



EDGE OF LIFE

CONNECTING THE DOTS

*Understanding the history of euthanasia builds
a disturbing picture we cannot ignore*

MORALITY **MORTALITY**

Will modern medicine kill our respect for human life?

WHEN DOES IT ALL BEGIN?

*The embryo: of what importance; how sacred; and when
does it become human?*

CANADIAN MARRIAGE POLICY

A tragedy for children

AND THEN THERE WERE NONE

*Are the current income tax policies discouraging families
from having children?*

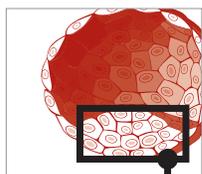




ease up... they could *still* be at the library.

Researchers everywhere are wondering what to do with all the time on their hands since discovering FAMILYindex.net...

Where's your research team?



features

EDGE OF LIFE

CONNECTING THE DOTS 10

Understanding the history of euthanasia builds a disturbing picture we cannot ignore

by Ian Dowbiggin, Ph.D

MORALITY MORTALITY 16

Will modern medicine kill our respect for human life?

by Sue Martinuk

WHEN DOES IT ALL BEGIN? 20

The embryo: of what importance; how sacred; and when does it become human?

by Gord Giesbrecht, Ph.D

MARRIAGE AND FAMILY

CANADIAN MARRIAGE POLICY 23

A tragedy for children

by Seana Sugrue, D.C.L.

AND THEN THERE WERE NONE 26

Are the current income tax policies discouraging families from having children?

by Derek Rogusky

departments

FROM THE IMFC EXECUTIVE DIRECTOR 4

CONTRIBUTORS 5

NEWS 6

RESEARCH ROUNDUP 7

Q&A 8

A Natural Death • *An interview with Dr. Margaret Cottle, palliative care specialist*

REVIEWS 28

Roots of Empathy: Changing the World Child by Child by *Mary Gordon* • The Golden Cell: Gene Therapy, Stem Cells, and the Quest for the Next Great Medical Breakthrough by *Karen van Kampen* • Between Two Worlds by *Elizabeth Marquardt* • Why Gender Matters by *Leonard Sax*

CLOSING WORDS 30

• FROM THE IMFC EXECUTIVE DIRECTOR



THE PAST FEW MONTHS HAVE BEEN BUSY ONES. As we were preparing to launch the Institute of Marriage and Family Canada, Canadians elected a new government and cheered our Olympic athletes to our nation's best winter finish ever. And while the weather was not at its finest here in Ottawa, many people joined us on February 16, 2006 to officially open our doors. My thanks go out to the many people who attended or sent their best wishes to us.

As spring shakes off the winter chill and generates new life, it seems timely, for more than just seasonal reasons, to choose research focusing on life for this, the second issue of the *IMFC Review*.

Dr. Ian Dowbiggin has written an in-depth piece tracing the history of euthanasia. As the question of euthanasia will reappear on the national radar screen in the not too distant future, there is a need to understand its roots and its implications for Canadian social policy. In the words of philosopher George Santayana, "Those who cannot remember the past are condemned to repeat it."

Sue Martinuk challenges us with her poignant take on human genetics. Medical technology continues to reach unforeseen breakthroughs and yet we must ask ourselves if we are ready to fully comprehend and answer the questions that go hand-in-hand with these quantum leaps.

Our third feature article, written by Dr. Gordon Giesbrecht, peers into the fast changing world of stem cell research. As this research stretches our knowledge, it also raises significant questions that our society and decision makers need to fully debate and resolve.

Also inside our Spring/Summer *IMFC Review* is research, books and articles that will challenge you and broaden your thinking.

The *IMFC Review* brings the latest in research from within Canada and around the world and places it in the hands of our decision makers – to help them engage and understand the short- and long-term consequences of the issues currently facing Canadian families.

For regular updates, visit imfcanada.org and sign up for our e-newsletter. Also, we welcome your feedback. The *IMFC Review* will only be better with your input. ✉

Sincerely,

Dave Quist
Executive Director, IMFC

publisher

Institute of Marriage and Family Canada, an initiative of Focus on the Family Canada
Box 9800 Stn Terminal
Vancouver, BC V6B 4G3

editor-in-chief

David Quist

managing editor

Kristen Best

copy editor

Meghan Wood

contributing writer

Mark Penninga

art director

Andrea Smith

photography

Tommi Lintinen

notice of disclaimer of liability

Although care has been taken in preparing the information contained in this document, the publisher is not responsible for or liable for errors, misinformation, misprints or typographical errors.

The opinions cited herein are solely those of the authors and do not necessarily constitute those of the IMFC, Focus on the Family Canada, or its board of directors.

© 2006 Focus on the Family Canada

All rights reserved. International copyright secured.

Printed in Canada. No material in this publication may be reproduced in whole or in part without the prior written consent of the Institute of Marriage and Family Canada.

permissions/syndication

Institute of Marriage and Family Canada
130 Albert, Suite 2001
Ottawa, ON K1P 5G4

IMFC Review is published semi-annually
ISSN 1715-5711

subscription info

subscriptions@imfcanada.org or
www.imfcanada.org/subscribe

IMFC Review

130 Albert St. Suite 2001
Ottawa, ON K1P 5G4

tel. 613.565.3832

fax. 613.565.3803

toll free. 1.866.373.IMFC (4632)

email. info@imfcanada.org

www.imfcanada.org

• CONTRIBUTORS



IAN DOWBIGGIN: Dr. Ian Dowbiggin is the chair of the history department at the University of Prince Edward Island and a fellow with UPEI's Centre for Christianity and Culture. An internationally acclaimed historian of medicine, he is the author of five books, including *A Merciful End: The Euthanasia Movement in Modern America* (2003) and *A Concise History of Euthanasia: Life, Death, God, and Medicine* (2005). He lives in Cornwall, PEI, with his wife Christine and their children Beth and Christopher.

GORDON GIESBRECHT: Dr. Gordon Giesbrecht received his Ph.D. from the University of Manitoba's Department of Medicine. He is now a professor of thermophysiology at the same university. Other research interests include human physical and mental performance in other stresses such as altitude (hypoxia) and diving (hypobaria). Dr. Giesbrecht's research program is committed to the goal *Vitas Salvantes* – saving lives.

SUSAN MARTINUK: Susan Martinuk is a public policy commentator, writer, media consultant and former ovary specialist. She conducted Ph.D. studies at an infertility clinic where she received national awards for her studies and published numerous scientific papers. However, ethical concerns eventually led her to resign.

