embryo became deserving of protection. However, the Warnock Committee did not extend its analysis to a consideration of how a similar distinction can be drawn with respect to the foetus throughout its development. The Polkinghorne Report concurs generally with the Warnock Committee Report, in that it says that foetal tissue is worthy of special respect due to its human origin and should not form any part of a commercial transaction but conceded that the protection afforded to an embryo might be weighed against other interests. Some members of the Committee found moral distinctions between embryos available by chance and embryos created solely for the purpose of providing research material. According to that viewpoint, it is ethically inconsistent to endow the embryo with special status as a result of its ability to achieve independent life but to permit it to be created with no intention of allowing it to achieve life.

²³¹ B. M. Dickens, "Morals and Legal Markets in Transplantable Organs" (1994) 2 *Health Law Journal* 121 at 124.

norm. But you will never get an "ought" just from an "is". In order to be able really to assess the facts and tell what is to be considered as good or bad, right or wrong, you need to have values as touchstones. And if your assessment is to become not just a subjective one but one with general bearing, the values have to be values that fully rational people support.²³²

I have chosen Framework II as a practical middle ground from which the analysis of the ethical and legal issues can be considered. In a Framework II analysis, the post-viable foetus would be entitled to enforce its rights as a human being through a next friend prior to or after its birth. In this regard, the born alive rule is maintained with relative integrity. In the case of a pre-viable foetus, it may be electively aborted in accordance with current law and the tissue harvested for therapeutic transplantation.²³³ Framework II represents the alternative with the least amount of negative impact on the law as it stands in many important areas and the most opportunity for development of this very beneficial treatment.

²³² Bertil Wennergren, "Human Rights of an Embryo" (1991) 2:1 *International Journal of Bioethics* 46 at 47.

²³³ Eike-Henner W. Kluge, *Biomedical Ethics In a Canadian Context* (Scarborough: Prentice-Hall Canada Inc., 1992) at 183, where Kluge supports the Framework II analysis.

ETHICAL ISSUES

1 Introduction

As indicated earlier, I have chosen Framework II as the most reasonable. Briefly, the Framework II analysis states that the foetus, after it has reached the stage of viability, is entitled to be recognized as somewhat independent of the pregnant woman in light of the fact that it could be delivered and have the potential to maintain its own existence separate from her. However, prior to viability, the foetus is so intertwined with the pregnant woman that it cannot logically assert any legal rights independent of her. The ethical issues raised by the possibility of using foetal tissue for therapeutic transplantation will be considered in this context. Therefore, as the only tissue that is suitable for transplantation is derived from elective first trimester abortions, that foetus is, by definition, a pre-viable foetus and is not entitled to exert any legal rights independent of or in conflict with the pregnant woman. The tissue that results from that abortion is tissue that was intimately connected with the pregnant woman.

Many of the ethical issues raised by the use of foetal tissue for transplantation²³⁴ have their genesis in the fact that first trimester elective abortion is the most

²³⁴ *Supra* note 3 at 995 – 996, sets out *Proceed With Care's* recommendations regarding the ethical uses of foetal tissue.

common and best source of foetal tissue.²³⁵ If the morality of elective abortion is linked to the question of whether foetal tissue should be used for transplantation purposes, the pure logic of an analysis of the ethical issues is lost. It is no wonder that two vocal groups at the hearings upon which *Proceed With Care: The Final Report of the Royal Commission on New Reproductive Technologies*²³⁶ were the Alliance for Life and the Canadian Abortion Rights Action League. The gist of their respective and diametrically opposed views are set out at page 972. Although they are a bit lengthy, they bear repeating. The Alliance for Life said:

Scientific research should not be conducted on embryos or on fetal tissue resulting from induced abortion, nor should such tissue be utilized for transplantation into other people suffering from disease. Such uses would legitimize abortion [and] have the potential of encouraging acceptance of it, and of increasing the type and numbers of abortions, as well as the gestational age at which [abortion] is performed. In all cases of induced abortion it is impossible to get proper informed consent.²³⁷

The Canadian Abortion Rights Action League said:

It is argued that women will be forced to become pregnant and to abort. We point out that there is no evidence to support this theory. Women in society in general need to be vigilant against coercion of any kind for any reason. It is argued that commercialization of fetal tissue will proliferate. Again, this is an example of scare-mongering. Canada has no tradition of commercializing donated blood or body parts It is said that women will be asked to delay abortions to

²³⁵ *Supra* note 94 at 32. McCullaugh states that foetal pancreas cells should be mature at 16-18 weeks, foetal brain cells for use in treating Parkinson's patients are at their best at approximately 9 weeks, and foetal liver cells should be less than 12 weeks old to minimize Graft versus Host reactions.

²³⁶ *Supra* note 3.

²³⁷ A. Kiss, "Alliance pour la vie", Public Hearings transcripts, Montreal, Quebec, 21 November, 1990 as cited in *Proceed With Care* at 972.

maximize chances of success for recipients. However, where research is underway, there is a clear policy to separate the abortion procedure from fetal tissue transplant therapy.

Finally, opponents argue that fetal [tissue] transplantation shows disrespect for life and a respect for fetuses. This argument can only be made by people who wish to grant legal status to the fetus. In fact, such an argument grants a greater status to fetus[es] than to people, inasmuch as research on human cadavers is an established part of medical education and practice and does not imply a disrespect for human life nor for human beings.²³⁸

Interestingly, no-one favoured the commercialization of foetal tissue. Everyone was opposed to the:

. . . exploitation of vulnerable women, the deliberate undertaking of a pregnancy to produce fetal tissue for a particular use, and the use of abortion methods that were not in the best interests of the pregnant woman.²³⁹

²³⁸ *Supra* note 3 at 972.

²³⁹ *Ibid.*

It is possible and important to separate the arguments about the morality of elective abortion from those relevant to the use of foetal tissue for transplantation.²⁴⁰

For opponents of elective abortion and foetal tissue transplantation, it is an effective strategy to link the source of the foetal tissue to its use. Of course, supporters of foetal tissue transplantation separate the concepts.²⁴¹ The most extreme opposition to the use of foetal tissue for transplantation characterizes conception as the dawning of personhood, as “life” beginning at conception. Any intrusive intervention or subrogation of the foetus is ethically unacceptable because it is akin to interfering with or murdering a child.²⁴² The argument is premised upon the notion that a person exists at conception; thus, a person is killed by the abortion. Images are used to evoke sympathy by visualizing the

²⁴⁰ By contrast, McCullaugh (*supra* note 94 at 29-30) suggests that “it is appropriate to recognise that [abortion’s] role as the mainstay for the acquisition of human fetal tissue will inevitably have some bearing on ethical assessment programs for fetal tissue transplantation. While these are likely to be a range of opinions regarding the impact of each event on the ethical status of the other . . .”. For example, certain mechanical methods of abortion have proven to yield higher percentages of viable cells than chemical methods; see also James F. Childress, “Statement to the Advisory Committee to the Director, NIH” in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda Maryland at C7 where Dr. Childress says that “the fact that fetal tissue becomes available through an elective abortion should not lead society to reject its use in transplantation research. It is possible to use fetal tissue following elective abortions without complicity in abortions and without directly encouraging abortions.”; see also John A. Robertson, “Rights, Symbolism, and Public Policy in Fetal Tissue Transplantation” (1988) 18:6 *Hastings Center Report* 5 “[a]n essential distinction in the fetal tissue controversy is between procuring tissue from family planning abortions and procuring tissue from abortions performed expressly to provide tissue for transplant. Although opponents of fetal tissue transplantation have often conflated the two, tissue from family planning abortions may be used without implying approval of abortions to produce tissue. Indeed, with ample tissue available from family planning abortions, the latter scenario may never occur.”

²⁴¹ Nicolas P. Terry, “Politics and Privacy: Refining the Ethical and Legal Issues in Fetal Transplantation” (1988) 66 *Washington University Quarterly* 523 at 523.

²⁴² *Ibid.* at 524.

foetus as a fully-formed, independent, cooing baby and by suggesting that the use of the tissue is inseparable from the putative murder (abortion) of the baby.²⁴³ Ann Murray Tomlins of the Council for Life espouses a common objection that anti-abortion groups would argue to oppose the Victoria General Hospital, Halifax, Nova Scotia's attempt to transplant foetal tissue into Parkinson's patient's brains.²⁴⁴ She said:

Our major concern is the transplants depend on the use of deliberate killing of unborn human beings. (emphasis added)

The extreme nature of this position is obvious; however, it remains a commonly held viewpoint.

Nicolas Terry²⁴⁵ confirms that the most:

. . . extreme position likely to be encountered in organized opposition to fetal tissue transplantation may be characterized with the slogan 'fetus as person.' At this extreme, an intrusive intervention involving the fetus, or the subjugation of the interests of the fetus (interests presumably identified by persons) to the interests of a person is considered ethically unacceptable. In this camp, abortion is regarded as the ultimate offence. Adherents to these views immediately integrate any consideration of fetal tissue transplantation into the ethics of the preceding abortion, leading to statements such as '[t]he abuse is not in the sale of those tissues, but in killing the baby in the first place.'

²⁴³ *Ibid.* at 524.

²⁴⁴ D. Jones, "N.S. hospital set to try transplant of fetal tissue to treat Parkinson's", *The Globe and Mail* (21 February 1990) A1 at 1.

²⁴⁵ *Supra* note 241 at 524.

The emotional tenor of this argument is clear and persuasively conveyed. If one accepts the premise that the foetus is a person, then abortion is the deliberate killing of that foetal person and morally reprehensible. If abortion is morally reprehensible, how can the use of foetal tissue for transplantation be supported if it depends totally on the availability of electively aborted fetal tissue? There is logic to the argument as long as the battle over the availability of elective abortion is still being fought.

By way of comparison, society generally accepts the process of whole organ donation for the purpose of transplantation. The Royal Commission on New Reproductive Technologies conducted some surveys of Canadians as part of their report.²⁴⁶ Some of the results are, as follows:

1) 44% had heard “something” about foetal tissue research and 37% had not heard anything.

2) When told that “the tissue from an unborn foetus is being used for organ donation or to control some diseases in adults and children”; 34% believed “that is a positive development and should be encouraged” and 52% were undecided.

3) 31% said that they would support the research if the foetus was going to be aborted anyway; 48% said they would support the research if the foetus was “miscarried”; 18% said they would not support the research under any circumstances.

²⁴⁶ *Supra* note 13 (Volume 2 of Research Studies) at 107 and 236 - 241.

4) Over 80% felt that termination of a pregnancy should be permitted if a problem was revealed but half of those 80% felt it should only be permitted in certain circumstances.

5) 29% were aware foetal tissue was being used to treat disease and could name a disease; 13% were aware but unable to name a disease, 57% were not aware, and 1% failed to respond (Table 14).

6) After being informed that foetal tissue could be used to treat Parkinson's Disease and Alzheimer's Disease, 10% said foetal tissue could be used to treat Parkinson's Disease and Alzheimer's Disease, 10% said foetal tissue should not be used under any circumstances; 37% said it should be restricted to tissue derived from natural miscarriages and stillborn foetuses; 48% said treatment should be permitted with all types of foetal tissue and 5% failed to respond (Table 15).

7) 84% felt foetal tissue should be used to treat fatal diseases; 77% approved of the use of foetal tissue for medical research; only 18% said foetal tissue could be used for commercial purposes such as testing cosmetics (Table 16).

8) 72% said they would undergo foetal tissue therapy if they were suffering from a serious disease that could be treated; 13% said they would not; 8% tried to restrict the source of the foetal tissue.

9) 33% felt that the use of foetal tissue would create a demand for aborted foetuses and the number of abortions would increase; 54% disagreed; 10% were neutral.

10) 56% agreed that the decision to abort and the decision to use the foetal tissue could be kept separate; 23% disagreed; 13% were neutral.

Clearly, the act of transplanting tissue from one person to another cannot be the source of the objection to the use of foetal tissue for therapeutic purposes.²⁴⁷ The difference is that foetal tissue may be obtained only from an elective abortion and, therefore, from the death of the foetus. It is critical to remember that the donation of whole organs which results in the donor's death is ethically impermissible.²⁴⁸

A distinction must be made between permitting elective abortion and permitting the use of foetal tissue for transplantation. Ultimately, it is essential to analyze the propriety of foetal tissue transplantation in the absence of an opinion as to whether elective abortion ought to be permitted. The fact is that elective abortion is permitted at law. The question is: Should the product of the legally permitted elective abortion be utilized for therapeutic purposes by being transplanted or should it be discarded?²⁴⁹

²⁴⁷ The fact that little objection exists to foetal tissue transplantation seems to be because transplantations appear to be generally acceptable. Most objections to foetal tissue transplantation deal with the tangle of abortion and foetal tissue. The attacks do not focus on the tissue transplantation aspect but on the source of the tissue: *supra* note 241 at 531.

²⁴⁸ Patricia A. King, "Statement to the Advisory Committee to the Director, NIH" in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda, Maryland at C21. Ms. King identifies the analogy between research/transplantation of foetal tissue and organ transplantation, which is "an acceptable therapeutic procedure in our society". She highlights the fact that foetal tissue transplantation is an "important and promising area of research". In the case of therapeutic organ transplantation, "we have separated the issues of obtaining organs, and the means by which we obtain those organs, from the question of who will receive the organs and, indeed, under what circumstances those recipients might be designated."

²⁴⁹ *Supra* note 240 (Robertson) at 6 where he states "[t]he key question is whether women who abort to end unwanted pregnancies may donate the aborted fetuses for use in medical research or therapy by persons who have no connection with or influence on the decision to terminate the pregnancy. One's views on abortion need not determine one's answer to this question, because the abortion and subsequent transplant use are clearly separates." He goes on to mention the complicity and legitimization arguments and concludes that they are insufficient to justify a public policy banning or not funding research or therapy using electively aborted foetal tissue. (emphasis added)

There are several arguments raised as objections to the use of foetal tissue for therapeutic purposes. Those arguments are:

- 1) The complicity argument;
- 2) The legitimization argument;
- 3) The potential negative impact on foetal welfare and respect for the human foetus argument;
- 4) The commodification or the creation of the free market in human tissue argument; and,
- 5) The negative impact upon maternal welfare argument.

The complicity and legitimization arguments are founded on the assumption that elective abortion is immoral and ought not to be permitted. James Bopp, Jr. espouses the view that "abortion is, in fact, the taking of a human life and, thus, is morally objectionable except for the gravest of reasons".²⁵⁰ In my opinion, these arguments fail to accept that first trimester elective abortion is permitted at law, making the morality of elective abortion irrelevant to this discussion. The debate regarding the use of foetal tissue must commence after the elective abortion has occurred. At present, there is no law controlling the motivation of women at the time that a pregnancy is initiated.

²⁵⁰ James Bopp, Jr. "Statement to the Advisory Committee to the Director, NIH" in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda, Maryland at C11.

The question of foetal welfare is a legitimate concern. Clearly, society has determined that the foetus is worthy of some measure of respect. The born alive rule demonstrates the intent to provide the foetus with acknowledgement of its humanness without interfering unduly with the pregnant woman's autonomy. The concern about foetal welfare is also grounded in the morality of abortion debate although it does go a bit further. The objectors view the foetus as the most vulnerable member of society. Therefore, if one believes that abortion is murder, the foetus's welfare is sacrificed for the recipient patient with little concern for the fact that the foetus pays for its altruism with its life. Once foetuses are exploited this way, what will be the next vulnerable group attacked?

The commodification or creation of a free market argument follows the classic "slippery slope" approach. It is founded on the assumption that human tissue should never be the basis of a free market system because it should be respected as ethically superior to any saleable commodity. The possibility exists that the demand for foetal tissue may increase the need for an ongoing and larger supply if it proves to be a positive treatment option for a large number of patients.²⁵¹

The maternal welfare objection is linked to the commodification/creation of a market in human tissue argument. This argument goes further than the position

that "human tissue should never be the subject of a free market" by contending that "if [foetal tissue] is the subject of a free market, desperate women will make socially undesirable choices or be forced to make unwilling donations".²⁵²

Stacked up against these five formidable bases for objection are the ethical reasons in support of using foetal tissue for therapeutic transplantation:

- 1) The utilitarian or waste - not, want-not argument;
- 2) The respect for the human quality of the foetal tissue argument;
- 3) The redemption of tragedy argument; and,
- 4) The advancement of technology argument.

The utilitarian argument can be called the "waste-not, want-not" argument. Elective first trimester abortion is legal. Foetal tissue from this procedure is available. The choice is to throw it away or to use it as donor tissue for therapeutic transplantation. Waste-not, want-not!

²⁵¹ *Supra* note 241 at 527 – 528, where Nicolas Terry suggests that the perceived surplus of foetal tissue may appear to be diffused by the number of elective aborted fetuses, suggesting that one to two million elective abortions are performed annually in the United States. However, he points out that 10 million people in the United States are insulin-dependent diabetics. If a program of transplanting insulin-producing foetal pancreas cells was undertaken, the demand could easily outstrip the supply. The two and one half million Alzheimer's patients and 500,000 to one million Parkinson's Disease sufferers would have to be added to the list of potential recipients. Clearly, the risk of demand exceeding supply is a real concern.

²⁵² *Supra* note 241 at 525 where Nicolas Terry links considerations of the motivation of a pregnant woman to seek an abortion with the fear of commercialization and exploitation of women who may be willing to bear tissue for profit.

The respect for human tissue is similar to the utilitarian argument in that it is based on the fact that foetal tissue, which is suitable for transplantation is available. Is it more respectful for that human tissue to be used in an attempt to save the life of another human being or to be thrown away with other surgical garbage? The proponents of this argument would submit that it is disrespectful to the foetus to treat its remains like last night's leftovers.

The redemption of tragedy argument has a different focus than the foregoing two arguments. It focuses on the emotional welfare of the formerly pregnant woman after the abortion. The woman who terminates her pregnancy may feel a sense of loss that might be alleviated by the use of the foetal tissue for positive, altruistic purposes.

Finally, the advancement of technology argument focuses on the "big" picture. Today's level of technology suggests that foetal tissue may help to alleviate some of the severe symptoms of Parkinson's Disease. In order for science to progress, foetal tissue transplantation may be used as a stepping stone to the development of better technology.

2 Arguments in Opposition to the Use of Foetal Tissue for Transplantation:

a) The Complicity Argument:

A common objection to the use of foetal tissue for transplantation purposes is the belief that elective abortion is morally reprehensible. One can argue that there is a

moral obligation to refrain from using foetal tissue because it indicates an indifference to the means of foetal death and constitutes complicity²⁵³ in the evil of the abortion.²⁵⁴ This argument is firmly rooted in the parameters established in the Framework I analysis. Framework I describes the foetus as a fully entitled human being from the time of conception. This human being is impressed with the same set of rights at law as if it was a child. Therefore, elective abortion is deliberate, pre-meditated murder. Murder is socially reprehensible and, therefore, abortion is similarly reprehensible.

The complicity argument is misplaced because of its inherent reliance on the assumption that elective abortion is immoral, while declining to recognize the fact that first trimester elective abortion is legal. The fact that first trimester abortion is legal does not make it moral. However, it does mean that the morality of abortion is irrelevant. The view that abortion is immoral cannot be the foundation of a sound argument because the legality of abortion will not be affected by the use, or lack of use, of the resultant foetal tissue. The tissue will exist until the occurrence of first

²⁵³ See the *Concise Oxford Dictionary*, 7th ed., s.v. "complicity" as "partnership in wrongdoing".

²⁵⁴ *Supra* note 2 at 154; see also *supra* note 250 at C11 where Mr. Bopp says that "[s]ince tissue for transplant was obtained from induced abortions, the essential ethical question before the Panel was whether or not the beneficial prospect of transplantation research is subverted by its association with induced abortion. " Bopp takes the position that it is inconsistent for the Panel to say that they do not want to encourage abortion for the purposes of donation but that abortion is not immoral. He points out that if abortion is not immoral, why not encourage it? Bopp also argues that the use of foetal tissue for transplantation will legitimize and encourage abortions by women who might not have had an abortion and will create a market force for the commercialization of foetal tissue. At C12 Bopp suggests that women facing a problem pregnancy are ambivalent toward abortion and would be persuaded by the potential for the donation of this tissue for transplantation.

trimester elective abortion ends. Regardless of these facts, the complicity argument is made by many pro-life activists and deserves consideration.

There are four aspects to the complicity argument in the context of elective abortion:

- 1) One must bear responsibility for particular immoral abortions.
- 2) One must bear responsibility for the practice of abortion generally.
- 3) Activities that imply the approval of immoral abortions are immoral in and of themselves.
- 4) It is immoral to benefit knowingly from the immorality of abortion.²⁵⁵

The question of whether a particular abortion occurs for a moral or immoral reason is impossible to assess. The probability of a situation where women would abort solely for the purpose of creating foetal tissue is impossible to determine. Abortions occur for a multitude of reasons that are completely unrelated to the end use of the foetal tissue.²⁵⁶ In the end, the one common reason for a pregnant

²⁵⁵ *Supra* note 2 at 252.

²⁵⁶ *Supra* note 81 at 448;

The three most common reasons for a women procuring an elective abortion are as follows:

- a) A child would interfere with work, school or other responsibilities (75%);
- b) The mother cannot afford to support the child (66%); and
- c) The mother has no desire to be a single parent (50%) (*supra* note 2, page 142).

Footnote Continued on Next Page

woman to elect to abort is because she does not want the pregnancy to continue. The complicity argument suggests that there is a shift from bearing the moral responsibility for particular abortions to bearing the moral responsibility for the practice of abortion generally. In this regard, I concur with the following statement:

Causes . . . must precede effects, and so one cannot be complicit in some misbehaviour by approving it, or failing to sanction it, or failing to disassociate one's self from it after the fact . . .²⁵⁷

The suggestion is that one implicitly approves of an immoral activity (abortion) unless one detaches one self from it, withdrawing one's approval in a visible and meaningful manner. Thus, a meaningful and visible disapproval of the use of foetal tissue for transplantation purposes goes hand in hand with the meaningful and visible withdrawal of approval of elective abortion.

James Burtchaell, a vocal proponent of the complicity objection, suggests that activities that imply the approval of abortion are immoral in and of themselves.²⁵⁸

Rape or incest accounts for only one percent (1%) of abortions and diagnosed foetal defects account for approximately thirteen percent (13%) (*supra* note 2 at 142). The likelihood that a woman who did not intend to abort would be persuaded to do so in order to donate the foetal tissue transplantation is unlikely. There are no documented cases of deliberate conception and abortion to aid an anonymous third party. There is some anecdotal evidence that a woman might consider conceiving and aborting to assist a family member. However, there is no need to be so dramatic because there is no physiological advantage to be gained by transplanting related donor tissue rather than non-related donor tissue. *Supra* note 7 has an excellent discussion of these points.

²⁵⁷ *Supra* note 2 at 253.

²⁵⁸ James T. Burtchaell, "Statement to the Advisory Committee to the Director, NIH" in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda, Maryland at C23 - C24. Burtchaell reiterates the complicity argument in slightly different terms. He says that it is impossible to distance foetal tissue transplantation from the immorality of elective abortion. He makes the analogy to Nazi scientists with respect to being distant from the decision-making process that led to the experiments being conducted. He suggests that the Nazi physicians are, and anyone who uses the information obtained from the experiments, complicit after the fact and that the same argument applies to foetal tissue transplantation.

Complicity occurs just by acquiring benefits from the use of foetal tissue. Furthermore, by entering into a "supportive alliance" with the "evil" that permits the use of the foetal tissue, the "evil" is propagated.²⁵⁹ Burtchaell overlooks the clear analogy to suicide and homicide victims whose whole organs are used for transplantation. He does not accuse transplant surgeons or recipients of whole organ transplants with entering into a "supportive alliance" with suicide victims or murderers.²⁶⁰ An additional argument raised under the complicity umbrella is that the actual procurement of the tissue from the foetus by virtue of the abortion might cause pain to and does cause the death of the foetus.²⁶¹ It has not been proven that a foetus at this early stage of gestational development has sufficient neurological sophistication to feel pain. Obviously, the abortion does cause the death of the foetus.

Extreme opponents of foetal tissue transplantation like Burtchaell, Bopp and Aron A. Moscona²⁶², often make the analogy to the Nazi concentration camp experiments. The argument is that abortion is so immoral that to gain any benefit

²⁵⁹ *Supra* note 81 at 450; see also *supra* note 250, at C11 – C16 and *supra* note 240 (Robertson) at 6 for Robertson's comments regarding Burtchaell's "supportive alliance" theory.

²⁶⁰ *Supra* note 17 at 32 acknowledges that "[n]o one would seriously argue that the surgeon who transplants the homicide or accident victim's kidneys, heart, liver, or corneas or the recipient who receives it become accomplices in the homicide or accident that made the organs available. Nor is the medical student who uses the cadaver of a murder victim to study anatomy an accomplice in that murder"; also *supra* note 240 (Robertson) at 6.

²⁶¹ *Supra* note 7 at 152.

whatsoever from the practice of abortion is, in and of itself, an immorality.²⁶³ In fact, to use any of the results of the admittedly horrendous unethical medical research would “make us retroactively accomplices in the Nazi horrors”.²⁶⁴ The killing of Jews and other “non-desirables” in Nazi concentration camps described the height of immorality and human tragedy. Proponents of this aspect of the complicity argument equate elective abortion to the atrocities of the Nazi concentration camps. The distinction they fail to acknowledge is that the Jews in the concentration camps were alive but the foetus is dead when its tissue is used for transplantation. For better or worse, some, medical insight was gained as a result of those experiments. To suggest that those results ought to be discarded because of the extent of the immorality of the experimentation is logical to some people who oppose foetal tissue transplantation on this basis. However, it seems to be compounding the harm visited upon the victims to acknowledge that beneficial information was acquired by their suffering and to pretend it does not

²⁶² Dr. Aron A. Moscona, “Dissenting Statement”, *Report of the Human Fetal Tissue Transplantation Research Panel*, Consultants to the Advisory Committee to the Director National Institute of Health, December 1988 at 27, supports Burtchaell’s argument that “transplantation research represents complicity in abortion and is, thus, a ‘perversion of both the scholar’s and the healer’s work’ similar to the crimes of the Nazi’s and the Nazi ‘doctors’”.

²⁶³ *Supra* note 10 at 280. Interestingly enough, Rabbi J. Bleich, a participant on the Panel, dissents from this position. One would have expected that a Rabbi would have been the strongest voice against the use of scientific data acquired by the atrocious treatment of Jewish prisoners in concentration camps. However, Rabbi Bleich expressed the view that the ultimate user of the information does not, by the use, become an accomplice to the original evil in his statement, *Report of the Human Fetal Tissue Transplantation Panel*, Consultants to the Advisory Committee to the Director National Institute of Health NIH, December 1988 at 39 - 43; also see C. S. Campbell, “Awe Diminished”, (1995) 25:1 Hastings Center Report 44.

²⁶⁴ James T. Burtchaell, “Case Study: University Policy on Experimental Fetal Tissue” 1RB: A Review of Human Subjects Research 10:4 (July/August 1988), 7 – 11 at 10, as cited in *supra* note 240 (Robertson) at 6. Robertson goes on to comment that Burtchaell’s argument ignores the “clear separation between the perpetrator and beneficiary of the immoral act that breaks the chain of moral complicity for that act”.

exist.²⁶⁵ Similarly, the results of the unethical research performed on retarded children at the Willow Brook Institute in the 1960's²⁶⁶ and the syphilis studies conducted at Tuskegee between 1932 and 1972²⁶⁷ were unquestionably unethical. However, to throw away the knowledge gained by the suffering inflicted on these individuals is to guarantee that their suffering goes for nought.²⁶⁸

Until such time as society deems that it is immoral or illegal for elective abortions to occur, one must accept that abortions will occur and then make a decision as to whether it is appropriate to use the resulting tissue for transplantation or to be obliged to dispose of it.²⁶⁹ The complicity argument is not a complete answer to the question: should foetal tissue transplantation for therapeutic purposes be

²⁶⁵ *Supra* note 7 at 114.

²⁶⁶ During these studies, retarded children were infected with Hepatitis virus in an effort to develop a vaccine. Their experiments succeeded in doing so. *supra* note 254 at 114.

²⁶⁷ During these studies, 400 Negro men with syphilis were deliberately denied treatment to see what the effect of the disease would be, as it ran its course, even though penicillin had been found to be an effective treatment. The result of the study was that 28 out of 107 men died; *supra* note 254 at 114.

²⁶⁸ The flagrantly unethical conduct that occurred in each of these three examples is the subject of extensive academic writing and is beyond the scope of this paper. Suffice it to say that the complicity argument fails in its opposition to the use of foetal tissue transplantation insofar as it relies on the Nazi concentration camp, Willow Brook Institute and Tuskegee atrocities as comparable examples of benefits obtained from unethical conduct; also see *supra* note 240 (Robertson) at 6 where he concurs that "one could rely on Nazi-generation data while decrying the horrendous act of Nazi doctors that produced the data. Nor would it necessarily dishonor those unfortunate victims. Indeed, it could reasonably be viewed as retrospectively honoring them by saving others. The Jewish doctors who made systematic studies of starvation in the Warsaw ghetto to reap some good from the evil being done to their brethren were no accomplices in the evil, nor are doctors and patients who now benefit from their studies".

²⁶⁹ *Supra* note 81 at 444; also see *supra* note 17 at 31 - 32 where the Panel says that complicity can only be levelled at people who believe that elective abortion is a moral evil and then proceed to use the tissue anyway. "It does not follow that use of fetal remains makes one morally responsible for or an accomplice in abortions that occur prior to and independent of later uses of foetal remains. A researcher using foetal tissue from an elective abortion is not complicitous with the abortionist and woman choosing abortion. The researcher and patient will have no role in the abortion process. They will not have requested it, and may have no knowledge of who performed the abortion or where it occurred."

permitted? Similarly, the Framework I analysis is limited by its rigid adherence to the "life begins at conception" point of view.

b) The Legitimation Argument

To legitimize²⁷⁰ an activity is to justify or promote it in such a way as to persuade others to consider it acceptable and choose to be involved with it. Opponents to foetal tissue transplantation suggest that promoting the beneficial or routine use of foetal tissue will legitimize elective abortion and result in a more relaxed social attitude toward and policy regarding elective abortion.²⁷¹ The assumptions underlying this argument are that the existence of elective abortion is immoral and steps should be taken to minimize its occurrence; pregnant women base their decision to abort a pregnancy on the interests of anonymous third parties; that it is immoral to abort a foetus for the purpose of donating the tissue; and that public perception of the moral legitimacy of abortion is reflected in the abortion rate.²⁷² There is no empirical evidence to support any portion of this claim.²⁷³ This argument in opposition to the use of foetal tissue for transplantation is also grounded in the Framework I analysis. Because of the limitations imposed by that

²⁷⁰ *Concise Oxford Dictionary*, 7th ed., s.v. "legitimize" as to "make lawful, proper, regular, conforming to standard type".

²⁷¹ *Supra* note 2 at 260; see also *supra* note 240 (Robertson) at 6 – 7, where he discusses and dismisses the legitimation argument and the assumption upon which it rests.

²⁷² *Supra* note 2 at 260.

Framework, it would be impossible to permit any elective abortion to occur because abortion would constitute murder in the Framework I analysis. If the Framework I analysis is applied, no foetal tissue would be available to transplantation for any reason.

The argument that using foetal tissue for therapeutic transplantation will result in an increase in the rate of elective abortions is illogical. To suggest that providing a socially acceptable use for aborted foetal tissue means that society is endorsing or legitimizing elective abortion is a bit extreme.²⁷⁴ The same argument could be made with accident, homicide or suicide victims whose organs are used for transplant purposes. Arguably, by using those organs, society would be seen to encourage the carelessness that causes accidents and the violence that causes homicide and suicide.²⁷⁵

Perhaps the real fuel that drives the legitimation argument is the fear that if foetal tissue transplantation becomes an accepted therapy, it will be impossible to reverse the current position on the permissibility of elective abortion.²⁷⁶ It is logical to suggest that if foetal tissue transplantation became a highly effective treatment of severe and irreversible diseases, it would be socially impossible to oppose the

²⁷³ *Supra* note 42 at 81; also *supra* Note 263 (Bleich); also see *supra* note 17 at 33 to 35, which discusses the legitimation argument. The Report concludes by saying that the legitimation argument has no basis in fact and is rather speculative.

²⁷⁴ *Supra* note 26 at 750.

²⁷⁵ *Supra* note 81 at 454.

abortions that made it possible. For example, the donation of blood for transfusion has become well accepted. Perhaps if there had been more resistance to the use of blood products when the concept was introduced, the practice may not have become so acceptable. At this stage, the likelihood that the "tide could be turned" on the use of blood products is low, in no small part due to the predominance of the practice. Proponents of the legitimization argument are focused on the immorality of the elective abortion, rather than on the fact that elective abortion coincidentally provides suitable tissue for foetal tissue transplantation for therapeutic purposes.

The question of whether there can ever be a socially acceptable increase in the rate of abortion is subject to debate. The answer depends entirely upon one's personal perception of the morality of abortion. Even if elective abortion became entrenched in society, it is still a leap of logic to suggest that the benefits achieved by therapeutic transplantation of foetal tissue will be so closely linked to elective abortion that the choice of elective abortion would be legitimized by the potential transplant.

Because of the dependence of the legitimization argument on the assumption that elective abortion is immoral, it is not an answer to the question of whether foetal tissue should be used for transplantation for therapeutic purposes. That answer is: no!

²⁷⁶ *Supra* note 7 at 157.

c) The Effect on Foetal Welfare Argument:

In the *Morgentaler* case, Madam Justice Wilson indicated that the protection of the foetus is a valid legislative intention. It qualifies as "pressing and substantial" in a Section 1 *Charter* analysis.²⁷⁷ The foetus could be given rights by Parliament and by provincial legislatures pursuant to Section 92(13) - the property and civil rights section - of the *Constitution Act*.²⁷⁸ Her Ladyship said that foetal rights are not inherent like other *Charter* rights.²⁷⁹

In order to analyze the issues of foetal welfare in the context of the use of foetal tissue for therapeutic purposes, one must accept that elective first trimester abortion provides the only suitable source of foetal tissue. The ultimate issue is: what level of harm to the foetus is socially and ethically tolerable? Should a foetus be sacrificed in the first trimester in order to procure tissue for transplant?²⁸⁰ Is value to be placed on the foetus as it exists *in utero*? It is simply wrong to treat a

²⁷⁷ *Supra* note 173 at 32, (*R. v. Morgentaler*).

²⁷⁸ *Supra* note 173 at 32, (*R. v. Morgentaler*); 1867 (U.K.) 30 & 31 Vict., c.3.

²⁷⁹ *Supra* note 173 at 33, (*R. v. Morgentaler*).

²⁸⁰ *Supra* note 81 at 457 see also *supra* note 4 at 6 where Alan Fine admits that the "[p]rocurement of fetal tissue for transplantation could lead to abuse of the fetus if it were the sole reason for the abortion, or if it required dissection of needed tissue from a living fetus. However, the force of these objections would be greatly reduced if, as seems likely, tissue from the current (independently motivated) caseload of routine terminations of pregnancy furnished a sufficient supply for transplantation."

person as a means to an end.²⁸¹ The use of the foetus as a means to an end is the perspective that is troublesome. As soon as personhood is ascribed to the foetus, one has to balance its rights, to whatever extent they may exist, against the rights of the pregnant woman.²⁸²

At this point, it is necessary to confirm two things. First, elective first trimester abortion is legal. No determination of the morality of abortion is necessary or fruitful. The fact that abortion is legal does not necessarily make it moral – it just makes it a fact. Therefore, the foetus's existence can be terminated legally. Secondly, the Framework II analysis, consistent with the current state of the law of abortion, establishes that the post-viable foetus would be given different consideration than the pre-viable foetus.²⁸³ Therefore, in considering the issues raised by the use of foetal tissue for transplantation, one must bear in mind the fact that only pre-viable foetal tissue is suitable for the purpose of transplantation and that this specific type and age of tissue is available as the result of legal elective first trimester abortions.

²⁸¹ For example, slavery and communicating for the purpose of prostitution have both been criminalized. Commerce in mature tissue and organs is not permitted, even if there is little or no risk to the donor; *supra* note 10, page 282; also refer to *Human Tissue Acts* as cited in *supra* note 21; see also *supra* note 240 (Robertson) at 7 where he says “[m]ost commentators assume that conception and abortion for tissue procurement is so clearly unethical that the prospect hardly merits discussion”.

²⁸² *Supra* note 141 (Kirman) at 33.

²⁸³ Viability is the point in its development in which the foetus has a chance, albeit with the aid of very sophisticated medical technology, of sustaining its own life outside the uterus. The interesting point about using viability as a threshold is that, as science progresses, the moment of viability occurs at an earlier and earlier gestational age. However, there is a point in time when there is simply an insufficient amount of development for the foetus to be viable. Accordingly, relying upon the date of viability provides a certain amount of flexibility to the “line drawn in the sand” (*supra* note 81 at 458) and permits a more objective threshold as to when the termination of the foetus is either ethically permissible or impermissible.

Using the Framework II analysis, the pre-viable foetus is not endowed with any particular rights at law, whereas the post-viable foetus has a limited set of rights. Therefore, the pre-viable foetus can be considered to be predominantly an extension of the pregnant woman's body, whereas the post-viable foetus is independent. When the abortion occurs, it is the pre-viable foetus that is terminated and, arguably, at that stage of development it has no independent or enforceable rights because "personhood" has not been impressed upon it. The circumstances might be quite different if post-viable foetal tissue was the source tissue for therapeutic transplantation. Then, the welfare of the post-viable foetus would be more relevant because personhood would be imposed upon the foetus and the tissue donation would result in the death of a legal person.²⁸⁴ However, because the pre-viable foetus cannot sustain independent life, the donation of its tissue cannot be seen to be the use of a person as a means to an end because personhood has not been established.

When the donation occurs, the foetus has already been aborted. At the time of the donation, the foetus is dead although the tissue remains functional at a cellular level. To harm a dead person:

²⁸⁴ In the context of whole organ donation, the donation of any vital organ that results in the certain death of the donor is prohibited. For example, it is not permissible to donate your heart if you have not been declared brain dead, regardless of how determined you may be to make the "ultimate" sacrifice. In the context of a foetal tissue donation, that resulted in the death of the post-viable foetus, that person would be prohibited for the same moral/ethical reasons. The fact that post-viable foetal tissue is unsuitable for donation permits the use of Framework II. The pre-viable foetus is not endowed with personhood and, therefore, can have its tissue donated without addressing the question of whether the donation will result in the death of a person. The post-viable foetus is endowed with personhood from the point in time when it could survive independently and ought to be treated as an independent person. Therefore, there would be an "ultimate" sacrifice if the post viable foetus's tissue were donated for transplantation.

is not to damage his interest but to assault the very foundation of the human community. It is to rend the social fabric, to wreak havoc with the basis of ordinary human moral sensibility, to threaten to plunge the social world into a nightmare of nihilism.²⁸⁵

Because the attribution of personhood to the pre-viable foetus has not occurred, the ethical dilemma is eliminated. A person did not give up its life to facilitate the donation. Therefore, at the time of the donation, the foetus does not have an interest that needs to be protected. At the time of donation, a dead person is not being harmed.

Is it necessary to go further than the Framework II analysis? It is consistent to argue that the pre-viable foetus cannot sustain its own independent life and therefore cannot be said to be a "person" until it reaches the stage of viability. It is also consistent to argue that after viability, the foetus should be endowed with rights similar to a "living child", on the basis that it could survive outside of the pregnant woman's uterus. Should the position that the pre-viable foetus is not a person mean that its humanness should be ignored? Does the deliberate creation

²⁸⁵ *Supra* note 10 at 283.

of a foetus for the purpose of tissue donation for transplantation have some symbolic significance as to the value to be placed upon the foetus?²⁸⁶

According to John M. Hillebrecht:

Becoming pregnant for the sole purpose of aborting a fetus to obtain tissue mocks every notion society holds as to the value of an individual (in this case, a potential individual).²⁸⁷

He is not advocating that abortion should never be permitted or that a Framework I type of analysis is appropriate. He is suggesting that society values the individual, even the pre-viable or "potential" individual to such an extent that the creation of a foetus for the sole and predetermined purpose of aborting it to obtain transplantable tissue is abhorrent. However, from the physiological point-of-view, there is no need for donor tissue to be matched to the recipient; there is a need for multiple fetuses to achieve a single donation; there is no protocol for payment of money or financial incentive to provide donor tissue; there is a sufficient supply of

²⁸⁶ *Supra* note 256 at 461; see also *supra* note 240 (Robertson) at 7 – 8, where Robertson analyzes a hypothetical situation of abortion for the purpose of donation and deliberate conception for the purpose of donation. With respect to the issue of an elective abortion in the first trimester and the ethical position created by the pregnant woman's decision, he says "[a]lthough aborting the fetus at that early stage does not wrong the fetus, it may impose symbolic costs measurable in terms of the reduced respect for human life generally that a willingness to abort early fetuses connotes. Still, the abortion may be ethically acceptable if the good sought sufficiently outweighs the symbolic devaluation of life that occurs when fetuses that cannot be harmed in their own right are aborted."

²⁸⁷ *Supra* note 10 at 282.

foetal tissue; and, there is no evidence to support the fear that women will treat themselves as foetal tissue farms.²⁸⁸

In conclusion, the issues of foetal welfare are encompassed within the parameters of the Framework II analysis. The vesting of personhood in the foetus at viability provides the most reasonable balance. Thus, the abortion of a foetus in the first trimester is not a compromise of foetal welfare because personhood has not been achieved. The donation of the foetal tissue is not ethically prohibited as an “ultimate” sacrifice resulting in the death of a person because a person does not exist. For the same reason, no ethically despicable harm to a dead person occurs. However, there is an acknowledgement that creation of a foetus for the sole and predetermined purpose of providing donor tissue is ethically unacceptable, because of the uniquely human quality of the foetus at every stage of development.

²⁸⁸ Patricia Huna, “Infants as Organ Transplant Donors: Should it Happen?” 6:2 *The Health Lawyer* 24. By comparison, there are a handful of cases where desperate parents have conceived a second child for the purpose of creating a tissue donor for an ailing sibling. Siblings have the greatest chance of being a good tissue match. These rare occasions usually find their way into the media, which leads to further degeneration of the altruism of the process. Discussions of the morals and ethics of deliberately creating a sibling as a tissue donor are somewhat different from the potential ethical quagmire of deliberately becoming pregnant for the purpose of creating donor foetal tissue. The donor organs or tissue must be a match to the recipient otherwise the transplanted tissue will be rejected by the recipient. Foetal tissue does not provoke the same response and so related tissue is a non-issue. Removing this incentive of helping a family member highlights the extent of the mercenary deliberate creation of foetal tissue for the purposes of donation. The distastefulness of this situation is mirrored by the lack of likelihood that it would occur.

d) The Commodification/Creation of a Market in Foetal Tissue

Argument:

The historical and prevailing view is that the human body should not be the subject of commerce.²⁸⁹ Obviously, neither slavery nor prostitution is generally acceptable in the modern world. It is beyond modern western society's tolerance to permit either coercion or commercial markets to develop in the human body or body parts.²⁹⁰ The choice of a Framework for analysis does not impact upon this argument. Regardless of the legal status of the foetal tissue at the time of the donation, this argument says that the sale of any human tissue should be prohibited. This argument permits the gifting of human tissue but not the development of a commercial market.