Susan has written and spoken extensively across Canada on issues related to bioethics and reproductive technologies. She is a member of the Cana-

dian Bioethics Society and has consulted with groups on the ethical implications of the human genome project.

WILLIAM MORRISON: Dr. William Morrison is a professor of Educational Psychology/Special Education at the University of New Brunswick. He is co-investigator on two Canadian Institutes of Health Research-funded projects; recipient of a three-year early crime prevention research contract with the National Crime Prevention Centre for the Department of Justice; research group-lead for the New Brunswick Anti-tobacco Coalition; and a member of the Registration Committee for the College of Psychologists of New Brunswick.

DEREK ROGUSKY: Derek Rogusky is senior vice-president of communications, marketing and family policy at Focus on the Family Canada. Before joining Focus in 1999 he was an assistant director of MBA programs at the University of Alberta and a research analyst for the Official Opposition in the Alberta Legislature. Derek has an MBA from the University of Alberta and resides in Langley, B.C. with his wife and two sons.

KELLY DEAN SCHWARTZ: Dr. Kelly Dean Schwartz is associate professor of Psychology and program head of Behavioural Science at Nazarene University College in Calgary, Alberta, where he has taught for more than 10 years. Prior to this, he was a psychologist with a Calgary school board and worked with

children who had severe learning and/or social/emotional needs. Dr. Schwartz has a Ph.D. in Social Psychology from the University of Calgary, and his research and teaching interests include the psychosocial factors contributing to adolescent and family development, particularly identity, moral and faith development. He is also a husband and proud father of three school-age children.

FRANK STIRK: Frank Stirk is a freelance journalist and writer from North Vancouver, B.C.. He earned a Bachelor of Arts (Honours) from the University of Manitoba and a Master of Divinity from the Canadian Southern Baptist Seminary in Cochrane, Alberta.

SEANA SUGRUE: Dr. Seana Sugrue is associate professor of Politics and chairwoman of the Department of Politics at Ave Maria University. She came from Princeton University, where she was the associate director of the James Madison Program in American Ideals and Institutions. Her interests include constitutional law and governance, the role of law in the formation of a just society, civic institutions, such as the family, and pro-life concerns. Dr. Sugrue holds the degrees of Bachelor of Business Administration from Bishop's University, Bachelor of Laws from the University of Ottawa, and both Master of Laws and Doctor of Civil Law from McGill University. She has taught at Princeton and McGill.

IMFC GRAND OPENING

On February 16, 2006 we officially opened our doors. We held an afternoon open house for 70 people including a ribbon-cutting, and an evening event which drew more than twice as many. We were very happy to see several current or retired MPs join in the festivities, and many others who represent work on behalf of Canadian families.

"A number of people came up to me and said, 'We don't agree (with you) on everything...but we agree on the family issues.' That commonality provides us with strength...that we can rally around the important institutions of marriage and family," our executive director, Dave Quist, said.

The guest speakers at the evening event were *Ottawa Citizen* columnist John Robson and researcher and author Elizabeth Marquardt. Robson's speech on "marrying the family to research" endorsed the need for organizations like the IMFC, while Marquardt spoke on the hardships faced by the children of divorce. They were well received, and represented what the Institute of Marriage and Family Canada is all about: to be thought-provoking, challenging, and to bring to light the latest research on family, marriage and social issues of the day. 📖



L to R: former MP Pat O'Brien, Derek Rogusky, Paul Szaba, MP



L to R: Cabinet Minister Stockwell Day, Dave Quist



Elizabeth Marquardt



Dr. Guillermo Mejia Castillo, Active Ambassador for Columbia



Evening event



Open House

• RESEARCH ROUNDUP

THE COURSE OF MENTAL HEALTH AFTER MISCARRIAGE AND INDUCED ABORTION: A LONGITUDINAL, FIVE-YEAR FOLLOW-UP STUDY.

BROEN, A.N., EKEBERG, Ø., MOUM, T., & SEJERSTED BØDTKER, A. (2005). *BIOMED CENTRAL*, 3.

The end of a pregnancy, either willingly or unwillingly, can be an emotionally trying time for a woman. But is there a difference between the effects of a miscarriage and the effects of an abortion on the mental well-being of a woman?

This study, conducted in Norway and published in December, 2005, compared 40 women who had experienced a miscarriage to 80 who had an induced abortion. Each woman's mental health was assessed through a questionnaire ten days, six months, two years and five years after the miscarriage or abortion occurred.

The questionnaires were designed for a number of different tests. The Impact of Event Scale (IES) measured levels of intrusion and avoidance through comments such as, "Things I have seen or heard suddenly reminded me of the pregnancy termination." A Hospital Anxiety and Depression Scale (HADS) was also used in the study, along with a quality of life questionnaire and a scale used to measure feelings associated with abortion.

The study found that women who had a miscarriage suffered more mental distress ten days and six months after the miscarriage. However, the initial mental distress was significantly reduced after two years, as indicated by their IES scores for avoidance, grief, loss and guilt. In contrast, women who had undergone an induced abortion had lower initial IES scores, but much greater IES scores for avoidance, guilt and shame after two and five years. They also had higher HADS scores at all four intervals following the procedure. For the women who miscarried, the proportion who were cases on the IES scale decreased from 47.5 per cent after ten days, to only 2.6 per cent after two and five years. In contrast, women who had induced abortions registered at 30 per cent after ten days, 18.1 per cent after two years, and 20 per cent after five years. ☐

HEALTH AND DRUG ALERT TITLE: SEPTIC SHOCK AFTER MEDICAL ABORTIONS WITH MIFEPRISTONE (MIFEPREX, RU 486) AND MISOPROSTOL.

MURRAY, S., & WOOLTORTON, E. (2005). *CANADIAN MEDICAL ASSOCIATION JOURNAL*, 173 (5), 485.

In 2005 The Canadian Medical Association Journal (CMAJ) released a Health and Drug Alert regarding the drugs mifepristone and misoprostol which are used for medical abortion. Although mifepristone is commonly used in Europe and the United States, it is not licensed for use in Canada.

The alert comes in the wake of the U.S. Food and Drug Administration's report that four women in the United States died after taking the drugs for medical abortion. One Canadian woman also died after taking the drug as part of a clinical trial in Canada in 2001.