The arguments against the sale of foetal tissue are founded upon three primary ethical concerns:

²⁸⁹ Margaret Swain and Randy Marusyk affirm the position that modern legal systems do not permit property rights to attach to the human body. A temporary right of possession exists in a dead body in favour of the executor/next-of-kin for the purpose of proper burial or disposition of the remains. However, a true alienable interest does not exist. The problem that arises, not only in the case of foetal tissue but with respect to any tissue is "[g]iven society's ethical standard of forbidding the recognition of property rights in human tissue, the question is how these standards can be maintained while allowing private industry to secure property rights in their inventions that directly or indirectly involve human tissue": Margaret S. Swain and Randy W. Marusky, "An Alternative to Property Rights in Human Tissue" in Joseph H. Howell and William F. Sale (eds.), *Life Choices: A Hastings Center Introduction to Bioethics* (Washington, D.C.: Georgetown University Press, 1995) at 410.

²⁹⁰ The United States has addressed this issue specifically: *The National Organ Transplant Act*, Public Law 98-507 [S.2038] explicitly permits the use of and prohibits the sale of foetal tissue.

1) Allowing the purchase and sale of foetal tissue harbours great potential for the exploitation of women because the likely supplier of foetal tissue under these circumstances would be the poor.²⁹¹ This situation may be ethically repugnant.

2) A market in foetal tissue could provide an incentive to undertake elective abortion.²⁹²

3) It is an affront to personal dignity to permit trade in body parts. Society has deemed that people are not mobile organ mines. They should not be robbed of their self-respect and autonomy in this way.²⁹³

On the other hand, permitting a commercial market to develop for the supply of foetal tissue for transplant may relieve any potential gap between supply and demand for it.²⁹⁴

²⁹¹ In "A Woman and Her Unborn Child: Rights and Responsibilities", at *supra* note 109 at 170, Ian Kennedy addresses the concerns raised by the potential for women to be seen as foetus containers. He refers to Margaret Atwood's, *The Handmaid's Tale*, in which one handmaid describes her situation as being "two-legged wombs, that's all; sacred vessels, ambulatory chalices". This plainly worded statement points out the potential for women to be defined by their reproductive ability, rather than any objective measure of intelligence or accomplishment. To create this situation in the twenty-first century would be to return the status of women to that of the handmaid.

²⁹² Article 9.4 of the *Tri-Council Policy Statement supra* note 14 says simply "It is not acceptable to create human embryos specifically for research purposes. However, in those cases where human embryos are created for reproductive purposes and subsequently are no longer required for such purposes, research involving human embryos may be considered to be ethically acceptable, but only if all of the following apply:

a) The ova and sperm from which they were formed are obtained in accordance with Article 9.1 and 9.2;

b) The research does not involve the genetic alteration of human gametes or embryos;

c) Embryos exposed to manipulations not directly specifically to their ongoing normal development will not be transferred for continuing pregnancy; and

d) Research involving human embryos takes place only during the first 14 days after their formation by combination of the gametes."

²⁹³ *Supra* note 2 at 218 - 219.

Based on experience with the donation of whole organs, the most ethically acceptable position is to prohibit the purchase and sale of any human tissue. The ethical concern is whether or not a market in the purchase and sale of foetal tissue will develop and, if it does, would this situation be ethically acceptable or ethically despicable? Part and parcel of this argument is the fear that disadvantaged groups will be exploited in order to obtain sufficient foetal tissue to meet the demand. The "consideration of any class of human subjects as no more than a commodity to be used for the benefit of others is wrong", suggests P. McCullaugh.²⁹⁵ It is this sentiment that is the foundation of the social prohibition on the purchase and sale of any type of human tissue, adult or foetal.

There may be a real connection between the number of transplants and the number of abortions, but one must remember that the likelihood of transplant demand driving up the abortion rate is less likely than the lack of available foetal tissue restricting the number of transplants possible. At first blush, the volume of the supply of foetal tissue is presently more than sufficient to meet the demand.²⁹⁶ However, if foetal tissue becomes a successful treatment of more frequently occurring diseases, the supply may become insufficient to meet the demand. If

²⁹⁴ *Supra* note 2 at 219.

²⁹⁵ Peter McCullaugh, "The Foetus as Transplant Donor" as cited in *supra* note 2 at 105; see also *supra* note 254 at 154.

²⁹⁶ *Supra* note 4 at 6. Fine states that the annual incidences of Parkinson's Disease in the United States are approximately twenty per 10,000. In 1988, this amounted to fewer than 60,000 individuals per year. Of course, not all sufferers are candidates for this therapy and not all sufferers will accept this treatment. At the present time, there is no real concern about the supply of foetal tissue being insufficient to meet the demand.

foetal tissue became a scarce resource, there is no reason to suggest that it should not become subject to allocation protocols.

Ethicists do not agree on the degree of commodification of human tissue that western society will accept. In this context, commodification is defined as the actual buying and selling of tissue. It is the "practice of thinking about interactions as if they were sale transactions".²⁹⁷ The two extreme positions in this regard can be contrasted easily. On one side, all things are commodities and freedom means the unrestricted choice as to which goods to trade.²⁹⁸ On the other side, "the market ought not to exist and that social interactions involving production and consumption should be reconceived in a non-market way".²⁹⁹

Raden suggests that the reconciliation of negative liberty (the right to be left alone) and the protection of individual rights means allowing an individual to gift parts of himself or herself that are essential to personhood but not to permit the sale of such intimate aspects of one's self.³⁰⁰ Furthermore, Raden indicates that an important limiting factor is that if an aspect of personhood is commodified already then the prohibition against selling it is meaningless and, in effect, would reduce

²⁹⁷ M. S. Dorney, "Moore v. The Regents of the University of California: Balancing the Need for Biotechnology Innovation Against the Right of Informed Consent" (1990) 5:2 High Technology Law Journal 333 at 364; and Margaret Raden, "Market Alienability", (1987) 100 Harv. L. Rev. 1849 at 1859.

²⁹⁸ *Supra* note 297 (Raden) at 1860 - 1861; also, R. Posner, *Economic Analysis of Law*, 29 to 33 (3d edition 1986).

²⁹⁹ *Supra* note 297 (Raden) at 1870.

³⁰⁰ *Supra* note 297 (Raden) at 1907 to 1914.

individual autonomy.³⁰¹ If foetal tissue becomes commodified, the unique ability of foetal tissue to achieve independent life may become minimized and the prohibition of its sale is truly meaningless. If the foetus becomes a saleable commodity, could people or their vital organs become similarly commodified?

Margaret Swain and Randy Marusky set out an interesting alternative to the traditional property analysis of tissue. They set out three different levels to classify the human being. Each level treats the question of property rights somewhat differently. The three levels³⁰² are:

- 1) The person and persona;
- 2) The functional body unit which is transplantable and carries out the same function in the recipient as it did in the donor; and,
- 3) Something produced from the human material such as a cell line.

The first level³⁰³ deals with the entire person and its persona or personality and appearance. Clearly, legal rights have been recognized in one's image, voice and features. These items, or the use of them, may be sold by the possessor. The first level deals with the integrated whole as a unit. As soon as it is disassembled, it falls into the second level.

³⁰¹ *Supra* note 297 (Raden) at 1912 to 1917.

³⁰² *Supra* note 289 at 412.

³⁰³ *Supra* note 289 at 412.

The second level³⁰⁴ deals with parts of the body that are removed for transplantation. They remain functional but are forever separated from the person. This tissue can be described as *res nullius*, a thing belonging to no-one. A limited possessory right could be created for those medical professionals who hold the tissue pending transplant. This would be a trust *res nullius*, a thing owned by no-one being held in trust for a recipient. This material would retain its character as being donated with traditional altruistic spirit without becoming a marketable commodity.

Tissue that is permanently removed from the body with the intention of transforming it would fall into the third level.³⁰⁵ This tissue can be described as *res commune omnium*, or a thing incapable of appropriation because it belongs to everyone. This type of tissue is the foundation for the transformed product in which the property right would vest. It is through the process of transforming the raw material that the product becomes property. In this level, the raw material is not subject to being owned.

The foregoing interesting analysis could be applied quite neatly to foetal tissue. Clearly, foetal tissue, as distinct from the foetus as an entire entity, would fall into level two or three. If foetal tissue fell into the *res nullius* level two analysis, it could be used freely by transplant surgeons after its removal from the pregnant woman,

³⁰⁴ *Supra* note 289 at 413 - 414.

³⁰⁵ *Supra* note 289 at 414 - 415.

without the fear of a commodity-style market developing. Because level two tissue is *res nullius* there is no right to own it and accordingly, no right to sell it. Because foetal tissue, in the context of this thesis, is destined for transplantation, it fits neatly into this level.

If foetal tissue was harvested for the purpose of using it as raw material to create a propagated cell line (similar to the *Moore* situation), then it would fall into level three. Under these circumstances, there is still no property right in the foetal tissue. However, if the research created a commercially viable product using foetal tissue as a raw material, that product would be the subject of a property right.

Ultimately, there is no evidence to support fears raised by the commodification of foetal tissue scenario. Accordingly, it would be appropriate to treat the donation of foetal tissue in the same fashion as the donation of other tissues, which are subject to strict controls to avoid commodification.

e) The Maternal Rights Argument:

During the course of pregnancy, there are three human entities that require consideration in various ways: the pre-viable foetus, the post-viable foetus and the pregnant woman. During the course of the pregnancy, the welfare of the pre-viable foetus must be balanced against the welfare of the pregnant woman and, after viability, the welfare of the post-viable foetus must be balanced against the welfare of the pregnant woman. The application of the Framework II analysis results in the

legal distinction between the pre-viable foetus and the post-viable foetus. However, the pregnant woman is not taken into account in any meaningful way in any of the frameworks of analysis. The pregnant woman has a right to privacy, intimate decision-making, and bodily integrity.³⁰⁶ Conflicts can arise if a pregnant woman's choices adversely affect the foetus. The real question is: who, if anyone, has the authority to adjudicate the conflict between maternal and foetal rights?³⁰⁷ Government intervention in support of the foetus over the pregnant woman can demoralize and dehumanize her.³⁰⁸

Clearly, the pre-viable foetus has the closest connection with the pregnant woman. In these circumstances, the pregnant woman's rights will take precedence under the Framework II analysis. The pre-viable foetus is not a person for the purpose of enforcing legal rights, so the pregnant woman's rights will take precedence. However, after viability it is arguable that a more equal balance must be struck between foetal welfare and the pregnant woman's right to autonomy. A pregnant woman has the right to abort the foetus prior to viability, but after the decision is made to carry it to term, she may lose her liberty to conduct herself in ways that might be harmful to the foetus. According to Robertson:

³⁰⁶ John A. Robertson, "Procreative Liberty and the Control of Conception, Pregnancy, and Childbirth" (1983) 69 Va. L. Rev. 405 at 437; R. H. Blank, "Emerging Notions of Women's Rights and Responsibilities During Gestation" (1986) 7:4 The Journal of Legal Medicine 441 at 443; and *supra* note 42 at 447; and *supra* note 109 at 172.

³⁰⁷ Prince v. Massachusetts, 321 U.S. 158, 168 (1944); and *Ibid.* (Blank) at 442.

³⁰⁸ *Supra* note 282 at 35.

The mother has, if she conceives and chooses not to abort, a legal and a moral duty to bring the child into the world as healthy as is reasonably possible. She has the duty to avoid actions or omissions that will damage the fetus and child, just as she has a duty to protect the child's welfare once it is born until she transfers this duty to another. In terms of fetal rights, a fetus has no right to be conceived- or once conceived, to be carried to viability. But once a mother decides not to terminate the pregnancy, the viable fetus acquires rights to have the mother conduct her life in ways that will not injure it.³⁰⁹ [emphasis added]

To continue this line of argument, perhaps the pregnant woman should owe a duty of care to the foetus to refrain from conduct that could harm the foetus. Kennedy suggests that the pregnant woman's primary duty is:

not to interfere with the fetus's rights, including the right to be born free from avoidable harm In practical terms, this translates into a duty not to expose the fetus to avoidable harm intentionally, recklessly, or negligently, whether by doing something (dangerous conduct) or by refraining from doing something, (refusing necessary medical care).³¹⁰

Kennedy's position is easily and logically adaptable to the Framework II analysis. The position he espouses could be applied to the post-viable foetus and not to the pre-viable foetus. This would make his position consistent with Roberston's position that once the decision is made to carry a foetus to term, or in my analysis

³⁰⁹ *Supra* note 306 (Robertson); and *supra* note 306 (Blank) at 443.

³¹⁰ *Supra* note 109 at 173.

once viability is achieved, the pregnant woman has at least a moral duty to conduct herself in a way that is not going to harm the foetus.³¹¹

In the context of the donation of foetal tissue for transplantation, there is no dispute that the pregnant woman maintains the complete discretion to determine whether or not to undergo an elective first trimester abortion and, as a totally separate consideration, how to dispose of the resulting foetal tissue. Her options in choosing how to dispose of the foetal tissue include donating it for the purpose of transplantation for therapeutic reasons. Should the pregnant woman choose another alternative with respect to the disposition of foetal tissue, that is her right. The Framework II analysis makes no comment with respect to limiting the pregnant woman's choices of the method of disposition of foetal tissue. It simply permits therapeutic transplantation to be one of those options.

The utilization of the Framework II analysis does not impact directly on the question of maternal rights. However, determining the status of the foetus both pre-viability and post-viability results in different balances to be achieved between foetal welfare and maternal rights. In the case of the pre-viable foetus, maternal rights during the consideration of the donation of foetal tissue are effectively unaffected because the foetus is not deemed to be a person at that time. In the context of the donation of foetal tissue, the pregnant woman is at her liberty to undergo an elective first trimester abortion and to donate the tissue should she

³¹¹ Also J. Robertson and J. D. Schulman, "Pregnancy and Prenatal Harm to Offspring: The Case of
Footnote Continued on Next Page

choose to do so, for the purpose of therapeutic transplantation. There is no obligation for the pregnant woman to donate foetal tissue for transplantation or for any other purpose. In the situation where the foetus has reached the point of viability, the pregnant woman's autonomy may begin to be affected by issues of the welfare of the post-viable foetus.³¹² For example, in the Framework II analysis,

Mothers with PKU" (1987) 17:4 Hastings Center Report 23 where similar views are expressed.

³¹² Also *supra* note 109 at 174 - 175 where Kennedy sets out a detailed eight step "calculus" to assist in balancing foetal and maternal rights that is, in my opinion, consistent with and supportive of the Framework II analysis. These eight steps are:

(i) The nature of the harm which the fetus may be exposed to. The more serious the harm, the more compelling may be the mother's duty and the greater the need on the part of the mother to show compelling reasons for not complying with it.

(ii) The capacity of the mother to comply with the conduct or regime deemed appropriate to protect the fetus. Account must be taken, for example, of such matters as the availability of medical and other care, access the mother has to the care, the level of her education and knowledge, the relative poverty in which she finds herself, and her capacity to exercise free will rather than being, for example, dependent on drugs.

(iii) A demonstrable relationship between the conduct of the mother (whether it be action or inaction) and the threatened harm to the fetus. This is a matter of medical evidence and advice. The more tenuous the link (*e.g.*, the link alleged between smoking or jogging and early fetal harm), or the earlier in pregnancy the mother engages in certain conduct, the less the duty can be said to limit the mother.

(iv) The relative development of the fetus. The more developed the fetus the greater may be its moral claim and the more limited may be the mother's freedom of action.

(v) The degree of limitation on the mother's choice. The limitation may range from an obligation to undergo a specific diet for nine months, to abstain from smoking, to abstain from some other substance or conduct, to be detained in a specific place under a specific regime, to undergo a medical procedure or to undergo surgical intervention. The greater the limitation, the greater must be the claim of the fetus.

(vi) The risk to the mother's health, *e.g.*, from a proposed surgical intervention. The more serious the risk associated with the proposed intervention or other stipulated regime, the less strong may be the claim of the fetus.

(vii) The reasons for the mother's choice or conduct. It may range from convenience to religious conviction, concern for her own health or concern for the fetus's or future child's health. That is to say, it may range from the trivial to the serious. The more trivial it is, the less justified the mother may be in seeking to rely on it.

(viii) The recognised uncertainty of prenatal diagnosis. The greater the grounds for uncertainty, the less it may serve as a ground for limiting the mother's freedom of action.

Footnote Continued on Next Page

the post-viable foetus is deemed to be person and to be in a position to enforce its version of legal rights as against third parties including the pregnant woman. In this regard, a more equal balance must be struck between the two on the basis that the foetus is deemed to be a person and is capable of sustaining independent life. Therefore, the Framework II analysis results in a situation where the post-viable foetus is treated like a child. However, this balance does not affect the issue of foetal tissue transplantation because post-viable foetal tissue is unsuitable for transplantation.

3 Arguments in Support of the Use of Foetal Tissue for Transplant

Purposes:

a) The Utilitarian Argument:

Utilitarians focus on the pre-viable foetus aspect of the Framework II analysis. In this argument, the pre-viable foetus maintains no independent legal status. After the elective abortion has occurred, the tissue that results must be disposed of or used. Consistent with the Framework II analysis, the basis for the decision is the ethics of using the tissue or throwing it away, not whether the abortion should have occurred or whether the foetus has any concerns relevant to the disposition of its tissue.

Of course, the extreme application of this position is the enforcement of maternal compliance. This raises the problem faced by courts everytime an application is made to apprehend a foetus based on the adverse conduct of the pregnant woman. The "flip side" of the argument is the forcible treatment of confinement of the

Footnote Continued on Next Page

The utilitarian argument could also be called the waste-not, want-not argument. This accepts, as a starting point, that first trimester elective abortion is legal. Foetal tissue suitable for transplantation is available. The ethical decision that must be made is should transplantation for therapeutic purposes be included in the list of options for the disposal of first trimester electively aborted foetal tissue. From the point of view of the utilitarian, it is ethically improper to waste available and valuable resources.³¹³ There is no need to consider the morality of abortion because that decision has been made by society. Clearly, there will always be members of society who do not agree that elective abortion, at any point in time, is moral. However, there is a great distinction between moral and legal. Furthermore, there is no obligation to undergo an abortion under any circumstances. It is always the choice of the pregnant woman to undergo this procedure. Since first trimester elective abortions are permissible at law, the product of that procedure, foetal tissue, will be available. As noted, this is the tissue that is suitable for transplantation into humans for therapeutic purposes. The tissue of second trimester or later abortions is not suitable for transplantation and therefore does not enter into this ethical debate.

pregnant woman. There is a wealth of legal writing in the United States about the non-consensual treatment of pregnant women. However, that literature and discussion is beyond the scope of this thesis.

³¹³ John A. Robertson, "Statement to the Advisory Committee to the Director, National Institute of Health" in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda, Maryland at C25 – C27. Robertson notes that "more than 1.5 million elective abortions occur annually in the United States. Because this tissue will be available regardless of research needs and will otherwise simply be discarded, tissue from these abortions can be used for transplant research without involving researchers or recipients in the abortion itself. Indeed, one could reasonably argue that it would be unethical to discard this tissue rather than use it in research that could save many lives."

The choice that must be made is how to dispose of that tissue. After the abortion, some of the choices would be the following:

- 1) Bury or cremate the tissue as if it were the funeral of a dead person in accordance with religious or other traditions;
- 2) Dispose of the foetal tissue as surgical waste, by mass incineration;
- 3) Donate the tissue for research; or,
- 4) Donate the tissue for therapeutic transplantation.

Dr. Olle Lindvall of the University Hospital in Lund, Sweden addresses this concern:

Of course the ethical question is important and very difficult . . . but I think that when you have these severely disabled patients who desperately need help, it's very important to use something that otherwise would be thrown away.³¹⁴

At present, foetal tissue is dealt with on an institution - by - institution basis. The majority of human foetal tissue is disposed of with the rest of the surgical waste. In circumstances where a specific request is made by the pregnant woman, or on her behalf, the foetal tissue may be cremated or buried in accordance with religious or cultural traditions. Some foetal tissue is donated to research and there would be no reason to believe that, if the opportunity is put to the woman, she would refuse

³¹⁴ Dr. Lindvall was one physician on the Swedish research team that reportedly transplanted the tissue from four aborted fetuses into the brain of a man suffering from severe Parkinson's Disease: February 1990 Newspaper article citing the patient as having severe Parkinson's Disease.

to donate the foetal tissue for therapeutic transplantation. However, it is critical to understand that there is no **opt out** policy for the donation of tissue for transplantation in Canada. What this means is that there is a presumption that the tissue will not be donated for transplantation. The donor, or someone on his or her behalf, must **opt into** the donation/transplantation scheme and specifically consent to the donation for the purpose of transplantation. There is no reason that this protocol could not be followed with human foetal tissue after an elective first trimester abortion.

The ethical question is: should the pregnant woman be given the choice of therapeutic transplantation as one means of disposing of the human foetal tissue after her elective abortion? Proponents of this view would say that therapeutic transplantation should be the first choice offered as it gives the opportunity to use the human foetal tissue that would otherwise be rendered useless, for the betterment of another person's health. The same argument would apply to the donation of foetal tissue for research purposes.

There is no negative impact upon the pregnant woman if the foetal tissue is donated for therapeutic transplantation. Clearly, once the abortion has been performed, there is complete separation of the pregnant woman and the foetus. The integrity of the foetus is physically disrupted, so the foetus has no independent existence after the abortion. Accordingly, the choice is to allow the tissue to become non-functional or to preserve its functionality and use it for the improvement of someone else's quality of life.

The utilitarian's answer is simple: waste-not, want-not.

b) Respect for the Human Quality of the Foetal Tissue:

This argument is consistent with the application of the Framework II analysis in that it recognizes the uniquely human nature of foetal tissue³¹⁵ at the same time as it refrains from falling into a Framework I analysis. This argument is not consistent with the view that the foetus is a fully entitled human being murdered by the abortion.

This argument recognizes the fact that foetal tissue is ostensibly human. Is it not more appropriate that this particular type of tissue is respected and recognized as capable of improving the quality of life of someone else, rather than being thrown into a container of surgical garbage and incinerated?

Stephen G. Post reflects upon the human cultural history of infanticide:

Respect for life is one of those several basic moral principles that rational persons would consent to through a social contract simply because without it society would collapse into the brutal and utterly insecure 'war of all against all'. This basic moral principle is *independent of any religious creed and language of 'sanctity'*; simply put, respect for life is a requirement of any stable social order. No viable society can afford to allow for any but the most *absolutely*

³¹⁵ Gail Vines, "Why Experiment on Human Embryos?" (*New Scientist*, 1989) 48 at 48. Vines refers to the clear stance taken by the Polkinghorne Report (1989) that foetal tissue is "worthy of special respect due to its human origin and should not form part of any commercial transactions. A statutory body should regulate the use of such material for research or therapeutic purposes with the informed consent of the donor".

necessary exceptions to the prohibition against one individual taking the life of another.³¹⁶

In the context of Post's comments, therapeutic abortion has been accepted by our society as a whole, not necessarily on an individual basis. However, individuals always have the right to decline an abortion. Having accepted first trimester abortion as, arguably, an "absolutely necessary exception" to the concept of respect for life, I believe that the human nature of the foetal tissue can be respected after the abortion by permitting it to be transplanted for the betterment of the recipient's life.

Without denying that the pregnant woman does have the legal right to access to an elective first trimester abortion, proponents of this view would suggest that the unique human quality of foetal tissue puts it in a category that is different from any other human tissue. The fact that the foetus could achieve independent human life if allowed to remain *in utero* is completely unique from any other cell in the human body.

The transplantation of the human foetal tissue is a suitable memorial to its human nature. In being transplanted, that particular tissue, which had the potential to become an independent human being had it remained undisturbed, is somewhat actualized insofar as the quality of life of another person is either enhanced or, in a best case scenario, life is extended or preserved. Because the elective abortion is

³¹⁶ Stephen G. Post, "History, Infanticide, and Imperilled Newborns" (1988) 18:4 Hastings Center Report
Footnote Continued on Next Page

legal, there is no ethical decision to make as to whether it is disrespectful to the human potential of foetal tissue to permit it to be aborted. The ethical issue that has to be addressed is the issue that follows the abortion and that is: to what end should the tissue be used?

To further human life would be the answer for proponents of this viewpoint.

c) The Redemption of Tragedy Argument:

This argument in support of the use of foetal tissue for therapeutic transplantation has a different focus than the foregoing arguments. The gist of the redemption of tragedy argument is that, despite the legality of elective abortion, a potential human existence is ended. That fact, without commenting upon the morality of abortion but simply considering the biology, is a tragedy. What remains after the abortion is foetal tissue that is suitable for transplantation. The use of that foetal tissue for the positive result of improving someone else's life redeems some of the tragedy of the termination of the foetus's gestation. It recognizes the potential for life that is lost as a result of the abortion and the humanity of the foetus regardless of its legal status. By using the foetal tissue to confer a life-saving benefit on someone in dire straits, the pregnant woman may be provided with a "beneficial psychological release".³¹⁷

14 at 17.

³¹⁷ *Supra* note 241 at 530 to 531; see also *supra* note 75 (Nolan) at 16, where she refers to the pursuit of transplantation as having the potential result of "reliev[ing] guilt".

Evidence of the emotional state of pregnant women undergoing elective first trimester abortions is anecdotal. It shows that some women who terminate pregnancies in the first trimester do experience a sense of loss and tragedy at the loss of the foetus despite their involvement in creating the situation. In such cases, the use of foetal tissue for therapeutic transplantation may help to alleviate that sense of loss and enhance the emotional well being of the women at issue.³¹⁸ This argument is extrapolated from experiences of parents who have donated organs of anencephalic children shortly after their birth.³¹⁹ It must be borne in mind that foetal

³¹⁸ Thomas Leggens, "Scientific Infants as Organ Donors – Legal and Ethical Perspectives" 9:3 *The Journal of Legal Medicine* 449 at 452. Although Leggens specifically limits his paper to anencephalic infants, and not aborted fetuses and Parkinson's Disease, the analogy between the two circumstances is clear. An anencephalic infant suffers from a lethal, congenital malformation in which the "brain and cerebral cortex are absent from the cranial vault" (pages 449 to 450). One of the issues that fetuses and anencephalics have in common is whether they are "persons" at law. Fetuses (in the first trimester) are incapable of independent life and bear little real resemblance to an infant. An anencephalic has an insufficient amount of brain tissue to endow it with "essential human characteristics" (pages 455 to 456). Both have "no self-awareness, cognitive function, or ability to communicate" (page 455). Neither will survive. Both can be used as donors of tissue for the betterment of others. Leggens concludes that putting anencephalics on life-support until brain death is established is a better choice than modifying the definition of death or declaring anencephalics to be non-persons. From the point of view of foetal tissue transplantation, this choice is consistent with Framework II.

³¹⁹ George J. Annas, "From Canada With Love: Anencephalic Newborns as Organ Donors?" (1987) 17:6 *Hastings Center Report* 36 at 37. The author finds most persuasive the position expressed by Arthur L. Caplan, "Should Fetuses or Infants Be Utilized as Organ Donors?" (1987) *Bioethics* 1 at 119 that "many parents are eager to have their dead or anencephalic child used as a donor in the hope that something good might come or a tragic situation". Annas says at 38 that the outcome of using anencephalic newborns as organ donors will depend "not only on the law, however, but on our ability to deal with them as members of the human race, and to safeguard them from harm as we try to turn their plight (and their bodies) to the benefit of others." I believe that the same sentiment can be expressed with respect to the use of foetal tissue for transplantation. There has been a tremendous amount of legal writing on the topic of anencephalic infants as organ donors, how the determination of death may need to be modified to address the situation and more importantly, should anencephalic infants be accepted as organ donors at all? Some articles that address these issues are good starting points for research: Norman Fost, "Organs from Anencephalic Infants: An Idea Whose Time Has Not Yet Come", (1988) 18:5 *Hastings Center Report* 5; Alexander Capron, "Anencephalic Donors: Separate the Dead from the Dying" (1987) 17:1 *Hastings Center Report* 5; Michael Harrison, "The Anencephalic Newborn as Organ Donor" (1986) 16:2 *Hastings Center Report* 21; James W. Walters and Stephen Ashwal, "Organ Prolongation in Anencephalic Infants: Ethical and Medical Issues" (1988) 18:5 *Hastings Center Report* 19; Ethic and Social Impact Committee, Transplant Policy Center, Ann Arbor, MI, "Anencephalic Infants as Sources of Transplantable Organs" (1988) 18:5 *Hastings Center Report* 28. Foetal tissue will continue to exist. If, as a society, we can overcome our squeamishness and respect the source of the gift, there will be tremendous opportunity to turn the ending of a potential human life into a life-saving treatment for another human.

tissue for therapeutic transplantation would not exist if first trimester elective abortion did not exist. Therefore, despite the anguish that many women undergo when electing a first trimester abortion, there is the possibility of a sense of positive purpose for the resultant tissue. There is no evidence to suggest that the existence of therapeutic transplantation will expand the likelihood that a pregnant woman will undergo an elective abortion or that a women will become pregnant for the sole purpose of creating foetal tissue to abort.³²⁰

d) The Advancement of Technology Argument:

This argument focuses on the "big" picture not on the welfare of the foetus, the pregnant woman or the transplant recipient individually. Rather, it focuses on the fact that technology advances by taking small steps. At this point in time, foetal tissue transplantation may be able to alleviate some of the severe symptoms of Parkinson's Disease and DiGeorge's Syndrome. It has not been demonstrated to be a cure for Parkinson's Disease or DiGeorge's Syndrome or for any other condition. However, there is some hope in the scientific community that this type of

³²⁰ *Supra* note 313. The Panel found "unpersuasive the notion that women, who otherwise would have decided not to abort, will choose to abort because tissue may be anonymously donated for research or therapy. The Panel heard no convincing evidence that a pregnant woman's decision against abortion would be changed by the prospect of anonymous tissue donation."

technology could lead to symptomatic relief for many very debilitating conditions and potentially could lead to a partial or full cure for other life altering conditions.³²¹

Proponents of this argument suggest that if foetal tissue is not made available for research and therapeutic transplantation, technology will be unable to proceed in this direction. At this stage in technological development, several foetuses are required for a single transplant. However, as technology proceeds to develop and patients are monitored both before and after transplantation with foetal tissue, perhaps the volume of foetal tissue may decrease or even other technologies may become more prevalent. However, if the first stone in the road is not laid, the second cannot follow.

Proponents of this argument would draw the analogy between the significant reliance upon whole blood products at one point in time that led to the ability to use blood fractions and the development of synthetic blood expanders. Similarly, if the hormones contained in pregnant mares' urine were not discovered to be suitable for the production of contraceptive pills, synthetic substitutes could not have been developed.

Proponents of this argument in favour of the use of foetal tissue for transplant purposes point immediately to the development of propagated cell lines as the

³²¹ *Supra* note 1 and *supra* note 6 provide very detailed, readable analyses of the state of the medical technology involved in transplanting human foetal tissue into the human brain. A complete discussion of the medical aspects of this technology, while fascinating, is beyond the scope of this thesis. There is ample authority in the references cited in this footnote to establish that the technology is viable. In fact, the existence
Footnote Continued on Next Page

next potential step in the development of this technology. A propagated cell line is created originally by using human tissue. That tissue is grown in culture so that it becomes self-propagating and new cells need only to be introduced into the culture intermittently. In this way, for example, the same volume of human foetal tissue cells created by the harvest of tissue from ten suitable fetuses could be created, over time, by the culturing of the tissue from a single foetus. Thomas Freeman, a professor of neurosurgery at the University of Florida, agreed that cell culture techniques are liable to reduce some of the intensity of the ethical objections to the use of foetal tissue. "I think that once they (the cells) are available, ethical concerns . . . will become less pressing, even though the issues obviously are significant" he said.³²²

Proponents of the advancement of technology argument say that one must look beyond immediate concerns to the future. The future requires difficult decisions to be made in order to further the progress of technology over all.

4 Conclusion

This review of the ethical arguments in favour of and against the use of human foetal tissue derived from elective first trimester abortions has been conducted within the parameters of Framework II. Briefly, Framework II suggests that viability

of the clinical trials conducted at Victoria General Hospital in Halifax, Nova Scotia is a testimony to the extent of the advancement of this technology.

³²² Stephen Strauss, Globe and Mail article titled "Fetal Brain Tissue to be Grown in Labs, U.S. Scientists Say".

is the threshold of foetal development that must be recognized as the time when the foetus's ability to survive independently necessitates a greater recognition of its legal status. Prior to viability, the foetus is totally dependent upon the pregnant woman and inseparable from her. At viability, some legal rights ought to be impressed upon the foetus. Prior to viability, the foetus cannot be considered to be separate enough from the pregnant woman to justify interfering with her rights to address the circumstances of the foetus. At the time of the elective first trimester abortion, the foetus is incapable of sustaining independent life and, in the context of Framework II, has not achieved personhood or sufficient development to justify the attribution of any specific legal status. At this stage, it is an extension of the pregnant woman that is within her control, even though it is human.

I do not believe that the complicity and legitimation arguments are persuasive because of their dependence on the "immorality of abortion" position. Similarly, there is insufficient evidence to suggest that the commodification and maternal welfare arguments are valid. The foetal welfare argument is the most valid argument in opposition to the use of foetal tissue for therapeutic transplantation. Admittedly, there is an undesirable possibility that the foetus will be viewed as a source of transplant tissue rather than a potential life.

The ethical arguments in favour of using foetal tissue for therapeutic transplantation are stronger and more logical. The utilitarian argument and the respect for human tissue arguments begin with the fact that foetal tissue suitable for transplantation will be available as a result of legal by available elective first

trimester abortions. From the utilitarian point of view, there is no benefit to be gained by wasting this valuable resource when it could be used for the benefit of others. From the social point of view, treating human foetal tissue like garbage is disrespectful. To use it in an effort to help others gives it the respect that it deserves. The redemption of tragedy argument also has strong roots in altruism. There is no evidence to suggest that pregnant women have abortions frivolously. Some women, although they have decided to terminate their pregnancy, do experience a sense of loss after this procedure, similar to the emotions experienced by parents who lose young children. By donating the child's organs, or the foetus's tissue, for transplantation, the loss or tragedy is redeemed by the chance of life given to another person. Finally, the advancement of science cannot be ignored. Presently, the tissue of several foetuses is required to perform a single transplant. The study of early efforts could lead to more efficient technology or even different technology that does not require freshly harvested foetal tissue. However, prohibiting the use of foetal tissue for therapeutic transplantation slows or possibly halts the progress of this type of technology.

Consideration of the ethics of any innovative technology always requires the search for an appropriate balance. If there were no issues to be weighed, no opposite but equally reasonable positions to consider, there would be no ethical dilemma. On balance, there are no insurmountable ethical bars to the use of first trimester electively aborted human foetal tissue for therapeutic transplantation.

LEGAL ISSUES

1 Introduction

The main legal issues that arise when the concept of foetal tissue transplantation is considered are diverse:

- 1) Property rights in the foetal tissue;
- 2) The potential for a commercial market to arise; and,
- 3) The issues of informed consent to the donation for the purpose of transplantation.

These are questions of law rather than questions of ethics. It is important to remember that the legal position will vary dramatically based upon the chosen framework of analysis. In Framework II analysis, the foetus becomes endowed with rights at law at the time when it becomes viable. Prior to that time, it is primarily considered an extension of the pregnant woman's body because it cannot be separated from her and survive. After the point of viability, the foetus could be separated from the woman's body and survive (even though the assistance of medical science is required). It is the possibility of maintaining independent existence that creates a "line in the sand", from the point of view of endowing the foetus with enforceable rights, rather than the fact of ultimate live birth.

The position established in the Framework II analysis is not the only way to look at the legal issues raised by the transplantation of foetal tissue into humans for

therapeutic purposes. However, it is the position that achieves the best balance between the various interests. Therefore, I have considered the legal issues in the context of this framework of analysis.

2 Property Rights in Foetal Tissue

The concepts of rights, privilege, power, immunity, exclusive possession or enjoyment, control over use, disposal, alienability, heritability, and divisibility define the traditional parameters of property.³²³ These concepts of "rights of control and domination over both tangible and intangible things . . ." ³²⁴ seem to be of extra significance in the context of foetal tissue. There are two ways in which property concerns could be applied to reproductive material and persons. The first inquiry is whether they should have the same legal status as "door handles, gizzards of domestic poultry or motor vehicles".³²⁵ The second is whether people should have exclusive control over themselves and their reproductive products. "The intuitive response to the former question is no. The latter question invites a positive response in relation to reproductive material".³²⁶

With respect to the first question, "treating bodies as property is abhorrent. Objectifying people undermines human dignity by treating them as mere

³²³ Meeker, Heather J. "Issues of Property, Ethics and Consent in the Transplantation of Fetal Reproductive Tissue", 9:2 High Tech. L. J. 185 at 199 - 200.

³²⁴ *Supra* note 200 at 243.

³²⁵ *Ibid.*

commodities. Commodification of persons may diminish society's sense of the worth of individuals."³²⁷

Clearly, our society has denounced the position that the body is simply a commodity.³²⁸ With respect to the second question, the issue of control over one's own body becomes more relevant. Litman and Robertson suggest that:

If property confers exclusive control to people over their own bodies, then their dignity is enhanced, not diminished. . . . as a general position, the greater the control conferred on individuals in relation to their bodies, the greater the respect that is being accorded to individuals. Giving people control that extends beyond their physical selves accords further respect to individuals. . . . To treat people as objects of property in the control of other persons is dehumanizing. Property rights in other persons is antithetical to human dignity, the fundamental value of human autonomy or self-determination, and contemporary principles of equality. Moreover, the notion of property rights in products of conception can be viewed as particularly egregious because it threatens the security interest of the persons who are incapable of providing for their own safety and protection.³²⁹

The foregoing position interleaves nicely with the Framework II analysis when one remembers that prior to viability, the foetus is not a person by law. After viability, when it could possibly maintain its own existence and becomes a person at law, it would be offensive to treat it like an inanimate object. However, prior to the

³²⁶ *Ibid.*

³²⁷ *Ibid.*

³²⁸ *Ibid.*; and also *supra* note 289 confirms that "[m]odern legal systems have consistently held that no property rights attach to the human body."

³²⁹ *Supra* note 200 at 243 - 244.

threshold being met, the foetus is not a person and the pregnant woman should be able to exert control over her body and the foetus that is part of it.

The primary concern with respect to foetal tissue centres on the right to control the use of and to dispose of the foetal tissue after the abortion has occurred. Recall that the turning point of Framework II is viability.

Using this analysis, one must distinguish between the property issues as they relate to the pre-viable foetus *versus* the post-viable foetus. The tissue used for transplantation is harvested from first trimester elective abortions. Prior to viability, Framework II does not ascribe personhood to the foetus. The foetus only achieves the status of being a person at law when it achieves viability. M. M. Litman and G. B. Robertson discuss at length the law in Canada that states clearly and consistently that a foetus or embryo is not a person at law.³³⁰ They note that Canadian case law does not tell us “what a foetus is, but rather what it is not”.³³¹ Therefore, in accordance with the Framework II analysis, the property issues must be viewed in the context of the pre-viable foetus. Those rights may be different for the post-viable foetus.³³² A post-viable foetus, under Framework II, is a person.

³³⁰ *Supra* note 200 at 235 - 242.

³³¹ *Supra* note 200 at 242.

³³² Under early English common law, it was clearly established that there was no property right in the dead body: *supra* note 297 (Dorney) at 350.

Footnote Continued on Next Page

Clearly, the concept of property cannot be applied to a person and therefore the post-viable foetus cannot be property under the control of another.³³³

At the time of an elective first trimester abortion, the foetus is contained in its amniotic sac and attached by way of the umbilical cord to the placenta attached to the uterine wall. Blood flows through the bodies of the pregnant woman and the foetus as a single unit. The foetus does not breathe oxygen; it metabolizes oxygen from the joint blood supply which is oxygenated by the pregnant woman's lungs. If the foetus is delivered prematurely at this stage, it is incapable of survival outside the uterus. Despite this level of intimate connection between the pregnant woman and the pre-viable foetus, it is genetically unique, different from the pregnant woman's DNA and carrying the DNA contributed by the sperm. The pre-viable foetus, if left undisturbed in its uterine environment, has the potential to become a human being.

"At common law, a person's body was not considered property, so there was no way to stipulate what was to be done with one's body parts after death", *supra* note 126 at 159 citing Schwartz, "Bioethical and Legal Considerations in Increasing the Supply of Transplantable Organs: from UAGA to Baby Faye", 10 Am. J.L. & Med. 397 (1985). This source provides an excellent overview of the legal and ethical issues raised by organ transplantation.

Historically, the "no property rights" rule has been suspect, especially since legislation was required to prohibit commerce in tissue. That prohibition simply may imply that property rights did exist in the absence of specific laws to the contrary. A corpse cannot form part of an estate and be governed by the disposition of assets set out in a will. Accordingly, it would appear that there are no property rights in that dead body. However, legislation does provide for the disposition of human remains for transplantation, research and medical education (*supra* note 231 at 126).

It is only a relative who can sue in damages for insult to the dead body (*supra* note 10 at 291).

³³³ *Supra* note 200 at 235.

The pre-viable foetus is incapable of exerting property rights or any other type of control over its tissue, because it is not a person at law at this time nor is it sufficiently independent of the pregnant woman to justify taking that legal position. The dilemma is to identify the person or entity that does have the best connection with the foetus and the right to exert control over the foetal tissue under the circumstances. There are several options:

- 1) The pregnant woman;
- 2) The man who is genetically related to the foetus; or,
- 3) The government or an agency on its behalf.

There is no Canadian law specifically on point³³⁴ regarding disputes over the ownership of foetal tissue after the first trimester elective abortion occurs. The closest comparison is the *Tremblay v. Daigle*³³⁵ case, where the putative father of the foetus sought an injunction to prohibit his girlfriend from having an abortion. The case was decided on the ground that Mr. Tremblay could not prevent the abortion because it would infringe on Ms Daigle's *Charter* rights to security of her person. Thus, it did answer the question of who was able to exert final control over

³³⁴ In *supra* note 200 at 237, the authors note that there was no Canadian law discussing whether reproductive material is capable of being treated like property. The law cited in the "Reproductive Material as Property" section is American and from the Commonwealth and will have persuasive value if these matters are ever litigated in Canada.

³³⁵ *Supra* note 181.

the foetus, as between the contesting parties in the context of the *Charter* rather than on a property based analysis.

The other situation that has provoked discussion of who “controls” the pre-viable foetus has occurred when embryos, created by artificial insemination, become the subject of a dispute. Even in these circumstances, the embryos in question were not *in utero* but stored in cryogenic facilities. For example, in *Kass v. Kass*³³⁶, as part of their divorce proceedings, Mr. and Mrs. Kass were contesting the fate of particular embryos fertilized by *in vitro* fertilization during their marriage. Mrs. Kass wanted custody of the embryos so that she could have them implanted if she so chose. Mr. Kass wanted to donate the embryos to research. The Court gave Mrs. Kass the exclusive right to determine the disposition of the embryos, basing its reasons upon the decision in *Roe v. Wade*³³⁷. In making this finding, the New York Court in *Kass* said at page 3:

. . . [i]t cannot seriously be argued that a husband has a right to procreate or avoid procreation following an *in vitro* fertilization.

Roe v. Wade does not deny the father the right of control over the foetus, but it prevents him from exercising that right to interfere with the bodily integrity of the pregnant woman by objecting to an elective abortion. The issue was constitutional and not related to arguments based upon the personhood of the foetus. The Court

³³⁶ No. 19658/93 (N.Y. Sup. C.T. Nasa City, filed 18 January, 1995).