The CMAJ Alert states that mifepristone and misoprostol result in a complete medical abortion in 92 per cent of users. Five to eight per cent require surgery due to bleeding, incomplete abortions or continued pregnancy. The reason for the Alert is a result of the connection between the use of mifepristone and infection with *Clostridium sordellii*-related sepsis. "Women should be warned of this rare but potentially fatal adverse effect," according to the CMAJ. ☐

ADOPTION AND COGNITIVE DEVELOPMENT: A META-ANALYTIC COMPARISON OF ADOPTED AND NONADOPTED CHILDREN'S IQ AND SCHOOL PERFORMANCE.

JUFFER, F., POELHUIS, C.K., & VAN IJZENDOORN, M.H. (2005). *PSYCHOLOGICAL BULLETIN* 131 (2), 301-316.

How do adopted children perform academically compared to non-adopted siblings and peers? The dramatically different family environment that adopted children adapt to after leaving their birth parent(s) may have some effect on their academic abilities. The authors of this meta-analysis examined 62 studies to determine how the cognitive development of adopted children compared to both non-adopted siblings/peers (in their current environment) and children who remained in institutional care or with their birth family.

The meta-analysis revealed that adopted children did better in school and also had higher IQ scores than their siblings or peers who remained in institutional care. However, there were no significant differences between the IQ of the adopted children and their environmental (those around them after the adoption) siblings or peers. A number of studies revealed that the adopted children had significantly more learning and language problems than non-adopted children, with twice as many needing special education.

Although many studies were analyzed for this meta-analysis, this study indicated that more research is needed to conclude that adoption has a positive effect on the cognitive development of an adopted child. ☐

VIEWS OF DISABLED PEOPLE REGARDING LEGALIZED ASSISTED SUICIDE BEFORE AND AFTER A BALANCED INFORMATIONAL PRESENTATION.

GILL, C.J., & VOSS, L.A. (2005). *JOURNAL OF DISABILITY POLICY STUDIES* 16 (1), 6-15.

In this study, 29 adults who had disabilities (17 with multiple sclerosis and 12 with various disabilities) heard a balanced presentation on the topic of the legalization of assisted suicide. It included speakers who promoted and opposed the legalization of assisted suicide, as well as an opportunity for questions. The participants filled in a questionnaire both before and after they attended the presentation, including questions on their attitudes towards the topic and what they thought some consequences would be if assisted suicide was legalized.

Of those who did change their minds as a result of the informational presentation, they left opposing the legalization of assisted suicide. Most of the participants were opposed to legalization of assisted suicide for people with incurable disabilities. The majority of responses also indicated that legalized assisted suicide could result in involuntary deaths, even with safeguards in place. The study concluded that balanced disability-relevant information did have a mild effect on the attitudes of the participants in the study. ☐

A NATURAL DEATH

AN INTERVIEW WITH DR. MARGARET COTTLE

By Frank Stirk

ASSISTING IN A SUICIDE IS ILLEGAL IN CANADA. Many people think this is wrong and that the law should be changed. They have bought into the idea that the only way for terminally ill patients to be freed of their suffering is to grant them their wish to have someone – most likely their doctor – help them commit suicide.

But the reality is very different. There have been many recent advances in palliative care that make it very possible for doctors to relieve suffering and allow the dying a peaceful, comfortable, truly dignified – natural – death.

Dr. Margaret Cottle is a noted expert on the subject. A resident of Vancouver, she is a palliative care physician and a clinical instructor at the University of British Columbia. She and her husband, ophthalmologist Dr. Robin Cottle, have two grown children and a black Labrador retriever. Ceilidh, as she is called, has her own hospital photo identification and visits patients and families on the Palliative Care Unit.



IMFC: From a lay perspective, what is palliative care?

MARGARET COTTLE: The word “palliative” comes from the Latin “pallium,” which was a cloak that covered the garments that people used to wear. So the idea behind palliative care is something that alleviates as much suffering as possible when there is no chance of cure. And it’s not just physical pain we’re dealing with. There’s psychological pain, interpersonal or emotional pain and spiritual pain. If you don’t address all of those, then you’re not really dealing with the total picture. The other distinctive of palliative care is that we see the family as the unit of care, not just the patient.

IMFC: What have been some of the advances in palliative care in the past few years?

MC: To be honest, I think the biggest advance has been that the general public has really figured out that it exists, and that people have come to see this not as just a “fringy” thing but as part of what good medical care is.

In 1992, the palliative physician coverage for the home hospice program in the City of Vancouver was basically just ten hours a week. Now we have 24/7 coverage that the home care nurses and the general practitioners can have access to. We also have more palliative care units, more people on consult services, and more people in home care. I do have to commend the government for spending some more dollars on staffing and resources for palliative care.

Even from the symptom-management standpoint, there’ve been some very good advances in terms of dealing with pain issues, nau-

sea and other things. So we’re always getting better at what we do.

As well, more family doctors are learning about it. I think all the medical schools across Canada have some teaching on palliative care, so that student doctors are learning about pain management. So there’s much greater awareness within the profession and within the general public who used to say that “nothing can be done” for the terminally ill. We have made just some really big advances.

IMFC: Is British Columbia a leader in this area or is there a national awareness of the need for palliative care?

MC: I think there is a national awareness. But you can always use more. As the population ages, we’re going to need to increase the funding and put some other things in place.

IMFC: So what areas are there within palliative care that still need improvement?

MC: The place where there’s been a problem is support issues. We’re not able to get as much funding for homemaking and some of those other social services which are incredibly important if you’re going to keep people at home. Three days a week, two hours a day is really not enough support for somebody who’s completely bed-ridden.

And although there’s a lot of research being done, we’re still lacking some decent predictors, so that patients and families can have some kind of time-frame as to when death will occur – are we talking weeks or are we talking days? It’s quite difficult to actually

figure this out. You don't absolutely have to know, but it's helpful in terms of trying to pace yourself.

It would also be good for different community groups to have some education in how the average person can help somebody or help a family who is experiencing this kind of tragedy in their lives, and in return receive the blessing and the richness that one gets from being involved in something like this.

It's a real privilege, when someone is at a place where his or her body is not all that beautiful anymore and they don't have anything to contribute from a worldly standard, to be able to say, "It's not your job to feel significant; it's our job to impart that significance to you." There is something very healing for the person who receives that and also for the person who gives that.

IMFC: Given all the benefits that can come from palliative care, it must be a real concern to you to hear warnings that the next big social debate in Canada is going to be euthanasia or assisted suicide.