³³⁷ *Roe v. Wade*, 410 U.S. 113 (1973).

in *Kass* misconstrued *Roe v. Wade* in this regard.³³⁸ The result of the *Kass* case is simply that it designates the foetus as maternal property rather than marital property.

The Tennessee case of *Davis v. Davis*³³⁹ addressed the issue of control of embryonic tissue and illustrated the doctrinal difference between custody and ownership theories. In the *Davis v. Davis* case, the dispute over frozen embryos was similar to the fact situation in the *Kass* case. Mrs. Davis wanted the embryos implanted and Mr. Davis wanted to continue the cryogenic preservation of the embryos until they reached an agreement as to the fate of the embryos. The Tennessee Supreme Court found explicitly that embryos were not property but were unborn human beings, thereby supporting the custody theory rather than the ownership theory. Therefore, the embryos were the future children of Mr. and Mrs. Davis. The Court based its decision on its *parens patriae* jurisdiction and the best interests of the child test, rather than specifically addressing the custody *versus* ownership models.³⁴⁰ However, the *parens patriae* and best interests of the child tests tacitly accept the same assumptions as the custody model rather than the ownership model.³⁴¹ It must be noted that the custody model precludes either

³³⁸ *Supra* note 336 at 202.

³³⁹ 1989 WL 140495 (Tennessee Circuit 1989), rev'd at 842 S.W. 2d 588 (Tenn. 1992).

³⁴⁰ *Supra* note 339 at 204.

³⁴¹ *Supra* note 200 at 258 - 261 where Litman and Robertson provide a thorough analysis of this case; see also Alexander Morgan Capron, "Parenthood and Frozen Embryos: More than Property and Privacy" (1992) 22:5 Hastings Center Report 32, for Capron's view of this case.

parent from consenting to an abortion and the subsequent donation of the tissue on the basis that the foetus is not the property of either parent. Accordingly, it is inconsistent with the Framework II analysis.

Two similar American cases, the *Del Vio v. Presbyterian Hospital*, an unreported decision of the U.S. District Court – New York, and *York v. Jones*, a Virginia decision, address the issues of the ownership of embryos and pre-embryos. These cases do not provide a very thorough analysis of the issues. However, they are helpful to the extent that the pre-viable foetus, embryo or pre-embryo can be the subject of a property analysis.³⁴²

In the case of *McCoy v. Georgia Baptist Hospital*,³⁴³ the Court considered whether the couple had a quasi-property interest in the dead body of their stillborn child. Georgia recognizes quasi-property rights in the remains of dead relatives. The Court held that parents had no such rights, in light of agreements that they had signed authorizing the hospital to “dispose of this infant in any manner they deem advisable”.³⁴⁴ The Court in *McCoy* did not decide the issue. The Court inferred that if the parents could sign their rights away and be bound by that release, then they must have had enforceable rights at some point in time.

³⁴² *Supra* note 200 at 255 - 257. In the *Del Zio* case, the embryo was assumed to be property. In the *York* case, the question was addressed but treated superficially.

³⁴³ 306 S.E. 2d 746, 748 (Ga. Ct. App. 1983).

³⁴⁴ *Supra* note 343 at 747 to 748; *supra* note 339 at 205.

In my view, the pre-viable foetus in a Framework II analysis, is incapable of sustaining any meaningful property rights in its own tissue, especially after an elective abortion. Therefore, either the pregnant woman, the man or the government is in a position to enforce the property right in the foetal tissue. The pregnant woman has the greatest connection with the pre-viable foetus and ought to be able to exert the property right in it and the foetal tissue that results from the elective abortion, especially in light of the fact that it is the dependency of the connection between the pregnant woman and the foetus that deprives the foetus of the logical basis for independent legal status prior to viability in the Framework II analysis.

3 The Development of Commercial Interests in Tissue and the *Moore* Case

Bearing in mind that the Framework II analysis leads to the conclusion that the pre-viable foetus is not capable of possessing any type of ownership or controlling interest in its tissue, either before or after abortion, it is unnecessary to consider whether a commercial interest or right to sell could vest in the foetus. There is no risk that the foetus could be involved in this type of scenario. However, as the foregoing discussion established, someone has the right to possess or control the foetal tissue prior to viability, because the foetus has not become a person at that time. I conclude that the pregnant woman has the greatest connection to the foetus and ought to be in the position to possess or exert control over the foetal tissue. There is a distinction between controlling foetal tissue for the purpose of disposal, or consent to transplantation, and control for the purpose of a sale of that

tissue. It is accepted in all Canadian *Human Tissue Acts*³⁴⁵ that the sale of transplantable tissue for profit is not permitted. Furthermore, public opinion is consistent that an open market in cadaver organs is unacceptable. There is a certain “moral revulsion” associated with the “desperately ill furiously bidding against each other for transplantable organs”.³⁴⁶

However, if there is an alienable property interest in one’s own body, by extension the pregnant woman would have the same alienable interest in the pre-viable foetus: why could there not be an opportunity to sell that tissue? *Moore v. Regents*

³⁴⁵ *Supra* note 21.

³⁴⁶ Arthur L. Caplan, “Organ Procurement: It’s Not in the Cards” in Joseph H. Howell and William F. Sale, (eds.), *Life Choices: A Hastings Center Introduction to Bioethics* (Washington, D.C. 1995: Georgetown University Press) at 422; also *supra* note 3 at 1001 – 1003, which sets out the position of The Royal Commission, being that the “non-commercialization of reproduction is one of our guiding principles. Apart from the threat to human dignity, the commercialization of fetal tissue could open the door to exploitation of poor women, especially in developing countries who might be persuaded to begin and end pregnancies for money”. The Royal Commission sets out the guiding principles espoused by the World Health Assembly (1989):

i) Giving or receiving payment (including any other compensation or reward) of organs should be prevented.

ii) Advertising the need for or availability of organs, with a view to offering of seeking payment, should be prohibited,

iii) Physicians and other health professionals should be prohibited from engaging in organ transplantation procedures if they have reason to believe that the organs concerned have been the subject of a commercial transaction.

iv) Organs should be made available to patients on the basis of medical need, not on the basis of financial or other considerations.”

We believe these principles should also apply to fetal tissue.

of the University of California³⁴⁷ discussed the ownership of bodily tissue but declined to decide whether a person “owns” his own tissue. It was held that Mr. Moore did have a cause of action in conversion, for the unauthorized use of his excised spleen cells by a researcher to create a marketable and profitable cell line.³⁴⁸ The California Court of Appeal explicitly declined “to resolve the complex issues relating to the human fetus”.³⁴⁹

The Court made the following comments:

There is a real concern about treating fetal tissue as pathological waste and permitting the hospital to profit from the sale of this discarded tissue without providing women with the opportunity to consent to or reject the proposed use of the fetal tissue.³⁵⁰

In addition, there is a concern that the clinics which recover the cost of harvesting in charging for fetal tissue will build in large personal profits and render the process ethically distasteful. Unfortunately, nothing can be done to police this type of behaviour other than to punish it when it occurs.³⁵¹

The rights of dominion over one’s body, and the interests one has therein, are recognized in many cases. These rights and interests

³⁴⁷ 249 Cal. Rptr. 494, 506 n. (1988); see also *supra* note 200 at 252 to 255 for a clear concise summary of the *Moore* case and the relevant property issues that were discussed therein; also George J. Annas, “Whose Waste Is It Anyway? The Case of John Moore” (1988) 18:5 Hastings Center Report 37 for an informative and, at times, humorous view of this important case. In particular, Moore comments on the abandonment and consent arguments. In trying to find the “right” analogy, Annas compares Moore’s spleen cells to crops in the ground, the Roman doctrine of “specification”, milk cows and garbage with the potential to be turned into gold.

³⁴⁸ *Supra* note 347 at 200.

³⁴⁹ *Moore v. Regents of The University of California*, 249 Cal. Rptr. 494, 506 n. 8 (1988); *supra* note 347 at 201.

³⁵⁰ *Supra* note 347 at 505.

³⁵¹ *Ibid.*

are so alien to property interest that it would be subterfuge to call them anything else.³⁵²

Clearly, there is a relevant distinction to be drawn based on the *Moore* case, between the pre-viable foetus as part of the pregnant woman's body and the post-viable foetus or any other entity having independent life or rights.³⁵³

The underlying thesis of the *Moore* case is that "[a] patient must have the ultimate power to control what becomes of his or her tissues. To hold otherwise would open the door to a massive invasion of human privacy and dignity in the name of medical process".³⁵⁴ Interestingly, *Moore* did not address the issue of whether or not the individual has the right to own and sell his tissue. The Court in *Moore* stopped at the point where Mr. Moore ought to have had the right to consent to the particular use of his tissue.³⁵⁵ The view was that the right to control one's tissue is distinguishable from the right to sell one's tissue. In so finding, the Court said:

[w]e are not called upon to determine whether the use of human tissue or body parts ought to be 'gift based' or subject to a 'free market'.³⁵⁶

A significant concern regarding property rights in foetal tissue transplantation is whether the right to sell one's tissue, including pre-viable foetal tissue, would result

³⁵² *Supra* note 347 at 725; 249 Cal Rptr at 505; and see *supra* note 347 at 342.

³⁵³ *Supra* note 10 at 293.

³⁵⁴ *Supra* note 347 at 728; 249 Ca. Rptr. at 506; in *supra* note 347 at 343.

³⁵⁵ *Supra* note 347 at 363.

in an undesirable commercial market in foetal tissue as discussed in the Ethics section.

Commercialism risks the exploitation of a woman's reproductive capacity as well as rendering the aborted fetus a commodity.³⁵⁷ Although there is no evidence to suggest that a woman would become pregnant and undergo an abortion solely for money, history shows that desperate people do desperate things, selling even vital non-regenerative organs if their circumstances or the circumstances of the recipient are perceived as desperate enough to warrant the sacrifice.³⁵⁸ There is a definite risk in exploiting the reproductive capacity of women and denigrating the human dignity of aborted fetuses by treating them as market commodities.³⁵⁹ On the other hand, accepting the fact that first trimester abortion is permissible, is it more demeaning to a desperately poor person to force her to survive the indignity of poverty or to provide the opportunity to sell her regenerative tissue to feed herself and her family? While this scenario raises numerous issues regarding the need for social support systems, one must acknowledge that:

to the person who needs money to feed her children or to purchase medical care for her parent, the option of not selling [her foetal tissue] is worse than the option of selling it. Society had not

³⁵⁶ *Ibid.*

³⁵⁷ *Supra* note 10 at 287; also see *supra* note 240 (Robertson) at 10 – 11, where Robertson thoroughly discusses the commercialization concerns.

³⁵⁸ *Supra* note 10 at 286.

³⁵⁹ *Supra* note 81 at 473.

benefitted individuals by banning organ sales unless it also provides a means to escape desperate conditions.³⁶⁰

Canada, the United States, and Western Europe have passed laws to prohibit the sale of organs. The solution may be to modify those statutes to include a prohibition against the sale of foetal tissue.³⁶¹ Most commentators recommend that market transactions in foetal tissue be prohibited. There is a general willingness to donate, as is shown in the case of bone marrow, blood, solid-twinning organs and other tissue. There is no reason to believe that women would not donate foetal tissue altruistically given their decision to abort the pregnancy. Therefore, there may be little need to fear development of a commercial market.³⁶² At present, the supply of electively aborted first trimester foetal tissue is more than sufficient to satisfy demand. The commercialization of the supply of foetal tissue is a possibility only if demand increases dramatically and the supply becomes insufficient. It is

³⁶⁰ Lori B. Andrews, "My Body, My Property" in Joseph H. Howell and William F. Sale, eds., *Life Choices: A Hastings Center Introduction to Bioethics* (Washington, D.C. 1995: Georgetown University Press) 389 at 396.

³⁶¹ *Supra* note 42 at 83.

³⁶² An interesting problem that would present itself if a commercial market were to be permitted would be whether the sale of foetal tissue would give rise to the same types of implied warranties that ordinarily follow the sale of a commodity. When goods are produced on a for-profit basis, a warrant of suitability and quality is usually strictly imposed. There are three relatively recent cases that deal with the concept of strict liability for medical/biological goods. Those cases are: (a) *Hollis v. Birch* [1990] B.C.W.L.D. 1290; (1993), 81 B.C.L.R. (2d) 1 (C.A.), (1995), 129 D.L.R. (4th) 609 (S.C.C.); (b) *ter Neuzen v. Kom* (1993), 81 B.C.L.R. (2d) 39 (C.A.), [1995] 10 W.W.R. 1 (S.C.C.); (c) *Pittman Estate v. Bain* (1994), 112 D.L.R. (4th) 257. In these cases, the plaintiff sought to impose liability on the defendant physicians for things placed into the body during the course of treatment. These cases involve a breast implant, semen infusion and a blood transfusion. Each concluded that the strict liability of sale of goods legislation should not be applied to these circumstances. Stephen G. Coughlan and Subrata Bhattacharja's article "Strict Liability for Medical Products?: When Should Doctors Be Liable" 3:3 Health Law Review 46 provides an excellent summary and analysis of these foundation cases.

possible that tissue markets may not serve a legitimate or desirable goal at all.³⁶³

In its Working Paper #66, the Law Reform Commission of Canada says:

The purchase of (*sic*) sale of human bodies, organs and other non-regenerative tissue should be made a *Criminal Code* offence . . . with allowance, however, for reasonable payments for procurement, transport, processing, preservation and implantation of tissue.³⁶⁴

Clearly, there is no consensus as to whether a commercial market in foetal tissue would be acceptable, even if suitably controlled, or completely unacceptable. Lori B. Andrews expresses the opinion that body parts could be sold under properly controlled circumstances. She says that “[i]t is possible to maintain that people are priceless by not allowing others to treat a person’s body commercially either before or after death and by giving people the power to refuse to sell their body parts”.³⁶⁵ She emphasizes that only the person who owns the body part should be able to sell it and the “middleman” should be removed to ensure that adequate compensation goes to the owner of the body part.³⁶⁶ Of course, Andrews’ position would have to be adapted to meet the specific concerns raised by the foetal tissue sales. Henry Hansmann³⁶⁷, says that:

³⁶³ Law Reform Commission of Canada, (Ottawa: Minister of Supply and Services, 1992) at 123

³⁶⁴ *Ibid.*, at 184.

³⁶⁵ *Supra* note 360 at 398.

³⁶⁶ *Supra* note 360 at 399.

³⁶⁷ Henry Hansmann, “The Economics and Ethics of Markets for Human Organs” (1989) 14 *Journal of Health Politics, Policy and Law* 57.

It appears possible to design a suitably regulated market-type approach to the acquisition and allocation of cadaver organs (and perhaps of organs from living donors as well) that will be neither unduly offensive to ethical sensibilities nor easily abused as it may yield significant improvements over the existing system of organ procurement, which presents important ethical and practical problems of its own.³⁶⁸

The main issue with respect to commercial transactions in foetal tissue is the allocation or rationing of what is at present a plentiful resource, but that could in the future become a scarce resource.³⁶⁹ The “design [of] a suitably regulated market-type approach to the acquisition and allocation” of foetal tissue would be a difficult, but not impossible, task.

Adherents to the Framework I analysis would find this position most distressing because its logical outcome is that the pregnant woman would reap a financial benefit from the deliberate killing of her foetus. Framework III supporters have to make no concessions because until the foetus is physically independent of the pregnant woman, it is as much a part of her as any other body part to which Andrews refers. Framework II proponents have to make the same rationalization that they do for every argument: before viability, the foetus does not have an independent legal identity and after viability it does. Therefore, in the case of first trimester abortions, Andrews’ proposition would be feasible. After that point, it becomes much less practical.

³⁶⁸ *Supra* note 367 at 122.

Another interesting option with respect to foetal tissue transplantation is to see it as a gift. In order to give a gift, one must own or control it. Therefore, electively aborted first trimester foetuses are within the control of the pregnant woman and she can choose the ultimate use of that tissue. There are three pivotal concepts in the gift analysis, as set out by Thomas Murray³⁷⁰:

- 1) Significant gifts are commonly given in response to the needs of the client.
- 2) The degree of moral (and not merely prudential) obligation one feels (and should feel) to make a gift is greatest when the recipient's need is greatest.
- 3) Mass bureaucratic societies need to affirm what it is citizens share with their neighbours.

A gift of the body is, in Thomas Murray's view³⁷¹, ministering to the need for health and affirming independence. At present, there is no need to create a greater supply of foetal tissue because supply exceeds demand significantly. However, should the supply of foetal tissue diminish substantially, there may be a drive to increase supply. The method by which the supply is increased may become a source of great controversy in the future, particularly if evidence becomes available to suggest that the payment of valuable consideration may be sufficient

³⁶⁹ R. R. Bovbjerg, J. D., Book Review (1988) 9:3 *The Journal of Legal Medicine* 467; D. Cowan *et al.*, eds., *Human Organ Transplantation: Societal, Medical-Legal, Regulatory, and Reimbursement Issues*, (Michigan: Health Administration Press, 1987) at 471.

³⁷⁰ Thomas H. Murray, "Gifts of the Body and the Needs of Strangers" (1987) 17:2 *Hastings Center Reports* 30 at 30.

³⁷¹ *Ibid.*

inducement for a woman to become pregnant and undergo a first trimester abortion for the purpose of reaping the financial reward offered by a commercial market in foetal tissue.

4 Informed Consent

The doctrine of informed consent is a concept that pervades the treatment of patients by all medical and para-medical personnel.

The purpose for seeking consent to treatment is to protect the "right [of] an adult person of sound mind to determine what shall be done with his own body: *Reibl v. Hughes*³⁷². This general concept of common law was recently confirmed by the Supreme Court of Canada in *Ciarlariello v. Schacter*³⁷³ where the Court stated that:

It should not be forgotten that every patient has the right to bodily integrity. This encompasses the right to determine what medical procedures will be accepted and the extent to which they will be accepted. Everyone has the right to decide what is to be done to one's own body. This includes the right to be free from medical treatment to which the individual does not consent. This concept of individual autonomy is fundamental to the common law . . .

The concept of the consent to treatment was traditionally argued as a defence to allegations of assault or battery made against the physician by his patient, following the maxim "*Volenti non fit injuria*" – "to one who is willing, there is no harm done". The defence raised by the physician in these circumstances was that

³⁷² ([1980] 2 S.C.R. 880, 114 D.L.R. (3d) 1, 14 C.C.L.T. 1, 33 N.R. 361 (S.C.C.); rev'g 21 O.R. (2d) 14, 89 D.L.R. (3d) 112, 6 C.C.L.T. 227; rev'g 16 O.R. (2d) 306, 78 D.L.R. (3d) 35.

the patient had agreed to the particular contact. Thus, the physician had not committed an assault or battery because the patient had consented to the examination.

Over time, the law adopted the concept of informed consent to treatment and found liability in negligence for incomplete or absence of communication of a sufficient amount of information to the patient to enable him to make an "informed" decision as to whether to permit the treatment. The liability can flow if the physician has inadequately informed the patient of the particulars of the treatment (especially the risks) even if the procedure is performed without negligence. Of course, if the consent is obtained under duress or deception, then it is not valid³⁷⁴.

The basic elements necessary to obtain consent to a procedure (whether that procedure is a first trimester abortion or a course of medication) are the following:

- 1) the patient must have the mental capacity to be able to provide the consent;³⁷⁵
- 2) the consent must be given voluntarily;³⁷⁶

³⁷³ [1993] 2 S.C.R. 119 at 135.

³⁷⁴ The chapter titled "Consent to Medical Treatment" in Gilbert Sharpe, *The Law & Medicine in Canada* (Second edition) (Toronto: Butterworths, A Division of Reed Inc., 1987) provides an overview of the development of the law of consent to treatment and informed consent. Sharpe highlights the development of the concepts and provides a good general discussion.

³⁷⁵ Clearly, if a person does not have the mental capacity to understand the nature of the treatment and the consequences of his decision, the consent to treatment should be provided by a substitute decision maker. Capacity to consent to treatment can be limited to the patient's ability to understand the particular treatment proposed. Erin Nelson cites the example of a person who may not be capable of consenting to cardiac surgery but may be capable of consenting to routine testing and procedures such as the taking of blood or administration of antibiotics in *Canadian Health Law and Policy* supra note 146 at 110 -111.

3) the consent must be informed;³⁷⁷ and

4) the consent must contemplate a specific set of events or a particular treatment³⁷⁸.

Consent may be written or verbal and may be express or implied by conduct³⁷⁹.

The leading Canadian case dealing with informed consent is the *Reibl v. Hughes*³⁸⁰. In that case, the Supreme Court found that there was a distinction between battery and negligence. Battery is the completely unauthorized touching

³⁷⁶ Consent cannot be acceptable if it is given while under coercion or undue influence, or as a result of misrepresentation of the type of treatment in question. See *Norberg v. Wynrib* (1992), 92 D.L.R. (4th) 449 (S.C.C.) at 457 regarding coercion and undue influence and *Reibl v. Hughes* (1980), 114 D.L.R. (3d) 1 (S.C.C.) at 11 regarding misrepresentation as to the nature of the treatment, as cited in *Canadian Health Law and Policy* supra note 146 at 108-110.

³⁷⁷ Chapter 5 of *Canadian Health Law and Policy* supra note 146, authored by the well-respected Bernard M. Dickens (pages 117-141) presents an exceptional summary of this issue. In this chapter, Dickens highlights the *Reibl v. Hughes* and *Hopp v. Lepp, sub.*, cases which are discussed summarily later in this section.

³⁷⁸ Both the patient and the physician must understand the scope of the consent being provided in order to avoid unfortunate circumstances. In the *Schweitzer v. Central Hospital* (1974), 6 O.R. (2d) 606 (H.C.) case, the patient consented to an operation on his toe and also received a spinal fusion. The confusion occurred because the physician had received authorization from the Workers' Compensation Board to perform both procedures on the patient but the patient's consent form said nothing about the spinal fusion. Similarly, in *Parmley v. Parmley*, [1945] 4 D.L.R. 81 (S.C.C.), consent was given to the removal of two teeth and, while under the general anaesthetic, the dentist took out all of the patient's teeth. This issue is discussed in further detail at pages 112-113 of *Canadian Health Law and Policy* supra note 146.

³⁷⁹ Of course, written consent to a procedure is preferable from the point of view of the liability of the physician as it is evidence should the matter come to trial. Verbal consent is equally valid – just harder to prove: L. Klar, *Tort Law*, 2nd edition (Toronto: Carswell, 1996) at 104. Similarly, express consent by the patient is preferable to implied consent. Consent can be implied from the conduct of a patient in presenting himself for examination and co-operating with that examination: *Reynen v. Antonenko* (1975), 30 C.R.N.S. 135 (Alta. T.D.) as cited in *Canadian Health Law and Policy* at 103 where the Plaintiff was found to have impliedly consented to a rectal search for the retrieval of drugs. The Plaintiff was given the choice by the police to remove the drugs himself or have a doctor remove them. He responded "let's go to the hospital", removed his clothes and assumed the requested position to allow the doctor to perform the rectal examination and remove the drugs. The doctor testified that the examination would have been impossible without the co-operation of the Plaintiff. The Court held that the Plaintiff had consented, by his conduct, to the examination and dismissed his action in battery against the doctor.

³⁸⁰ [1980] 2 S.C.R. 880, 114 D.L.R. (3d) 1, 14 C.C.L.T. 1, 33 N.R. 361; rev'g 21 O.R. (2d) 14, 89 D.L.R. (3d) 112, 6 C.C.L.T. 227; rev'g 16 O.R. (2d) 306, 78 D.L.R. (3d) 35.

of another person and negligence can be found if the physician failed to discharge his obligation to advise the patient of the particular risks of the procedure in question. Sharpe states that:

No challenges to the principles enunciated in *Reibl v. Hughes* have surfaced, and it is likely that the rule as to disclosure of material risks and the objective reasonable patient test of causality of damage will continue to be sacrosanct for some time to come. Thus, physicians who obtain consent from their patients without fulfilling their responsibility to inform the patient of significant risks will not be found liable in battery (unless the consent was obtained by fraud or under duress) but may very well be found negligent.³⁸¹

The other leading case in this area that is often quoted in the same breath as the *Reibl v. Hughes* decision is the decision of the Supreme Court of Canada in *Hopp v. Lepp*³⁸². In that case, the general principle established by the Supreme Court of Canada:

. . . that a patient's consent, whether to surgery or to therapy, would give protection to his surgeon or physician only if the patient has been sufficiently informed to enable him to make a choice whether or not to submit to the surgery or therapy. The issue of informed consent is at bottom a question whether there is a duty of disclosure, a duty by the surgeon or physician to provide information and, if so, the extent or scope of that duty.³⁸³

The principles of informed consent, while refined through the various cases dealing with particular situations of alleged failure to disclose material risks, have not

³⁸¹ Supra note 374 at 48.

³⁸² Supra note 372.

³⁸³ 112 D.L.R. at 71

changed dramatically³⁸⁴. At the foundation of all of the cases is the theory that the patient, unless it would be therapeutically detrimental to him, has the right to be informed as to the nature and consequence of the proposed treatment.³⁸⁵ In the British Columbia case of *Koehler et al. v. Cook*³⁸⁶, a patient who underwent surgery for migraine headaches and suffered a loss of her ability to smell and a partial loss of her ability to taste sued her physician for failing to advise her of these risks of the surgery. No negligence was established; however, she was awarded damages in battery on the basis that she did not provide "informed" consent to the procedure. The Court in that case reflected upon the fact that the patient had inquired about the risks and had been reassured by her physician that there were none although the evidence established that there was a small risk of permanent injury to the sense of smell associated with the surgery. The Court stated found that a small probability of a serious injury should be disclosed particularly when the

³⁸⁴ For example, even though the English court have adopted a subjective test with respect to whether the patient would have consented to the procedure in question had he been fully informed as compared to the more objective "reasonable patient" test that has found favour with the Canadian courts, the English courts have approved the principles set out in *Reibl v. Hughes*: Supra note 374 at page 47 - 48. On this point, also refer to Sharpe's article "Five Recent Decisions on Informed Consent", (1981) 1 *Health Law in Canada* 79.

³⁸⁵ This is the concept of "therapeutic privilege". In general terms, if the physician, in his professional opinion, believes that the patient will be harmed severely by the disclosure of particular types of information or particular risks of undergoing a procedure, he can exercise his professional judgment in proceeding with the proposed treatment in the absence of disclosure of the information in question. This concept is addressed in the *Hopp et al. v. Lepp* case at page 77 where Chief Justice Laskin says that the physician "has some leeway in assessing the emotional condition of the patient" in deciding how much information to provide to the patient and then at page 80, his Lordship cautions that "[I]t should not be for that physician to decide that the patient will be unable to make a choice and, in consequence, omit to warn him of risks". Despite the apparent contradiction expressed here, it is important to note that the concept of therapeutic privilege does seem to be accepted, perhaps with some uneasiness, and applied in extreme circumstances where the patient's health would be negatively affected by receiving the information in question. Also, see Bernard M. Dickens, "Informed Consent" in *Canadian Health Law and Policy* at pages 135-140. The patient has the right to be informed of the material risks of the proposed treatment, to consider those risks, and to make a free and voluntary decision as to whether to undergo the: Supra note 374at 34.

patient has made specific inquiries. The Court in the *Koehler* case also referred to the issue of whether the patient would have elected to undergo the procedure had the appropriate information been provided to her. Sharpe says that this determination is a question of fact in each case (implying that it is a subjective test rather than an objective "reasonable person" type of test). The subjective test was clearly overruled in the *Reibl v. Hughes* case where Chief Justice Laskin applied the following test:

. . . aspects of the objective standard would have to be geared to what the average prudent person, the reasonable person in the patient's particular position, would agree to or not agree to, if all material and special risks of going ahead with the surgery or foregoing it were made known to him.³⁸⁷

The law at present is that the information required to be disclosed in order to obtain proper consent to the administration of treatment is the "reasonable person in the plaintiff's position" test enunciated by the Supreme Court in *Reibl v. Hughes*. The old standard of the medical professional standard of disclosure (being, the amount of information the reasonable physician would disclose in the circumstances) was superceded by the foregoing test. It is important to note that this test is not purely objective because it does take into account the personal circumstances and factors that might affect the decision-making of the particular

³⁸⁶ (1976), 65 D.L.R. (3d) 766 (B.C.S.C.)

³⁸⁷ (114 D.L.R. at 16).

patient in question rather than trying to establish a single level of disclosure for all patients.

The law of consent to treatment also involves the right to withdraw that consent.

Again, in the *Ciarlariello* case, the Supreme Court held, at page 136, that:

An individual's right to determine what medical procedures will be accepted must include the right to stop a procedure . . . the patient's right to bodily integrity provides the basis for the withdrawal of consent to a medical procedure even while it is underway. Thus, if it is found that the consent is effectively withdrawn during the course of the proceeding then it must be terminated.

There are circumstances where consent is not required prior to treatment. Circumstances of emergency or specific legislative provisions are times when consent prior to treatment is not required.³⁸⁸

The questions and peculiarities of obtaining informed consent to medical treatment generally are beyond the scope of this paper³⁸⁹. The issue of obtaining informed consent needs to be considered, for the purposes of this paper, at the time of the abortion and at the time of the donation of the resulting foetal tissue³⁹⁰.

The question of obtaining consent to an abortion is a very difficult subject insofar as the pregnant woman is often in a situation of extreme vulnerability and emotional turmoil. In addition, the issue of abortion is very controversial and one

³⁸⁸ *Canadian Health Law and Policy* supra note 146 at 105 – 108.

³⁸⁹ There is a very good discussion of the issues surrounding consent to medical treatment in chapters 4 and 5 of *Canadian Health Law and Policy*, eds. Jocelyn Downie and Timothy Caulfield, *supra*

that will undoubtedly affect the pregnant woman psychologically for a long time, if not for the rest of her life.

From the point of view of the pre-viable foetus, obviously it cannot give or withhold consent to either the abortion or the donation of its tissue. In accordance with the choice of Framework II, the pre-viable foetus has not achieved personhood and is not entitled to consideration at this time. Therefore, it is not necessary to obtain the consent of the foetus, on either a proxy or substituted basis. However, applying the Framework II analysis, I believe that the pregnant woman's consent to the donation of the foetal tissue is required and appropriate, because she has the greatest connection to the foetus and the right to control the disposition of the foetal tissue.³⁹¹ Obviously, the pregnant woman must consent to the abortion. There are specific considerations with respect to obtaining informed consent during such difficult circumstances. Obtaining the pregnant woman's consent to the abortion is a specific task that is beyond the scope of this thesis, because the donation of foetal tissue presumes the existence of transplantable tissue from elective first trimester abortions.

With respect to obtaining consent to the donation of the foetal tissue for therapeutic transplantation purposes after the abortion has occurred, one has

³⁹⁰ *Supra* note 3 at 996 – 1001 for the position and recommendations of *Proceed With Care* .

³⁹¹ *Supra* note 240 (Childress) at C7 where he says that the majority of the Panel held that “maternal consent is both necessary and sufficient to transfer fetal tissue after an elective abortion (except where the father's objection is known.”

recourse to the various Human Tissue Donation Acts, cited earlier, that deal with the current law regarding the altruistic donation of human tissue for transplantation, research or experimentation, and teaching.

It is settled law that there is no "property" right inherent in the physical body after death that vests in the next-of-kin or the state. The next-of-kin has the duty to arrange suitable disposal of the remains in accordance with the law, social values and any other personal or religious beliefs. For this limited purpose, the next-of-kin has control of the body and can consent to the donation of the tissue for transplantation or other purposes. Under those circumstances, the next-of-kin can consent to the donation of the remains for transplantation purposes. This concept can be applied to the donation of foetal tissue.

The donation of foetal tissue can be compared to the donation of other types of tissue. The purpose of obtaining consent under the circumstances is the recognition of the rights, obligations and sensibilities of the family members in disposing of the remains, in this case, the foetal remains.³⁹² The parents and next-

³⁹² *Supra* note 2 at 234. Further, *supra* note 346 at 420 where Arthur Caplan discusses the following issues. Many European countries have enacted legislation mandating a policy of, in the words of Caplan, strong presumed consent or weak presumed consent. Austria, Denmark, Poland, Switzerland and France have policies supporting strong presumed consent to tissue donation. Finland, Greece, Italy, Norway, Spain and Sweden have adopted weak presumed consent policies. There is no empirical data showing that these policies increase the supply of cadaver organs available for transplantation. Interestingly, even in the face of strong presumed consent policies, French physicians report that they will not harvest organs for transplantation without the consent of the family. Caplan reports that American physicians also refrain from harvesting any transplantable organs without the consent of the family. Caplan acknowledges that there is a gap between what physicians are able to do and what they are prepared to do by way of tissue harvest. He says at page 427 that:

Footnote Continued on Next Page

of-kin are authorized to donate tissue for use in research or for transplant purposes. In the case of the donation of pre-viable foetal tissue for therapeutic transplantation purposes, it is my opinion that the pregnant woman can make that decision.

Some people argue that the pregnant woman should lose her right to consent to the foetal tissue donation because her decision to abort proves her to be incapable of considering the best interests of the foetus. Arguably, the decision to abort disassociates the woman from the maternal role that requires her to be concerned for the best interests of the foetus/child.³⁹³ Several commentators, including Bopp and Burtchaell, believe that a woman's consent is inappropriate because the decision to abort is a clear indication that she will not act in the best interests of the foetus and must be denied the opportunity to act as the decision-maker.³⁹⁴ It is important to remember that the Framework II analysis leads to the conclusion that

"Cadaver organ donation is, whether we like it or not, a family matter. Families should be given every opportunity to act upon their desire to transform the tragedy of death into the gift of life. But they must be asked."

³⁹³ *Supra* note 26 at 752; see also *supra* note 240 (Robertson) at 9 where he discusses this issue under the heading "The Woman's Right to Dispose of Fetal Tissue" and concludes "the ethical case for denying the woman who aborts dispositional control of fetal remains is not persuasive. She cannot insist that fetal remains be used for transplantation because no donor has the right to require that intended donees accept anatomical gifts, but she should retain the existing legal right to veto use of fetal remains for transplant research or therapy. Her consent to donation of fetal tissue should be routinely sought" (page 9). I agree.

the pre-viable foetus, while uniquely human and deserving of respect, is not endowed with personhood. Therefore, there is no need to act in its best interests or to consider its position in any way.

If the pregnant woman has an interest as the owner or controller of the foetal tissue, particularly where the foetal cells may be maintained in a viable state, it is reasonable to require her to consent to its use.³⁹⁵ Some people are generally uncomfortable with the woman having an absolute right of control over the foetus that could be exercised in a way that is interpreted as being harmful to the foetus. This argument is founded upon the assumption that the foetus is a person.³⁹⁶ Surely, those people expressing this viewpoint would not be overly concerned about whether the same woman donated a kidney for transplant purposes, at least, not on behalf of the kidney. The Framework II analysis addresses this

³⁹⁴ *Supra* note 42 at 82; *contra* this position, see *supra* note 240 (Childress) where Dr. Childress says that “a woman who has a legal abortion remains the proper decision-maker about the disposition and transfer of foetal remains. Societal disputes about the morality of her legal decision to abort should not disqualify her as a decision-maker about abortion. I quote from the Panel’s rationale: “She still has a special connection with her fetus, and she has a legitimate interest in its disposition and use. Furthermore, the dead fetus has no interests that a pregnant woman’s donation would violate”; also, Mary B. Mahowald, “Placing Wedges Along a Slippery Slope: Use of Fetal Neural Tissue for Transplantation”, *Clinical Research* 36 (1988) 220 as cited in *supra* note 240 (Robertson) at 9 where Robertson says that “some ethicists claim that the decision to abort disqualifies the mother from playing any role in disposition of fetal remains”; see also *supra* note 75 at 14, where Kathleen Nolan supports the “disqualification” concept as it pertains to the pregnant woman who chooses to abort.

³⁹⁵ *Supra* note 42 at 82.

³⁹⁶ By way of an indication of the interdependence of the pregnant woman and the foetus, Susan S. Mattingly, in her article, “The Maternal-Fetal Dyad: Exploring the Two-Patient Obstetric Model”, (1992) 22:1 *Hastings Center Report* 13 at 17, discusses in detail the dilemma faced by physicians who treat pregnant women. She notes that the legal status of the foetus is almost irrelevant to the physician. Ethically, he/she has two patients with unique physical connections. Conflicts are known to occur and cannot simply be passed off on the legal status of the foetus argument. “Treating the fetus as an independent patient but continuing to regard the pregnant woman as a compound patient incorporating the fetus has caused the physician’s ethical dilemma to be misconstrued as a conflict between the duty to benefit the fetus and the duty to respect the woman’s autonomy.”

concern by endowing the foetus with personhood at the point in its gestational development when it can, theoretically, sustain its own life independent of the pregnant woman.

It is asserted that a woman who aborts a foetus has no interest in that foetus's ultimate fate. To the contrary, I believe that the pregnant woman may care deeply about whether the foetal remains are donated to therapy, research or simply discarded.³⁹⁷

After it has been determined that informed consent to the donation of the foetal tissue is required, an examination of the timing of that request must occur. There are two stages at which informed consent must be acquired in the process of harvesting foetal tissue. First, the decision to abort must be an informed decision made independently of the second choice, that is whether to donate the resultant foetal tissue.³⁹⁸ Based upon the Framework II analysis, the decision to abort is made only by the pregnant woman. The decision to donate the foetal tissue that results from the first trimester elective abortion is also made by the pregnant woman, either on the basis that the foetal tissue is effectively an extension of her body at this stage of development or as the next-of-kin.

³⁹⁷ *Supra* note 81 at 465; see also *supra* note 240 (Robertson) at 9.

³⁹⁸ *Supra* note 337; also *supra* note 10 at 284; and *supra* note 240 (Robertson) at 9, where he confirms that the "main ethical concern is to assure that her choice about tissue donation is free and informed".

The timing of the request for consent to use the foetal tissue for transplantation is controversial. Presently, some hospitals request that women undergoing an abortion sign a consent to give the clinic or hospital the right to dispose of all pathological waste, including foetal remains. There are at least three reasons to obtain consent to donate the foetal tissue prior to the abortion:

- 1) Seeking consent after the abortion may constitute harassment or may prolong any psychological suffering experienced by the patient;
- 2) To obtain the greatest amount of high quality foetal tissue, there is a need to expedite the process between the death of the foetus and the retrieval of the foetal tissue; and,
- 3) If the woman knows that tissue may be used for research, there is no ethical reason to wait until after the abortion to prevent women from considering donation at the time of the abortion decision.³⁹⁹

There are also at least three good reasons to seek consent to donate foetal tissue only after the abortion has occurred:

- 1) The information that must be discussed constitutes an unreasonable burden for women prior to an abortion;
- 2) Those who procure the tissue should wait until foetal demise is certain, not just possible, before approaching a woman so that their interests do not influence the procedure for the abortion; and

³⁹⁹ *Supra* note 2 at 244.

3) It is necessary to maintain a distinction between the decision to abort and the decision to donate.⁴⁰⁰

If there is a substantial fear that obtaining consent to donate foetal tissue prior to the abortion creates perceived negative repercussions with respect to the frequency or legitimacy of abortion, legislation could be enacted to separate the decision to abort from the request for informed consent to the use of the resulting foetal tissue for transplantation.⁴⁰¹

However, it must be ensured that the separation of the abortion and transplant teams actually protect women from unfair pressure.⁴⁰² The environment should be one in which the woman can make a free and voluntary choice. Obviously, there can be no threats, coercion or subtle forms of pressure to agree to donate foetal tissue.⁴⁰³ Access to abortion must not be contingent upon the willingness to donate

⁴⁰⁰ *Ibid.*

⁴⁰¹ *Supra* note 21 at 53.

⁴⁰² *Supra* note 81 at 470; see also *supra* note 240 at 9, where he reiterates that there must be “[a] clear separation of the two discussions . . . [to] assure that tissue donation is not a prerequisite to performance of the abortion. Also it will prevent the prospect of donating fetal remains from influencing the decision to abort, a preferable policy when sufficient tissue from family planning abortions is available. To that end, the request to donate fetal tissue should be made only after the woman has consented to the abortion. The alternative of waiting until the abortion has been performed would add little protection and not be practical. In addition, the person requesting consent to tissue donation and performing the abortion should not be the person using the donated tissue in research or therapy, a constraint widely followed in cadaveric organ procurement.”

⁴⁰³ It is important to note that there are many ways in which a woman’s reproductive capacity can be exploited. Janice G. Raymond, “Reproductive Gifts and Gift Giving: The Altruistic Woman” (1990) 20:6 *Hastings Center Report* 7 at 9, noted that “[t]he potential for women’s exploitation is not necessarily less because no money is involved . . . there are unique affective ‘inducements’ in familial contexts that do not exist elsewhere . . . there could be the coercion of family ties in which having a baby for a sister or another family member may be rationalized as the ‘greatest gift’ one woman can give to another”. In making this comment Ms Raymond highlights the depth of the potential for obtained coerced consent that looks very much like free and informed consent. This potential situation must be zealously prevented. Thankfully, foetal tissue is immunologically neutral, so this situation is less likely to occur than in other circumstances.

foetal tissue.⁴⁰⁴ There is the question “whether the requirement for a legally valid consent could be met for the donation of foetuses in the context of an abortion procedure”.⁴⁰⁵ It is uncertain as to whether the knowledge of the possible use of foetal tissue may result in “motivation, reason or incentive” for the abortion.⁴⁰⁶ Regardless of any additional motivation, the ultimate reason for an abortion is that the pregnant woman wishes to end her pregnancy.⁴⁰⁷

It is hoped that the separation of consent to abort from consent to donate will draw attention to the issue of foetal tissue donation in a positive sense and may enhance the voluntary donation of tissue.⁴⁰⁸ To avoid the appearance of coercion, separate personnel should obtain the consent to abort and the consent to donate. Those who secure consent should not be the treating personnel.⁴⁰⁹ The physician’s primary obligation is to serve the patient’s interests. The perception

⁴⁰⁴ *Supra* note 2 at 245.

⁴⁰⁵ Alexander M. Capron, “The Law Relating to Experimentation with the Fetus” 13-4 in Appendix: Research on the Fetus (1975) at 40 Fed. Reg. 33, 530 (1975).

⁴⁰⁶ *Supra* note 10 at 284.

⁴⁰⁷ The United States House of Representatives sought to close the loophole of ensuring that pregnant women were not seeking abortion for the purpose of making a foetal tissue donation by passing H. R. 2507 (National Institutes of Health Revitalisation Amendments of 1991), restoring federal funding to human foetal tissue research and requiring that they sign a document consenting to the abortion and certify their decision to donate “separately and independently” from her decision to have an abortion. She is also required to sign a separate document certifying that her decision to abort is “not made in order to provide fetal tissue” for donation. A more thorough discussion of this bill can be found in Warren Kearney *et al.*, “Fetal Tissue Research and the Misread Compromise” (1991) 21:5 Hastings Center Report 7 at 7 - 8. This bill highlights the extent to which the Americans thought they had to go to ensure that consent to abort and consent to donate were independent.

⁴⁰⁸ *Supra* note 2 at 234.

⁴⁰⁹ *Supra* note 2 at 246.

that he is interested in obtaining foetal tissue for his own research may weaken the patient's trust at a time when the patient is particularly vulnerable.

Despite the fact that researchers may be the best source of information regarding the use, handling, and purpose of tissue donation, there is a danger that they could unintentionally exert pressure on the woman to donate as a result of their self interest and based on their own feelings and biases with respect to the personhood of the foetus. It is inherently logical to suggest that coerced donations of foetal tissue are inappropriate regardless of the source of the coercion. Medical researchers are in a particularly vulnerable position because their protocols are subject to review. An alternative is to permit the use of foetal tissue without specific consent.⁴¹⁰ However, western society generally rejects the non-consensual harvest (or opt-out theory) of tissue or organs; in that regard, the consent of the family is usually necessary.⁴¹¹

Clearly, there are many important issues raised in the context of obtaining appropriate informed consent to the harvest of human foetal tissue for

⁴¹⁰ *Supra* note 81 at 465.