MC: We're already there. There are some people who have ideological things about euthanasia and really just want it. But I think for the vast number of people who are in favour of assisted suicide or euthanasia, it's this whole idea of control – the idea that autonomy trumps everything else and everything should be based on the highest amount of control I can have over my life.

But all you have to do is look at Holland to see where things go when you open this can of worms. To say that we're going to put in safeguards is just ludicrous, because the laws there don't protect the patients, they protect the doctors and the health workers.

Do we really want the people who bring you Revenue Canada and Canada Post to decide whether you live or die—with no chance of appeal? I mean, is that really what you want?

IMFC: But realistically, is it going to be possible to keep assisted suicide and euthanasia illegal in Canada?

MC: It's going to be tough. People who said this was coming when we were losing the abortion debate were quite prophetic, because if you've got somebody in the womb who is perfectly normal, you've at least got a citizen who's going to be able to contribute to society. There really isn't that kind of an argument you can make with somebody who's already dying.

But in some of the studies done on what people fear at the end of life and why they would ask for ending their life early, physical pain is way down the list. Their big fears are fear of being a burden and fear of being abandoned. As a community, we need to realize that it may be a burden for one person or family to give care. But it doesn't have to be a burden if all of us get involved and help out. It's not impossible.

IMFC: All in all, do you feel that this message of palliative care being the better alternative is resonating with our political leaders and Canadians in general?

MC: I think there is some hope that that is the case. There was an independent poll done a number of years ago commissioned by the Euthanasia Prevention Coalition, which showed that the overwhelming majority of people in British Columbia supported improved palliative care as the first resort.

In the United States, where they have put these issues on the ballot, the longer the campaign goes on and the more information that goes out, the less support there is for physician-assisted suicide and euthanasia. People come to an understanding that it's not as simple as they thought it was.

There's a quotation I really like that says, "Euthanasia kills the patient twice." The first time is when you look at the patient's life and say, "Yeah, you're right. Your life really isn't worth living." And the second time is when you actually do it. But when people are asking for this, oftentimes what they're saying is, "It doesn't feel to me like my life is worth living. What do you think?" And that's where it's up to us to be saying, "Yes, it is worth living. Even if this is hard for us as a community, this is an important thing for us to do, to care for you."

We need to be saying, "Look, there's more to life than just having control of when you knock yourself off," and we need to be talking about the importance of protecting the weaker ones among us. *GR*





CONNECTING THE DOTS

UNDERSTANDING THE HISTORY OF EUTHANASIA
BUILDS A DISTURBING PICTURE WE CANNOT IGNORE

BY IAN DOWBIGGIN, PH.D

AS THE BRITISH BROADCASTING CORPORATION REPORTED in 2003, the debate over euthanasia is “sweeping the world” in the early twenty-first century, and no country has been more affected than Canada. On June 15, 2005, Bloc Quebecois MP Francine Lalonde introduced Private Member’s Bill C-407, calling for the decriminalization of assisted suicide and the legalization of physician-assisted suicide (PAS). The fall of Paul Martin’s Liberal government on November 28, 2005, meant that a vote on C-407 never materialized, but indications are that similar legislation will be proposed in an upcoming Parliament.

In all likelihood, PAS will prove to be one of the most contentious and important policy debates in Canadian history. The stakes could not be higher. Western civilization’s two-thousand-year-old belief in the sacredness of individual human life hangs precariously in the balance. The history of euthanasia demonstrates that legalizing PAS would be a fateful step toward the erosion of medical ethics and the devaluing of human lives.

WHY HISTORY MATTERS

Euthanasia, derived from the Greek word meaning “good death,” can refer to actual mercy killing with lethal injections or the practice of withdrawing unwanted or unnecessary medical treatment. Yet most current-day debate centres around PAS, in which doctors prescribe overdoses to patients who ingest the drugs themselves. PAS is now legal in Belgium, Switzerland, the Netherlands and Oregon (the lone American state to enact such legislation). In recent years, policy makers in France, Spain and England have debated the same issue, amidst pressure from pro-PAS organizations and other groups which argue that legalizing a right to aid a suicide means extending a fundamental personal liberty to individual citizens.

In 2004, in the wake of highly-publicized assisted suicides in Quebec and British Columbia, Irwin Cotler, then Canada’s Justice Minister, announced that it was time to re-open the debate over whether or not the Criminal Code’s ban on assisted suicide is out-dated.¹ When concerned Canadians try to make sense of euthanasia, they can turn to a burgeoning literature on its ethical, clinical, religious and public policy dimensions. Yet, to date, a scholarly historical perspective on the issue has been largely missing. Such an historical perspective strongly suggests that society has every right to fear the legalization of PAS. As Conservative MP Jason Kenney told the House of Commons on November 1, 2005, C-407 harked back to the agenda of the twentieth-century eugen-

ics movement, and thus would likely reduce the value of individual life. Kenney’s comments about the eugenic roots of euthanasia warrant serious consideration. As history shows, the well-documented links between euthanasia and eugenics constitute a powerful, cautionary reminder of what can happen when nations begin ranking human life in terms of social usefulness, economic productivity or biological fitness.

Opponents of legalizing PAS often cite Nazi medical crimes during World War II as an example of where toleration of euthanasia can lead. Between 1939 and 1945, under Adolf Hitler’s personal order, German doctors, nurses and other health care personnel starved, poisoned, gassed or shot roughly 200,000 disabled men, women and children in asylums throughout central and eastern Europe. Support for euthanasia in Germany, however, began long before Adolf Hitler came to power in 1933. For years, physicians, scientists and philosophers had engaged in lengthy debates over whose life was most biologically fit and useful to the community. Discussions about which groups were socially productive and which were not had the effect of defining down the value of human life. As the century unfolded, it became increasingly easier for Germans to propose that the “unfit” (meaning the sick and disabled) should not only be prohibited from breeding, they should also be put to death for the welfare of society and their own good.²

The tale of euthanasia in Nazi Germany is now a matter of historical record. But until very recently, the history of euthanasia outside Germany was almost completely ignored. Currently, as we begin to learn more and more about the fortunes of the euthanasia movement in Britain, Canada, the United States and other countries, comparisons between German atrocities and the proposals of today’s euthanasia movement, dismissed as wild exaggerations by right-to-die advocates, grow increasingly valid.

DARWINIST ORIGINS

The historical connections between euthanasia and eugenics stretch back to the nineteenth century and the introduction of Charles Darwin’s theory of evolution according to natural selection. In *The Origin of Species* (1859), Darwin proposed that species were not independently created, but descended from a common ancestor. Species were modified throughout natural history because the fierce struggle for limited food supply weeded out the “unfit” individuals of a species and privileged the “fit,” which, by surviving, tended to pass on their favourable traits to offspring.

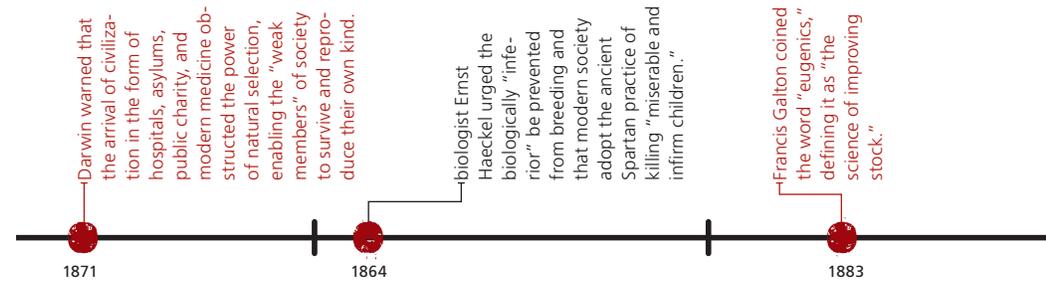
This process of “natural selection,” Darwin argued, accounted for the modification of species and was even sufficient to bring about new species.

Yet in his *Descent of Man* (1871), Darwin warned that the arrival of civilization in the form of hospitals, asylums, public charity and modern medicine obstructed the power of natural selection, enabling the “weak members” of society to survive and reproduce their own kind. Worse, according to Darwin, “the reckless, degraded and often vicious members of society tend to increase at a quicker rate than the provident and general virtuous members.” In Darwin’s eyes, the “degeneration” of the human race was a distinct possibility unless society prevented “the reckless, degraded and vicious” from reproducing.³

Darwin himself shrank from the policy implications of his theories, vaguely hoping that the “unfit” would voluntarily refrain from marriage and the “fit” would have bigger families. However, Darwin’s cousin Francis Galton (1822-1911) was not so ambivalent. Borrowing from many of Darwin’s concepts, Galton coined the word “eugenics” in 1883, derived from the Greek word for “well-born.” He defined eugenics as “the science of improving stock” by using the “agencies of social control” to “improve...the racial qualities of future generations.” With its emphasis on social

ASTHECENTURYUNFOLDED,ITBECAMEINCREASINGLYEASIER FORGERMANS TO PROPOSE THAT THE “UNFIT” (MEANING THE SICK AND DISABLED) SHOULD NOT ONLY BE PROHIBITED FROM BREEDING, THEY SHOULD ALSO BE PUT TO DEATH FOR THE WELFARE OF SOCIETY AND THEIR OWN GOOD.

planning, preventive medicine and the study of heredity, the theory of eugenics swept across most of the globe in the first half of the twentieth century, affecting science, medicine and public health policy. Governments from Scandinavia to Latin America introduced legislation based on eugenic principles.⁴ “Positive” eugenics referred to policies designed to encourage the fit to have large families. But governments tended to enact “negative” eugenic policies, including laws restricting marriage and permitting the voluntary or coercive sterilization of the disabled through vasectomy for men or tubal ligation for women. Eugenics authorized the reduction of social problems to utilitarian considerations



and evolutionary biology while dispensing with approaches based on traditional value systems, largely what many euthanasia advocates were also inclined to favor. Galton himself believed that the goal of eugenics was to create a “new religion” whose value system would make the mainstream churches obsolete. The eugenicist playwright George Bernard Shaw, an early proponent of euthanasia, observed in 1905 that “there is no reasonable excuse for refusing to face the fact that nothing but a eugenic religion can save our civilization.”⁵ In 1923, Albert Wiggam, a U.S. eugenicist and euthanasia supporter, praised eugenics as a critical part of a revolutionary new world view that “demands...a new set of values by which and for which to live,” a “new code of conduct.”⁶

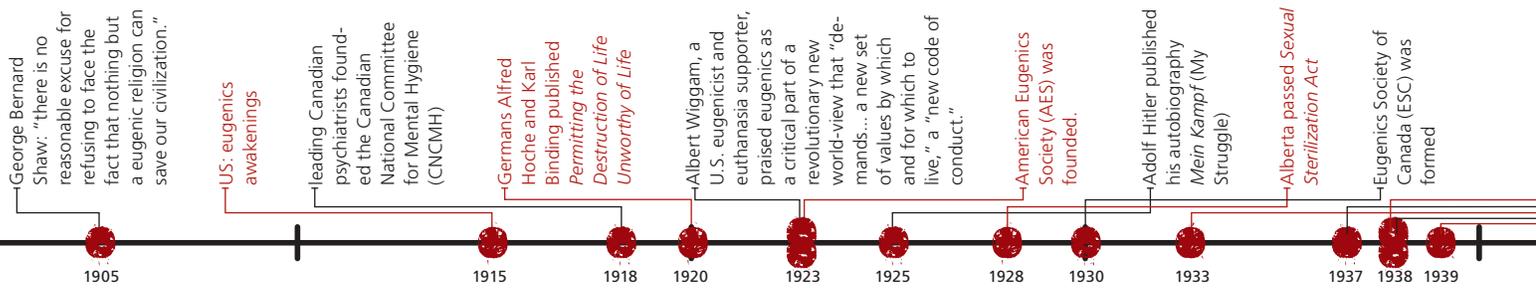
Little wonder that, over much of the twentieth century, the fledgling euthanasia movement would recruit many of its members from the ranks of eugenics organizations. For centuries the teachings of major world religions had condemned suicide, particularly as a way to escape the suffering that afflicted humanity. That tradition remained intact down to the end of the twentieth century. In 1997, citizens in Oregon voted in favour of legalizing PAS, becoming the first jurisdiction in the Western world to enact such a statute.⁷

EUGENICS AND EUTHANASIA IN GERMANY

In the meantime, the United States and Germany became the world’s most eugenic nations, with other countries such as Canada and Great Britain not far behind. The roots of German eugenics date back to the late nineteenth century when many German scientists and physicians, impressed by Darwinism’s social implications, contended that traditional Christian moral-

ity needed to be replaced. A leading voice in this campaign belonged to the biologist Ernst Haeckel (1834-1919), a world famous, best-selling popularizer of Darwinism, many of whose books were translated into English. In as early as 1864, Haeckel maintained that “personal individual existence appears to me so horribly miserable, petty, and worthless, that I see it as intended for nothing but for destruction.”⁸ Haeckel became an avid eugenicist, urging that the biologically “inferior” be prevented from breeding and that modern society adopt the ancient Spartan practice of killing “miserable and infirm children.”⁹ By the end of his long career attacking the idea that all human life was equally valuable, Haeckel had supported suicide, infanticide, abortion, assisted suicide and involuntary mercy-killing of the mentally ill. His view that customary ethics were in need of revision enjoyed the support of numerous prominent German scientists and physicians of his day, including Alfred Ploetz, August Forel and Willhelm Schallmayer.