⁴¹¹ *Supra* note 81 at 466; see also *supra* note 240 (Robertson) at 9, where Robertson reiterates that "American public policy has vigorously rejected routine salvage of body parts without family consent as a way to increase the supply of organs for transplant. Even presumed consent, which would take organs unless the family actually objects, has been largely rejected. Depriving the mother (and father who agrees to the abortion) of the power to veto fetal tissue transplants would single out fetal tissue for transplant use without family consent. Such a radical change in tissue procurement practice is not needed to satisfy the demand for fetal tissue. It serves only to punish women who abort."

transplantation.⁴¹² It is important to return to the framework of analysis when answering this question in its particulars. Framework II clearly specifies that the pre-viable foetus is uniquely human and deserves respect and dignity. However, because of its gestational immaturity, it is not endowed with personhood. Therefore, its interests play no part in considering the question of consent to the use of foetal tissue, after the elective abortion is performed. The pregnant woman has the closest connection to the foetus and, at the time of the abortion, it is more an extension of her body than an independent human being. Because of this classification, she is able to give consent to the donation of the foetal tissue. The mechanics of obtaining these two different consents must be considered carefully and every opportunity for free, informed consent based on full information must be given.

5 Conclusion

The legal issues that arise in the context of the transplantation of foetal tissue into humans for therapeutic purposes are far reaching; from the issues of who is the real owner of the foetal tissue, to who can give consent for its use, and to the question of a potential commercial market.

The framework of analysis is critical to the cogent discussion of these vital questions. Throughout this thesis, I have chosen to consider the issues raised by

⁴¹² *Supra* note 17 at 35 to 37, discusses the issues raised by maternal consent to the donation of the foetal remains for transplantation and foetal tissue procurement practices.

the transplantation of foetal tissue within the parameters of Framework II. In this framework, the foetus does not acquire any rights at law until it reaches the point in its development when it could maintain its own life independent of the pregnant woman, if necessary. The legal issues that arise in the context of foetal transplantation occur at a time when the foetus has not achieved the developmental milestone of viability. It is incapable of sustaining life outside of the pregnant woman's uterus with any amount of medical technology. It is first trimester foetal tissue that is most suitable for transplantation and, therefore, many of the legal rights that the foetus would acquire after viability have not vested. Therefore, the legal position of the foetus is simplified.

With respect to the question of the ownership of foetal tissue, the foetus is in no position to "own" any rights to its tissue, because it has not been endowed with personhood at the time of the abortion. In effect, the foetus is so intimately connected to the pregnant woman that it is an extension of her. The one distinction that does remain from the ethical, rather than the legal, point of view is that the pre-viable foetus does possess the potential to achieve viability and independent life if undisturbed. Therefore, it is deserving of special respect. However, this level of respect, in the context of the question of property rights, relates more to the way that it is treated rather than in vesting any type of property rights in the pre-viable foetus itself.

With respect to the question of informed consent, the foetus (whether pre-viable or post-viable) is unable to express its opinion. In the context of the Framework II

analysis, the pre-viable foetus is not required to give consent or to have consent given on its behalf because it has not achieved viability. The person most connected with the pre-viable foetus is the pregnant woman because of the physical connection to her body. It is the pregnant woman whose consent is required for the donation for transplantation to occur.

In the context of the potential for a commercial market to arise, the Framework II analysis dictates that the pregnant woman does possess the right at law to sell the foetal tissue if a market exists. However, the ethical position that human tissue should never be commodified to the extent that a commercial market arises becomes relevant. If the law is considered in isolation, Framework II does permit the buying and selling of human tissue by the owner of it. Because the pregnant woman is the person with the closest connection to the foetus, if the tissue is to be sold, then the pregnant woman is the one with the right. The foetus has no status to object.

Finally, from the point of view of regulating the entire process, several considerations become apparent. Clearly, the foetus has no input into the process in the Framework II analysis. The legal issues that arise in this context are focused on the management of the pregnant woman through the process of the abortion and the donation. Standardizing the procedures is a measure to help ensure that the pregnant woman is treated with respect and dignity throughout the procedure, particularly given the delicacy of the timing of the decision to abort and the decision to donate the foetal tissue. It is the role of the regulation of the

process to ensure that the pregnant woman is not harmed in the effort to obtain the best tissue harvest possible. Clearly, the Framework II analysis permits the pregnant woman to be considered before the pre-viable foetus.

In conclusion, the legal issues that arise in the context of the transplantation of foetal tissue for therapeutic purposes are complex. However, adherence to the Framework II analysis does provide a consistent way of looking at the issues. While the results might not always be the preferred answer, they are consistent with the model and therefore certain. It is most beneficial in establishing a framework for legal analysis, that a framework that yields certainty be chosen.

CONCLUSION

Is human foetal tissue the penicillin of the next millennium?

Human foetal tissue, which is presently in abundant supply and is disposed of routinely by incineration as pathological waste, may provide substantial relief from the symptoms of many debilitating and irreversible conditions. The impact of this technology could be felt very broadly throughout society if the research progresses.

At present, human foetal tissue has been transplanted into Parkinson's Disease patients and has demonstrated positive results in relieving some of the severely debilitating symptoms of that disease. Human foetal tissue has been used for decades as the treatment of choice for DiGeorge's Syndrome. There are many other debilitating diseases and conditions that may respond to foetal tissue transplantation therapy.

The best source of foetal tissue for use as graft tissue in transplantation therapy is the tissue that results from an elective first trimester abortion of a non-defective foetus. It would appear that this fact is the root of many of the ethical objections to the use of human foetal tissue for transplantation. Many people blend their views of the morality of elective abortion with the morality of the use of the foetal tissue following the act of abortion. In my opinion, the abortion debate is irrelevant to the consideration of the use of the foetal tissue after the abortion has occurred because elective abortion is permissible at law. The fact that it is legal does not

make abortion moral – that decision is the domain of each pregnant woman at the time the decision needs to be made. Because the abortion debate has been resolved by the law, one may proceed to consider the fate of the tissue that will exist as a result of the procedure without reviewing the entire debate about the morality of abortion.

Human foetal tissue is available, relatively inexpensive to harvest, resistant to the physical and metabolic insult of transplantation, transplantable by non-traumatic methods (by injection) and not subject to graft versus host rejection. The technology exists and the results of the preliminary studies are positive. The raw materials exist lawfully. The legal and ethical issues are complex and require a starting point from which the analysis ought to proceed. In my opinion, that starting point is the legal status of the foetus at the time of the elective first trimester abortion.

There are three fundamentally distinct frameworks for this analysis. Framework I treats the foetus as if it were a living human being with the same rights at law as a child. This framework treats the abortion as the deliberate killing of a child and the foetal tissue as the remains of that person. Framework II treats the foetus as a unique entity whose legal rights at law, being arguably a subset of those rights possessed by a child or an adult, vest on viability. This special status is premised on the acceptance of the foetus's potential to achieve a fully independent existence. Framework III treats the foetus as a simple extension of the pregnant woman until it is born alive. The foetus in this framework has no status at law

either before or after the abortion, or before or after viability. The point of distinction in this framework is live birth. Each of these frameworks centres on the legal status of the foetus and foetal tissue both before and after the abortion. Because the starting point of each framework is distinct at law, I chose a single framework as the basis for the analysis of the legal and ethical issues relevant to the use of this interesting technology.

I believe that the most reasonable direction in which the law ought to develop is toward Framework II. By relying upon viability as the point in gestational time when the legal status of the foetus changes, the uniqueness of the foetus is respected, the reality of its gestational age and ability (or lack of ability) to exist independently is acknowledged and the legality of elective first trimester abortion is accepted. By choosing Framework II, the use of human foetal tissue for transplantation can fit, without too much conflict, into the existing application of the born alive rule. I reviewed several discrete areas of the law to determine the impact of adopting a Framework II analysis. With very few adaptations, the Framework II analysis fit into the common law quite neatly.

Having determined that Framework II was the best choice for this analysis, I considered the ethical and legal arguments. When the ethical arguments are canvassed, the use of foetal tissue for therapeutic transplantation is acceptable. The critical point to understand is that elective first trimester abortion is legal, so railing against the immorality of abortion does not create ethical hurdles, it simply reveals the fact that there is a strong voice that opposes elective abortion under

any circumstances. It is important to recall that abortion is not mandatory under any circumstances. **The pregnant woman always has the choice.** Therefore, once the choice to abort has been made, the debate about the morality of abortion becomes irrelevant for the purposes of this paper. Under these circumstances, it is my opinion that there are no insurmountable ethical hurdles to the use of foetal tissue for therapeutic transplantation purposes.

With respect to the legal issues that arise, the choice of framework solves many of the concerns. By choosing viability as the time when legal status is attributed to the foetus (Framework II), many of the tricky legal issues are avoided. The property-type rights that a person has in his or her own body, such as the right to security of the person, are easily and reasonably extended to include the pre-viable foetus in the Framework II analysis. After viability, the foetus is capable of independent life and acquires its own set of rights which may include similar security of the person rights. Certainly, the harvest of pre-viable foetal tissue and the control of that tissue should, in my opinion, rest with the pregnant woman to whom the foetus is inextricably attached. Clearly, if the pregnant woman has a close enough connection to the foetus that she is the one to exert any physical control decisions, then she is the one with the connection to provide the appropriate consent to the use of the foetal tissue. With respect to the development of a commercial market, there are arguments on both sides that are equally valid. The critical point to remember is that the Framework II analysis refrains from endowing the pre-viable foetus with status at law. Therefore, the

commercialization of first trimester aborted tissue should follow the arguments relevant to commercialization of one's own tissues. Finally, the harvest and allocation of foetal tissue could be accommodated within existing tissue distribution/transplantation protocols based on the Framework II analysis.

In closing, the use of foetal tissue for transplantation poses a seemingly endless array of positive possibilities. Framework II recognizes the uniqueness of the foetal tissue and the realities of its immaturity when aborted, in its first trimester of gestation. The use of foetal tissue harvested from electively aborted first trimester fetuses opens the door to many exciting technological developments and, in my view, ought to be pursued.

BIBLIOGRAPHY

ARTICLES, TEXTBOOKS AND JOURNALS

L. B. Andrews, *Medical Genetics: A Legal Frontier* (Chicago: American Bar Foundation, 1987).

L. B. Andrews, "My Body, My Property" in Joseph H. Howell and William F. Sale, eds., *Life Choices: A Hastings Center Introduction to Bioethics* (Washington, D.C. 1995: Georgetown University Press) 389.

G. J. Annas, "She's Going to Die: The Case of Angela C." (1988) 18:1 *Hastings Center Report* 23.

G. J. Annas, "From Canada With Love: Anencephalic Newborns as Organ Donors?" (1987) 17:6 *Hastings Center Report* 36.

G. J. Annas, "Whose Waste Is It Anyway? The Case of John Moore" (1988) 18:5 *Hastings Center Report* 37.

Rosemary Anton, 18 March, 1998 *National Catholic Reporter* as cited in "The Nazi Analogy in Bioethics" (1988) 18:4 *Hastings Center Reports* 29 at 29.

F. Baylis & J. Downie, "An Ethical and Criminal Law Framework for Research Involving Children in Canada" (1993) 1 *Health and Law Journal* 39.

A. Bjorkland and U. Stenevi, (eds.), *Intracerebral Neuro-Grafting: A Historical Perspective, Neural Grafting in the Mammalian CNS* (Amsterdam: Elsevier Science

Publishers, 1985) as cited in U.S.Congress, Office of Technology Assessment, *Neural Grafting: Repairing the Brain and Spinal Cord*, OTA – BA – 462 (Washington, DC: U.S. Government Printing Office, September 1990) 21.

R. H. Blank, "Emerging Nations of Women's Rights and Responsibilities During Gestation" (1986) 7:4 *The Journal of Legal Medicine* 441.

R. R. Bovbjerg, Book Review (1988) 9:3 *The Journal of Legal Medicine* 467; of D. Cowan *et al.*, eds., *Human Organ Transplantation: Societal, Medical-Legal, Regulatory, and Reimbursement Issues*, (Michigan: Health Administration Press, 1987) at 471.

D. Callahan, "The Puzzle of Profound Respect" (1995) 25:1 *Hastings Center Report* 39.

S. Callahan, "The Role of Emotion in Ethical Decisionmaking" (1988) 18:3 *Hastings Center Report* 9.

A. L. Caplan, "Organ Procurement: It's Not in the Cards" in Joseph H. Howell and William F. Sale, (eds.), *Life Choices: A Hastings Center Introduction to Bioethics* (Washington, D.C. 1995: Georgetown University Press) at 422.

A. M. Capron, "Anencephalic Donors: Separate the Dead from the Dying" (1987) 17:1 *Hastings Center Report* 5.

A. M. Capron, "The Law Relating to Experimentation with the Fetus" 13-4 in Appendix: Research on the Fetus (1975) at 40 *Fed. Reg.* 33, 530 (1975).

A. M. Capron, "Parenthood and Frozen Embryos: More than Property and Privacy" (1992) 22:5 Hastings Center Report 32.

Chernaik, "Recovery for Prenatal Injuries: The Right of a Child Against its Mother" 10 Suffolk U.L. Review 582 at 607 as cited in R. H. Blank, "Emerging Notions of Women's Rights and Responsibilities During Gestation" (1986) 7:4 The Journal of Legal Medicine 441.

S. G. Coughlan and S. Bhattacharja, "Strict Liability for Medical Products?: When Should Doctors Be Liable" 3:3 Health Law Review 46.

T. B. Dawson, "Re Baby R: Comment on Fetal Apprehension" (1990) 4 C.J.W.L. 265.

B. M. Dickens, "Legal Issues in Embryo and Fetal Tissue Research and Therapy" in The Royal Commission on New Reproductive Technologies (Ottawa: Minister of Supply and Services, 1993) – Volume 15 at 44.

B. M. Dickens, "Morals and Legal Markets in Transplantable Organs" (1994) 2 Health Law Journal 121.

T. Dobson and K. K. Eby, "Criminal Liability for Substance Abuse During Pregnancy: The Controversy of Maternal v. Fetal Rights" 36:3 Saint Louis University Law Journal 655.

M. S. Dorney, "Moore v. The Regents of the University of California: Balancing the Need for Biotechnology Innovation Against the Right of Informed Consent" (1990) 5:2 High Technology Law Journal 333.

S. Elias, M.D. and G. J. Annas, *Reproductive Genetics and the Law* (London: Year Book Medical Publishers, Inc., 1987).

Ethics and Social Impact Committee, Transplant Policy Center, Ann Arbor, MI, "Anencephalic Infants as Sources of Transplantable Organs" (1988) 18:5 Hastings Center Report 28.

C. Feasby and S. Chambers (eds.) "Introduction: Comments on *Winnipeg Child and Family Services (Northwest Area) v. D.F.G.*" 36:3 Alberta Law Review 707.

A. Fine, "The Ethics of Fetal Tissue Transplants" (1988) 18:3 Hastings Center Report 5.

A. Fine, "Human Fetal Tissue Research: Origins, State of the Art, Future Applications, and Implications" in *The Royal Commission on New Reproductive Technologies* (Ottawa: Minister of Supply and Services, 1993) – Volume 15 at 58.

J. Fortin, "Legal Protection for the Unborn Child" (1988) 5 Modern Law Review 54.

J. Fortin, "Can You Ward a Foetus" (1988) 51 Modern Law Review at 768 as cited in Ian Kennedy, "A Woman and Her Unborn Child: Rights and Responsibilities" in Peter Byrne, (ed.), *Ethics and Law In Health Care and Research* (Toronto: John Wiley & Sons, 1990).

N. Fost, "Organs from Anencephalic Infants: An Idea Whose Time Has Not Yet Come" (1988) 18:5 Hastings Center Report 5.

D. E. Ginn, "Pregnant Women and Consent to Medical Treatment" (1994) 15 Health Law in Canada 41.

H. Hansmann, "The Economics and Ethics of Markets for Human Organs" (1989) 14 Journal of Health Politics, Policy and Law 57.

M. Harrison, "The Anencephalic Newborn as Organ Donor" (1986) 16:2 Hastings Center Report 21.

J. M. Hillebrecht, "Regulating the Clinical Uses of Fetal Tissue – A Proposal for Legislation" (1989) 10:2 The Journal of Legal Medicine 269.

P. Huna, "Infants as Organ Transplant Donors: Should it Happen?" 6:2 The Health Lawyer 24.

M. Jackman, "The Status of the Foetus Under Canadian Law" (1995) 15 Health Law in Canada 83.

M. Jackman, "The Canadian Charter as a Barrier to Unwanted Medical Treatment of Pregnant Women in the Interests of the Foetus" (1993) 14 Health Law in Canada 49.

M. Jackman, "The Constitution and the Regulation of New Reproductive Technologies" in *The Royal Commission on New Reproductive Technologies* (Ottawa: Minister of Supply and Services, 1993) Volume 3 at 1.

W. Kearney *et al.*, "Fetal Tissue Research and the Misread Compromise" (1991) 21:5 *Hastings Center Report* 7.

I. Kennedy, "A Woman and Her Unborn Child: Rights and Responsibilities" in Peter Byrne, (ed.), *Ethics and Law In Health Care and Research* (Toronto: John Wiley & Sons, 1990) at 161.

P. A. King, "The Juridical Status of the Fetus: A Proposal for the Legal Protection of the Unborn" 77 *Michigan Law Review* 1647.

P. G. Kirman, "Four Dialogues on Fetal Protection" (1993) 2:2 *Health Law Review* 31.

L. Klar, *Tort Law* (2nd edition) (Toronto: Carswell, 1996).

E. W. Kluge, *Biomedical Ethics in a Canadian Context* (Ontario: Prentice-Hall Canada Inc., 1992).

T. Leggens, "Scientific Infants as Organ Donors – Legal and Ethical Perspectives" 9:3 *The Journal of Legal Medicine* 449.

M. M. Litman and G. B. Robertson, "Reproductive Technology: Is A Property Law Regime Appropriate?" in *The Royal Commission on New Reproductive*

Technologies (Ottawa: Minister of Supply and Services, 1993) - Volume 3 of the Research Studies 233.

M. B. Mahowald, "Neural Fetal Tissue Transplantation – Should We Do What We Can Do?" (1989) 7:4 Ethical Issues in Neurologic Practice 745.

M. B. Mahowald, *et al.*, "The Ethical Options in Transplanting Fetal Tissue" (1987) 14:1 Hastings Center Report 9.

M. B. Mahowald, "Placing Wedges Along a Slippery Slope: Use of Fetal Neural Tissue for Transplantation" Clinical Research 36 (1988) 220 as cited in John A. Robertson, "Rights, Symbolism, and Public Policy in Fetal Tissue Transplantation" (1988) 18:6 Hastings Center Report 5 at 9.

P. A. Marten and M. L. Lagged, "Biotechnology and the Commercial Use of Human Cells: Toward an Organic View of Life and Technology" (1989) 5 Santa Clara Computer and High Technology Law Journal 211.

P. A. Martin and L. L. Martin, "The Human Preembryo, the Progenitors and the State: Toward a Dynamic Theory of Status, Rights and Research Policy" 5 High Technology Law Journal 257.

S. S. Mattingly, "The Maternal-Fetal Dyad: Exploring the Two-Patient Obstetric Model" (1992) 22:1 Hastings Center Report 13.

P. McCullaugh, "Some Ethical Aspects of Current Fetal Usage in Transplantation" in Peter Byrne, (ed.), *Ethics and Law in Health Care and Research* (Toronto: John Wiley & Sons, 1990) at 25.

P. McCullaugh, "The Foetus as Transplant Donor" as cited in Arthur L. Caplan *et al.*, "The Use of Human Fetal Tissue: Scientific, Ethical and Policy Concerns – A report of phase I of an interdisciplinary research project conducted by the Center for Biomedical Ethics" (Minneapolis: University of Minnesota, 1990) 21 at 105.

H. J. Meeker, "Issues of Property, Ethics and Consent in the Transplantation of Fetal Reproductive Tissue" 9:2 *High Technology Law Journal* 185.

K. L. Moore and T. V. N. Persaud, *Before We Are Born – Basic Embryology and Birth Defects* (Toronto: W. B. Saunders Company, 1998).

J. G. Moscoso, "Functional Aspects of Embryology" in E.R. Barnea, J. Hustin & E. Jauniaux (eds.), *The First Twelve Weeks of Gestation* (New York: Springer Verlag, 1992) at 169.

M.A. Mullen, "The Use of Human Embryos and Fetal Tissues: A Research Architecture" in The Royal Commission on New Reproductive Technologies (Ottawa: Minister of Supply and Services, 1993) – Volume 15 at 8.

T. H. Murray, "Gifts of the Body and the Needs of Strangers" (1987) 17:2 *Hastings Center Reports* 30.

Erin Nelson, "The Fundamentals of Consent" in *Canadian Health Law and Policy* (2nd edition), Jpcelyn Downie and Timothy Caulfield, eds., (Toronto: Butterworths, A Division of Reed Inc., 1999) at 101.

K. Nolan, "Genug ist Genug: A Foetus Is Not a Kidney" (1988) 18:4 *Hastings Center Reports* 13.

G. Oelsner, D. Bider, and S. Mashiach, "Pregnancy Rate and First-Trimester Outcome Following Ovulation Induction" in E. R. Barnea, J. Hustin, and E. Jauniaux (eds.), *The First Twelve Weeks of Gestation* (New York: Sprenger – Verlag, 1992) at 2.17.

Ben Pansky, *Review of Medical Embryology* (Toronto: Collier MacMillan Canada, Inc., 1982).