The erosion of standard ethics in Germany gathered steam after World War I when psychiatrist Alfred Hoche and jurist Karl Binding published *Permitting the Destruction of Unworthy Life* (1920). Hoche believed that “the continued existence of the species is everything, the individual is nothing.” He, like Binding, hailed the coming of “a new age...operating with a higher morality,” a time when “eliminating those who are completely mentally dead” would be “a permissible and useful act.” Hoche and Binding defended the legalization of euthanasia, including assisted suicide and the killing of the mentally and physically disabled, on the basis of diverse rationales. Compared with the countless German soldiers who had given their lives on the battlefield in World War I, they contended, the inmates of Germany’s asylums were “the fearsome counter-image of true humanity.” Their lives were “not just absolutely worthless, but even of negative value.”



Their deaths would be welcomed by their caregivers, families and themselves, if only their true wishes could be revealed.¹⁰

Binding and Hoche demonstrated how easily the mercy-killing of disabled newborns and the mentally ill could be justified philosophically once one accepted a right to kill oneself. Their highly influential publication warrants reading today, for it is a sobering illustration of the "slippery slope" theory that once assisted suicide was decriminalized, there was no logical reason why involuntary euthanasia should be banned.

Binding and Hoche's theory did not have an immediate impact on German medical thinking. But once the Nazis came to power in 1933, it took on a new life within the radically altered political climate. Nazi ideology was infused with eugenic and social Darwinist ideas categorizing people as either "valuable" or "valueless." In his speeches and his 1925 autobiography *Mein Kampf* (*My Struggle*), Adolf Hitler himself repeatedly had scorned humane attitudes and morality, calling them "the slave of weakness." In the words of one historian, "in Hitler's mind Darwinism provided the moral justification for infanticide, euthanasia, genocide, and other policies that had been (and thankfully still are) considered immoral by more conventional moral standards."¹¹

As soon as the Nazis came to power in 1933, the Hitler government enacted its eugenic sterilization law, which functioned until the outbreak of war in 1939. Nazi Germany's "eugenics program" resulted in the forcible sterilization of approximately 400,000 Germans between 1933 and 1939. This program of sterilization drew attention to the thousands of mentally disabled patients housed in state asylums at public expense. Psychiatrists and state officials, frustrated with the never-ending chore of trying to treat chronically ill inmates as tax revenues plunged, echoed the view expressed by Binding and Hoche that the sick

were a heavy drain on the nation's resources. By 1939, as one German asylum director argued, the only "serious" question was "whether to maintain this patient material under the most primitive conditions or to eradicate it."¹²

Thus, by the time Hitler issued his private order in 1938 to go ahead with a state euthanasia program, informed opinion in Germany tended to believe that the disabled population did not enjoy the same rights to life as healthy citizens. The new Nazi program of euthanasia, dubbed "Aktion T-4," quickly went into operation over the next two years. In 1941, when Roman Catholic protests brought a temporary halt to the program, Aktion T-4 became de-centralized, more covert and more difficult to monitor. Many of Aktion T-4's doctors fanned out into the fledgling death camp system, where they collaborated in the selection of "sick" inmates for extermination. Thanks to Nazi physicians' experience at devising ways to gas patients, the Holocaust was able to move into its most lethal stage which witnessed the mass killings of Jews and other so-called "enemies of the state" in notorious killing centres such as Belzec, Sobibor and Treblinka. In Germany, in other words, what had once been a mere discussion within a tiny group of scientists about the relative worth of individual human lives had culminated in the Holocaust itself.¹³

EUGENICS AND EUTHANASIA IN THE UNITED STATES AND CANADA

Meanwhile, eugenics may not have culminated in genocide in the United States, but it thrived there. By the 1920s, most of America's geneticists, biologists, physicians and social scientists had embraced eugenics, a trend that led to the 1923 founding of the American Eugenics Society (AES). Eu-

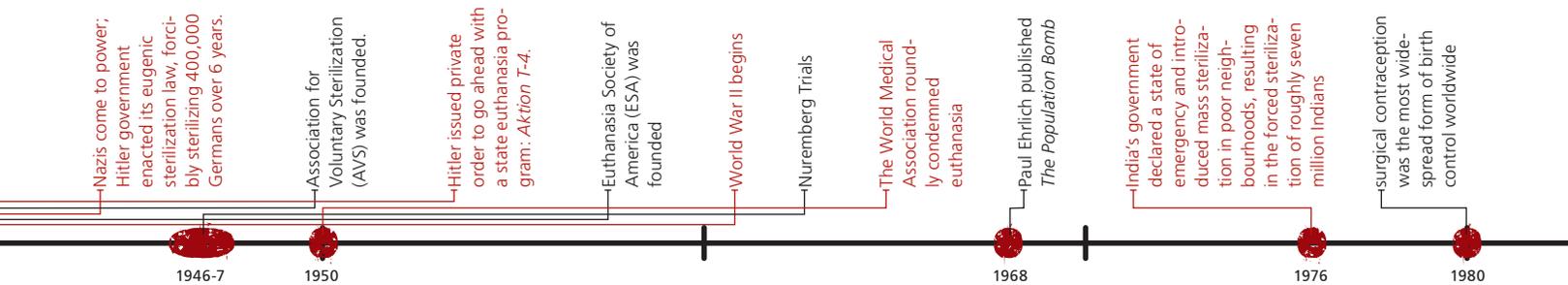
genics pervaded college, university and high school curricula. The Carnegie and Rockefeller foundations funded eugenic research. By the 1930s, 41 states had laws prohibiting the marriage of the mentally ill and mentally disabled, and 30 states had passed eugenic sterilization laws. Eugenic ideas encompassed public health concerns such as diet, exercise, parenting, pediatrics and personal hygiene, and surfaced in "eugenic" movies and stage dramas.¹⁴