R. Posner, *Economic Analysis of Law*, (3d edition 1986).

S. G. Post, "History, Infanticide, and Imperilled Newborns" (1988) 18:4 *Hastings Center Report* 14.

M. Raden, "Market Alienability", (1987) 100 *Harvard Law Review* 1849.

J. G. Raymond, "Reproductive Gifts and Gift Giving: The Altruistic Woman" (1990) 20:6 *Hastings Center Report* 7.

J. A. Robertson, "Fetal Tissue Transplants" (1988) 66:3 *Washington University Law Quarterly* 443.

J. A. Robertson, "Symbolic Issues in Embryo Research" (1995) 25:1 Hastings Center Report 37.

J. A. Robertson, "Procreative Liberty and the Control of Conception, Pregnancy, and Child Birth" 69 Va. L. Rev. 405.

J. A. Robertson, "Rights, Symbolism, and Public Policy in Fetal Tissue Transplantation" (1988) 18:6 Hastings Center Report 5.

J. Robertson and J. D. Schulman, "Pregnancy and Prenatal Harm to Offspring: The Case of Mothers with PKU" (1987) 17:4 Hastings Center Report 23.

S. Rogers, "State Intervention in the Lives of Pregnant Women" in Jocelyn Downie and Timothy Caulfield, eds., *Canadian Health Law and Policy* (Toronto: Butterworths Canada Ltd., 1999) at 275.

Gilbert Sharpe, "Consent to Medical Treatment" in *The Law & Medicine in Canada* (2nd edition) (Toronto: Butterworths, A Division of Reed Inc., 1987).

Gilbert Sharpe, "Five Recent Decisions on Informed Consent" (1981) 1 Health Law in Canada 79.

M. W. Shaw, "Conditional Prospective Rights of the Fetus" 5:1 The Journal of Legal Medicine 63.

M. Shaw, "Should Child Abuse Laws be Extended to Include Fetal Abuse" in Aubrey Milunsky and George J. Annas, (eds.), *Genetics and the Law III* (New York: Plenum Press, 1985) at 309.

M. C. Shea, "Embryonic Life and Human Life" *Journal of Medical Ethics* 11 (1985) as cited in Mario Moussa and Thomas A. Shannon, "The Search for the New Pineal Gland: Brain Life and Personhood" (1992) 22:3 *Hastings Center Report* 30 at 33.

B. Shelley, "Fetus as Patient – A Philosophical and Ethical Perspective" 317 in A. Milunsky & G. J. Annas, eds., *Genetics and the Law III*, (New York: Plenum Press, 1985).

K. Cranley Slass, "Research Involving Humans" in J. Downie and T. Caulfield (eds.), *Canada Health Law and Policy* (Toronto: Butterworths Canada Ltd., 1999) at 376-377.

M. S. Swain and R. W. Marusky, "An Alternative to Property Rights in Human Tissue" in Joseph H. Howell and William F. Sale (eds.), *Life Choices: A Hastings Center Introduction to Bioethics* (Washington, D.C.: Georgetown University Press, 1995) at 410.

N. P. Terry, "Politics and Privacy: Refining the Ethical and Legal Issues in Fetal Transplantation" (1988) 66 *Washington University Quarterly* 523.

J. W. Walters and S. Ashwal, "Organ Prolongation in Anencephalic Infants: Ethical and Medical Issues" (1988) 18:5 Hastings Center Report 19.

B. Wennergren, "Human Rights of an Embryo" (1991) 2:1 International Journal of Bioethics 46.

DICTIONARIES

Black's Medical Dictionary, 27th ed.

The Canadian Medical Association Home Medical Encyclopedia, Peter Morgan, M.D. (ed.), (London: Darling Kindersley Limited, 1992).

Concise Oxford Dictionary, 7th ed.

Dorland's Illustrated Medical Dictionary, 27th ed.

The Encyclopedia of Family Health, (Toronto: Marshall Cavendish, 1998) Volume 4.

COMMISSION REPORTS AND GOVERNMENT PUBLICATIONS

Canada:

Medical Research Council of Canada, *Guidelines on Research Involving Human Subjects* (Ottawa: Minister of Supply and Services, 1987).

Law Reform Commission of Canada, (Ottawa: Minister of Supply and Services, 1992).

The Royal Commission on New Reproductive Technologies (Ottawa: Minister of Supply and Services, 1993).

Proceed With Care: Final Report of the Royal Commission on New Reproductive Technologies (Ottawa: Minister of Government Services Canada, 1993).

Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (Ottawa: Public Works and Government Services Canada, August 1998).

Statistics Canada, 1994 *Report on Therapeutic Abortions* (Minister of Industry: 1996) ISSN 1195-4078.

Statistics Canada, 1994 *Report on Therapeutic Abortions* (Minister of Industry: 1996) ISSN 1195-4078 Table 13 "Selected Demographic Characteristics of Canadian Resident Women Who Obtained Therapeutic Abortions in Canada, 1975 – 1994".

Statistics Canada, *Report on Therapeutic Abortions* 1994, Table 14 "Selected Medical Characteristics of Canadian Resident Women Who Obtained Therapeutic Abortions in Canada, 1975 – 1994".

Statistics Canada, 1994 *Report on Therapeutic Abortions* (Minister of Industry: 1996) ISSN 1195-4078 Table 15 "Percent Distinction, by Gestation Period (in Weeks) at Pregnancy Termination and by Age of Woman, in Canada, 1975 – 1994".

A. Kiss, "Alliance pour la vie", Public Hearings transcripts, Montreal, Quebec, 21 November, 1990 as cited in *Proceed With Care: Final Report of the Royal Commission on New Reproductive Technologies* (Ottawa: Minister of Government Services Canada, 1993) Chapter 31 in Volume 2 at 972.

United States of America:

The United States National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research (National Commission), *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research* (Washington, D.C.: Supt. Of Government Documents, 1979).

Ethical Principles and Guidelines for the Protection of Human Subjects of Research (Washington, D.C.: Supt. Of Government Documents, 1979).

J. T. Burtchaell, "Case Study: University Policy on Experimental Fetal Tissue" 1RB: A Review of Human Subjects Research 10:4 (July/August 1988), 7 – 11 as cited in National Institutes of Health, *Human Fetal Tissue Transplantation Research Panel*, Bethesda, Maryland, December, 1988.

Rabbi Bleich, "Statement", Report of the Human Fetal Tissue Transplantation Panel, Consultants to the Advisory Committee to the Director National Institute of Health, December 1988 at 39.

J. Bopp, Jr. "Statement to the Advisory Committee to the Director, NIH" in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal*

Tissue Transplantation Research, 14 December, 1988, Bethesda, Maryland at C11.

J. T. Burtchaell, "Statement to the Advisory Committee to the Director, NIH" in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda, Maryland at C23.

J. F. Childress, "Statement to the Advisory Committee to the Director, NIH" in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda Maryland at C7.

P. A. King, "Statement to the Advisory Committee to the Director, NIH" in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda, Maryland at C21.

Dr. A. A. Moscona, "Dissenting Statement", Report of the Human Fetal Tissue Transplantation Research Panel, Consultants to the Advisory Committee to the Director National Institute of Health, December 1988 at 27.

J. A. Robertson, "Statement to the Advisory Committee to the Director, National Institute of Health" in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda, Maryland at C25.

K. J. Ryan, "Statement to the Advisory Committee to the Director, NIH" at C3 in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda Maryland at C3.

L. Walters, Ph.D., "Statement to the Advisory Committee to the Director, NIH" in *Report of the Advisory Committee to the Director, National Institute of Health Human Fetal Tissue Transplantation Research*, 14 December, 1988, Bethesda Maryland, at C5.

U.S. Congress, Office of Technology Assessment, *Neural Grafting: Repairing the Brain and Spinal Cord*, OTA – BA – 462 (Washington, DC: U.S. Government Printing Office, September 1990) 21.

A. L. Caplan *et al.*, "The Use of Human Fetal Tissue: Scientific, Ethical and Policy Concerns – A report of phase I of an interdisciplinary research project conducted by the Center for Biomedical Ethics" (Minneapolis: University of Minnesota, 1990).

International:

Universal Declaration of Human Rights G.A. Res. 217(II), U.N. GAOR, 3d Sess., Supp. No. 13, UN Doc. A/810 (1948) 71.

United Nations Declaration of the Rights of the Child G.A. Res. 1386, 14 U.N. GAOR Supp. (No. 16) at 19, U.N. Doc. 4249 (1959).

German Military Tribunals, *Trial of War Criminals Before the Military Tribunals: The Medical Cases*, vols. I and II (Washington, D.C.: U.S. Government Printing Office, 1948).

World Medical Association, *Declaration of Helsinki*; adopted at the 18th World Medical Assembly in Helsinki, Finland in June 1964) amended at the 19th World Assembly in Tokyo, Japan in October 1975; the 35th World Medical Assembly in Venice, Italy in October, 1983; and the 48th World Medical Assembly, Somerset West, republic of South Africa, 1996.

The Warnock Committee: Department of Health and Social Security, Report of the Committee of Enquiry into Human Fertilization and Embryology @ 11.2 at 66 (1984).

STATUTES

Canadian Charter of Rights and Freedoms, Part I of the Constitution Act, 1982, being Schedule B to the Canada Act, 1982 (U.K.). 1982, c.11, Section 7 and 15.

Child and Family Services Act, C.C.S.M. c. C80, s.1.

Child and Family Services Act of Ontario, R.S.O. 1990 c. C-11.

Child, Family and Community Service Act, R.S.B.C. 1996, c.46, s.1.

Child Welfare Act, R.S.A. 1980, c. C-8, s. 1.

Child Welfare Act, R.S.Nfld. 1990, C-12, s.1.

Child Welfare Act, R.S.N.W.T. 1988, c. C-6, s.1.

Children and Family Services Act, R.S.N.S. 1990, c.5, s.1.

Children's Act, R.S.Y.T. 1986, c. C-22, s.104.

Children's Law Reform Act, R.S.O. 1980, c. C-8, s. 1.

Congenital Disabilities (Civil Liability) Act 1976 (U.K.), 1976, c. 28.

Criminal Code of Canada, R.S.C. 1985, c. C-46.

Dependants of a Deceased Person Relief Act, R.S.P.E.I. 1988, c. D-7, s.1.

Dependants' Relief Act, C.C.S.M., c. D37 as amended by 1992, c. 46; 1993 c. 29; 1993, c. 48, s. 1(a).

Dependants Relief Act, R.S.N.W.T. 1988, c. D-4.

Dependants Relief Act, R.S.Y.T. 1986, c. 44, s.1.

Dependants' Relief Act, S.S. 1996, c. D-25.01, s.1.

Family and Child Services Act, S.B.C. 1980, c.11.

Family Relief Act, R.S.A. 1980, c. F-2, s.1(b), as amended by 1984, c. 55; 1985, c. 21; 1990, c. P-0.7, 1991, c. 11; 1992 c. 21.

Family Relief Act, R.S.N. 1990, c.F-3, s. 2(a)(ii).

Family Services Act S.N.B. 1980, c. F2.2.

Family Services Act, R.S.S. 1978, c. F-7, s. 1.

Human Tissue Gift Act, R.S.A., c. H-12; s. 1.

Human Tissue Gift Act, R.S.B.C 1996, c. 211; s. 1(b).

Human Tissue Gift Act, R.S.N.S., c. 215; s. 8(1).

Human Tissue Gift Act, R.S.O. 1990, c. H.20, s. 2(c).

Human Tissue Act, S.N.B., c. H-12.

Provision for Dependants Act, R.S.N.B. 1973, c. P-22.3, as amended by 1979, c. 41; 1986, c. 4; 1987, c. 6; 1991, c. 62.

Succession Law Reform Act, R.S.O. 1990 c. S26; 1994, c.27; 1997, c.25, Sched. E; 1999, c. 6, s. 1.

Testators' Family Maintenance Act, R.S.N.S. 1989. c. 465, s.(a)(ii).

The National Organ Transplant Act, Public Law 98-507 [S.2038].

The Yukon Children's Act, S.Y.T. 1984, c.2, pt.4, s.134(1).

Uniform Anatomical Gift Act, 8A U. L. A. 15 – 16 (West 1983 & Supp. 1987) (Table of Jurisdictions Wherein Act Has Been Adopted); 45 CFR 46.207(b) Title 45 Code of Federal Regulations, Part 46 (Section 46.102).

CASES

Bonbrest v. Kotz, 65 F. Supp. 138 (D.D.C. 1946) as cited in Margery W. Shaw, "Conditional Prospective Rights of the Fetus" 5:1 *The Journal of Legal Medicine* 63 at 95.

Borowski v. A.G. Canada, (1984), 4 D.L.R. (4th) 112 (Sask. Q.B.); aff'd (1987), 39 D.L.R. (4th) 731; aff'd (1987), 33 C.C.C. (3d) 402 (Sask. C.A.); [1989] 1 S.C.R. 342.

Brady v. Doe, 598 S.W. 2d 338 (Texas Civil Appeals 1980).

Cherry (Guardian ad litem) v. Borsman, (1990), 75 D.L.R. (4th) 668 (B.C.S.C.), affirmed (1992), 94 D.L.R. (4th) 487 (B.C.C.A.), to S.C.C. refused (1993), 99 D.L.R. (4th) vii (S.C.C.).

Ciarlariello v. Schacter, [1993] 2 S.C.R. 119 (S.C.C.).

City of Kamloops v. Neilson, [1984] 2 S.C.R. 2, 66 B.C.L.R. 273, [1984] 5 W.W.R. 1, 10 D.L.R. (4th) 641, 29 C.C.L.T. 97, 54 N.R. 1.

D. v. Berkshire CC, [1987] 1 All E.R. 20.

Davis v. Davis, 1989 WL 140495 (Tennessee Circuit 1989), rev'd at 842 S.W. 2d 588 (Tenn. 1992).

Dehler v. Ottawa Clinic Hospital, (1979) 101 D.L.R. (3d) 686; aff'd 117 D.L.R. (3d) 512n, (1990), 29 O.R. (2d) 677n (C.A.); leave to appeal to S.C.C. dismissed on February 3, 1981 at 117 D.L.R. (3d) 512n.

Distillers Co. (Bio-Chemicals) Ltd. v. Thompson, [1971] 1 All E.R. 694, [1971] A.C. 458 (P.C.).

Dobson v. Dobson, [1999] 2 S.C.R. 753 reversing (1997), 189 N. B. R. (2d) 208 (N.B.C.A.) reversing (1997), 186 N.B.R.. (2d) 81 (N.B.Q.B.).

Duval v. Seguin, [1972] 2 O.R. 686, 26 D.L.R. (3d) 418;); aff'd (1973), 1 O.R. (2d) 482 (C.A.).

Fitz Simmonds v. Royal Insurance Company of Canada (1984), 29 Alta L.R. (2d) 394 (C.A.).

Hatch v. Riggs National Bank, 284 F. Supp. 396 (D.D.C.) 1968.

Hollis v. Birch [1990] B.C.W.L.D. 1290; (1993), 81 B.C.L.R. (2d) 1 (C.A.), (1995), 129 D.L.R. (4th) 609 (S.C.C.).

Hopp v. Lepp (1980), 112 D.L.R. (3d) 67, [1980] 4 W.W.R. 645, 13 C.C.L.T. 66 (S.C.C.); rev'g 98 D.L.R. (3d) 464, [1979] 3 W.W.R. 409, 8 C.C.L.T. 260(C.A.); rev'g 77 D.L.R. (3d) 321, 2 C.C.L.T. 183, 5 A.R. 267 (Q.B.).

Jefferson v. Griffins Spalding County Hospital Authority, 247 Ga. 86 274 S.E. 2d 457 (1981).

Kass v. Kass, No. 19658/93 (N.Y. Sup. C.T. Nasa City, filed 18 January, 1995).

Kienapple v. R. (1974), 15 C.C.C. (2d) 524, 44 D.L.R. (3d) 351, [1975] 1 S.C.R. 729, 26 C.R.N.S. 1, 1 N.R. 322.

Koehler et al. v. Cook (1976), 65 D.L.R. (3d) 766 (B.C.S.C.).

Lister v. Romford Ice & Cold Storage Co., [1957] 1 All E.R. 125 (H.L.)

Lynch v. Lynch (1991), 25 N.S.W.L.R. 411 (H.C.).

Malette v. Schulman, (1990), 72 O.R. (2d) 417 (C. A.).

McCoy v. Georgia Baptist Hospital, 306 S.E. 2d 746, 748 (Ga. Ct. App. 1983).

McGhee v. National Coal Board, [1972] 3 All E.R. 1008 (H.L.).

McKay v. Essex Area Health Authority, [1982] 2 All E.R. 771.

Montreal Tramways Co. v. Leveille, [1933] S.C.R. 456, [1933] D.L.R. 337, 41 C.R.C. 291.

Moore v. Regents of The University of California, 249 Cal. Rptr. 494, 506 n. 8 (1988).

Murphy v. Dodd, (1989), 63 D.L.R. (4th) 515 (Ont. H.C.J.).

Norberg v. Wynrib (1992), 92 D.L.R. (4th) 449 (S.C.C.).

Parmley v. Parmley, [1945] 4 D.L.R. 81 (S.C.C.).

Paton v. United Kingdom, (1980) 3 E.H.R.R. 408 as cited in [1988] 2 W.L.R. 1288 (C.A.).

Pittman Estate v. Bain (1994), 112 D.L.R. (4th) 257.

Prince v. Massachusetts, 321 U.S. 158, 168 (1944).

R. v. Demers, (1999), 176 D.L.R. (4th) 741 (B.C.S.C.).

R. v. Drummond [1996] 143 D.L.R. (4th) 368, (1996) 112 C.C.C. (3d) 481, (1996) 5 C.R. (5th) 380 (Ontario Court – Prov. Div.).

R. v Morgentaler [1988] 1 S.C.R. 30, 63 O.R. (2d) 281, 26 O.A.C. 1, 44 D.L.R. (4th) 385, 82 N.R. 1, 3 C.C.C. (3d) 449, 62 C.R. (3rd) 1, 31 C.R.R.56.

R. v. Oakes, (1986), 26 D.L.R. (4th) 200, [1986] 1 S.C.R. 103.

R. v. Prince [1986] 2 S.C.R. 480, [1987] 1 W.W.R. 1, 54 C.R. (3d) 97, 30 C.C.C. (3d) 35, 33 D.L.R. (4th) 724, 45 Man. R. (2d) 93, 70 N.R. 119.

R. v. Sullivan and Lemay (1986) 31 C.C.C. (3d) 62 (B.C.S.C.); (1988), 43 C.C.C. (3rd) 65, (B.C.C.A.); [1991] 1 S.C.R. 489.

Re A. (in utero) (1990), 75 O.R. (2nd) 82 (U.F.C.).

Re A.C., 573 A. 2d 1235 (1990).

Re Baby R. (1988), 53 D.L.R. (4th) (B.C.S.C.).

Re Baby X., 97 Mich. App. Ill, 293 N.W. (2d) 736 (1980).

Re Children's Aid Society for District of Kenora and J.L. (1981), 134 D.L.R. (3d) 249 (Ont. Prov. Ct.).

Re Children's Aid Society of City of Belleville, Hastings County and Trenton v. T. (L) (No.2) (1987), 59 O.R. (2nd) 204 (Prov. Ct.).

Re F. (in utero), [1988] 2 All E.R. 193.

Re P., Unreported, as cited in Ian Kennedy, "A Woman and Her Unborn Child: Rights and Responsibilities" in Peter Byrne, (ed.), *Ethics and Law In Health Care and Research* (Toronto: John Wiley & Sons, 1990) at 167.

Re Superintendent of Family & Child Services and MacDonald (1982), 135 D.L.R. (3rd) 330 (B.C.S.C.).

Reibl v. Hughes, [1980] 2 S.C.R. 880, 114 D.L.R. (3d) 1, 14 C.C.L.T. 1, 33 N.R. 361; rev'g 21 O.R. (2d) 14, 89 D.L.R. (3d) 112, 6 C.C.L.T. 227; rev'g 16 O.R. (2d) 306, 78 D.L.R. (3d) 35.

Reynan v. Antonenko (1975), 30 C.R.N.S. 135 (Alta. T.D.) as cited in *Canada Health Law and Policy* (Toronto: Butterworths Canada Ltd., 1999)

Roe v. Wade, 410 U.S. 113, 93 S.ct. 705 (U.S. Supreme Court).

Schweitzer v. Central Hospital (1974), 6 O.R. (2d) 606 (H.C.).

Smith v. Brennan 31 N.J. 353. 157 A. 2d 497 as cited in Margery W. Shaw, "Conditional Prospective Rights of the Fetus" 5:1 *The Journal of Legal Medicine* 63 at 95.

ter Neuzen v. Korn (1993), 81 B.C.L.R. (2d) 39 (C.A.), [1995] 10 W.W.R. 1 (S.C.C.).

Tremblay v. Daigle, [1989] 2 S.C.R. 530, 62 D.L.R. (4th) 634.

Wayne Right v. Moore, 374 So. 2d 586 (Florida Appeals 1979).

Winnipeg Child and Family Services (Northwest Area) v. D.F.G., (1996), 138 D.L.R. (4th) 238 (Man. Q.B.); rev'd (1996), 138 D.L.R. (4th) 154 (Man. C.A.); aff'd [1997] 3 S.C.R. 925, (1997) 152 D.L.R. (4th) 193 (S.C.C.).

NEWSPAPER ARTICLES

Gina Kolata, "More U.S. Curbs Urged in the Use of Fetal Tissue", *New York Times* (19 November, 1989).

D. Jones, "N.S. hospital set to try transplant of fetal tissue to treat Parkinson's", *The Globe and Mail* (21 February 1990) A1 at 1.

Stephen Strauss, *Globe and Mail* article titled "Fetal Brain Tissue to be Grown in Labs, U.S. Scientists Say".

Gail Vines, "Why Experiment on Human Embryos?" (*New Scientist*, 1989) 48.