The broad enthusiasm for eugenics coincided with the first awakenings of America's euthanasia movement. In 1915, the Chicago surgeon Harry Haiselden had refused to operate on a newborn with intestinal and rectal infirmities. The case became headline news across America. When asked by a reporter why he had chosen to let the baby

WHAT HAD ONCE BEEN A MERE DISCUSSION WITHIN A TINY GROUP OF SCIENTISTS ABOUT THE RELATIVE WORTH OF INDIVIDUAL HUMAN LIVES HAD CULMINATED IN THE HOLOCAUST ITSELF.

die rather than operate, Haiselden replied: "Eugenics? Of course, it's eugenics."¹⁵

Yet it was not until the 1930s that the euthanasia movement began gathering momentum. Spearheaded by the ex-Unitarian pastor Charles Potter, a vocal supporter of eugenic sterilization, the Euthanasia Society of America (ESA) was founded in 1938. Anne Mitchell, the ESA's first major benefactor, talked of the necessity of breeding human beings "as carefully as we do animals." She welcomed the coming of World War II because, she claimed, it gave the United States a prime opportunity to do some serious "biological house cleaning" of the country's "unfit" citizens. Unsurprisingly, there was a noticeable overlap in membership between the ESA and AES. Fully 73 per cent of the ESA's founders were followers of eugenics. Initially, the ESA advocated the legalization of euthanasia for "incurable idiots," but as the ESA faced increased resistance from legislators in states such as New



York, it promoted a euthanasia bill for only consenting, terminally ill adults. Nonetheless, Potter told his allies in the movement that the ESA's ultimate goal was the enactment of a bill legalizing the mercy killing of the incurably mentally ill.¹⁶

Canada, too, was home to a robust eugenics movement. In 1918, leading Canadian psychiatrists founded the Canadian National Committee for Mental Hygiene (CNCMH) with the goal of lobbying governments to pass preventive measures designed to reduce the rate of mental illness. In 1930, many of the same individuals formed the Eugenics Society of Canada (ESC), whose aim was to develop a public education campaign of race betterment that would ultimately lead to legislation preventing reproduction by people deemed unfit for parenthood. By then, the Alberta provincial government had already taken action. In 1928, under pressure from public health officials and prominent women's rights activists, including Nellie McClung and Emily Murphy, the Alberta government passed its Sexual Sterilization Act. The Alberta bill set up a provincial Eugenics Board which decided whether or not individuals with a tendency to mental illness or mental deficiency would be sterilized. The Alberta Act was followed by British Columbia's own sterilization act. While the B.C. Act operated fitfully until it was repealed in 1972, Alberta sterilized almost 3,000 men and women until its act was repealed the same year. On a per capita basis, Alberta's experiment with eugenic sterilization proved to be one of the most sweeping in the entire world.¹⁷

Canadian support for euthanasia tended to develop more slowly than approval of eugenics, partly owing to the fact that the country remained religiously conservative as late as the 1960s. Yet in the first half of the twentieth century, some prominent Canadians with eugenic backgrounds did endorse various forms of euthanasia. In 1935, ESC president William Hutton, public

health officer for Brantford, Ontario, recommended overturning time-honoured taboos against taking human life in order to permit mercy killing for those with the weakest germ plasm.¹⁸ Canadian-born psychiatrist Brock Chisholm, the first director-general of the World Health Organization (1948-1952), warned in 1937 that Canada faced a biological crisis because of the disproportionate fertility of the less intelligent classes. He later advocated euthanasia for newborns, including the victims of the drug Thalidomide. And Olive Ruth Russell, the first woman psychologist in the Canadian army, urged ending "the stranglehold of tradition and religious dogma" so as to justify euthanizing the "surging rise in the number of physically and mentally crippled children" created by the twentieth-century "population explosion."¹⁹

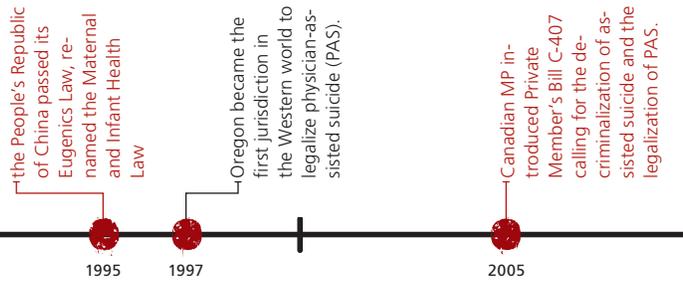
None of these recommendations led to changes in Canada's laws, but they illustrated that, in Canada, as elsewhere, proponents of eugenic policies typically favoured the legalization of euthanasia. This history is all the more troubling given the fact that although debate over euthanasia in this country was slow in developing, it has raged for the last fifteen years, against the backdrop of high profile human interest stories, including the killing of Tracy Latimer in 1993 and the assisted suicide of Sue Rodriguez in 1994. In 1993, the Supreme Court of Canada narrowly ruled that there was no Charter right to assisted suicide, and in 1995, the nation's Senate recommended that assisted suicide remain illegal. Yet, C-407 is a forceful reminder that in the eyes of PAS supporters, the debate is far from over.

EUGENICS AND EUTHANASIA AFTER WORLD WAR II

After the end of World War II, news of Nazi experiments on prisoners of war, the mass sterilization of the disabled and the murder of asylum patients gradually became public knowledge, notably at the 1946-1947 Nuremberg Trials of German doctors and

their assistants. In the words of Leo Alexander, a U.S. psychiatrist appointed to the Nuremberg prosecution team, Nazi medical atrocities were not a freak accident of history, but started from "small beginnings." Nazi medical crimes had a powerful ancestry dating back to Ernst Haeckel and late nineteenth century eugenics and social Darwinism, originating in the willingness of numerous German opinion makers in medicine and the sciences to accept that there were lives that were "not worthy to be lived." Once this view was accepted, it became easier to extend it beyond the disabled and chronically ill to "the socially unproductive, the ideologically unwanted, the racially unwanted, and finally all non-Germans;" in other words, to the Holocaust itself.²⁰

As the world recoiled in horror over these revelations, the fortunes of both eugenics and euthanasia faltered. In 1950, the World Medical Association roundly condemned euthanasia, as did all leading national medical organizations. Eugenics virtually became a "dirty word" and its supporters discovered that governments were no longer interested in enacting sterilization laws.²¹ In this changed political climate eugenicists shifted strategy and flocked to the emerging population control movement. In the 1950s and 1960s, a growing number of social scientists warned of a global crisis if drastic birth control programs were not implemented. Experts predicted that population growth, particularly in developing countries such as India, would create severe shortages of food and natural resources, triggering massive famine and disease. Observers also warned that unchecked population growth would destabilize developing nations, leaving them vulnerable to takeover by communist insurgents. The movement culminated in the 1968 publication of Paul Ehrlich's *The Population Bomb*, but Ehrlich was only one of many thinkers who believed that the threat of imminent mass starvation war-



ranted radical birth control policies, including mass sterilization. Eugenicists who had once advocated compulsory sterilization laws targeting the poor and mentally disabled now focused on popularizing sterilization among the public and medical profession. The new rationale was population control, but their overall objective remained essentially the same: sterilizing the poor, sick and dispossessed. In the words of one U.S. sterilization proponent, if “the half wits and morons could be talked into sterilization...we could at least be getting somewhere.” The goal of sterilization activists was to persuade doctors “to be more sterilization minded” in the name of defusing the “population bomb.”²²

This transformation from coercive to “voluntary” sterilization advocacy was particularly visible in the history of one organization, the Manhattan-based, non-profit Association for Voluntary Sterilization (AVS). Founded in 1937 as the Sterilization League of New Jersey, a group dedicated to persuading that state to pass a eugenic sterilization law, the AVS enjoyed close relations with the ESA

from the 1940s to the 1970s. The two groups regularly swapped membership lists based on the belief that their supporters shared a strong philosophic kinship. Indeed, almost all its board of directors were members of the ESA and AES, including birth controllers Margaret Sanger, Alan Guttmacher and Robert Latou Dickinson, as well as clergyman Joseph Fletcher, founder of the highly influential theory of “situation ethics” in medicine.²³ In the 1960s, Hugh Moore, the inventor of the Dixie Cup, and one of the most vocal advocates of population control, threw his immense wealth behind the AVS. He actually coined the phrase “the population bomb” years before Paul Ehrlich popularized it in his 1968 bestseller of the same name.²⁴ By the time of his death in 1972, Moore also

defended euthanasia, leaving one-quarter of his considerable estate to the ESA. He was simply the best known of the many supporters of population control who shared the deep belief that the time had come to legalize euthanasia.

POPULATION CONTROL, EUGENICS AND EUTHANASIA

The efforts of the AVS were rewarded by the early 1970s when the U.S. federal government announced it would fund domestic sterilizations through its Medicaid programs and would help subsidize groups such as AVS and International Planned Parenthood that were offering overseas sterilization services. Yet in the 1970s, the focus of the population control movement changed from attempts to reduce the sheer number of births to “family planning,” reproductive health programs offering counselling and medical services for couples who wanted to space the arrival of children. Officially, the new orientation stressed voluntarism and the worldwide provision of birth control services to women as a way of improving maternal and child care and stemming population growth, especially in developing countries.

Whatever the rationale, however, global sterilization rates continued to rise. By 1980, surgical contraception was the most widespread form of birth control worldwide and by the end of the 1990s, close to 300 million couples had been sterilized. Coercion in population control programs was an undeniable fact. For example, in 1976 India’s government, under Prime Minister Indira Gandhi, declared a state of emergency and introduced a program of mass sterilization in poor neighbourhoods, resulting in the forced sterilization of roughly seven million Indians. By targeting the poor, population controllers who preached sterilization upheld eugenic traditions dating back to the late nineteenth century.

More recently, as the example of the People’s Republic of China (PRC) demonstrates, population control retains its eugenic roots and promotes euthanasia. As part of its state policy of curbing demographic growth and improving the biological quality of its population, in 1995 the PRC passed its Eugenic Law, hastily renamed the Maternal and Infant Health Law under a torrent of foreign criticism. The 1995 law stipulates that potential marriage partners must have medical checkups to ensure that neither has any hereditary, venereal, reproductive or mental disorder. Those deemed “unsuitable for reproduction” can be compelled to undergo sterilization or abortion.

Moreover, once it became permissible for the Chinese state to intervene in the name of collective fitness, leading health officials began referring to the “zero worth” of defective infants. Infanticide was increasingly hailed as “scientific humanism” that protected Chinese society against the “counter-selective” forces represented by disabled newborns. Zhao Gongmin, a Fellow of the Chinese Academy of Social Science, stated that “painless euthanasia” for “those already born and afflicted with severe inherited malformations, such as cretins with a stretched tongue or babies suffering from hydrocephalus” was “a eugenic measure that will benefit the country and the people.” When the news broke in 1996 of abandoned children being starved to death in Chinese orphanages, officials had to admit that for years health care personnel had been discussing the possibility of selecting the “superior” infants for survival and “discarding” the “inferior.” As of the early twentieth century, euthanasia was still officially criminalized in the PRC, but the mounting acceptance of eugenics in the form of population control suggested a reversal of policy in the coming years.²⁵

CONCLUSION

Understanding the historical implications of euthanasia grounds Jason Kenney’s comments in Parliament about Bill C-407. Because hindsight is 20/20, history shows us the potential and looming repercussions for classifying mankind into categories denoting one’s ability to contribute to society, be financially productive or be favoured to reproduce genetically inclined offspring. It is tempting to think that abuses against vulnerable and disadvantaged individuals

comparable to the crimes committed by the Nazis could never happen here. Yet, both the history of eugenics and recent events suggest otherwise. In the wake of 2005's Hurricane Katrina, the state of Louisiana announced it was investigating allegations that doctors at a New Orleans area hospital killed patients rather than leave them to die in agony as they evacuated hospitals. Such triage conditions, when combined with alarmist observations about the rising costs of health care, create an environment which encourages policy-makers to make invidious distinctions about the value of individual human lives. Leading right-to-die advocates, including Derek Humphry, the co-founder of the pro-euthanasia Hemlock Society (now called Compassion and Choices), argue that the current difficulties governments face in paying health care costs will mean that society's elderly population will soon have to accept a "duty to die." But history shows that these and other troubling comments are far from new. Today, social scientists and ethicists often refer to the elderly as "biologically tenacious," echoing opinion makers of the past who talked freely about "useless eaters" and "ballast existences." Present day health care providers often measure the value of human life on the basis of "futile care" theory, which holds that financial costs largely dictate whether or not a person should be kept alive.²⁶ Peter Singer, professor of ethics at Princeton University, openly proclaims that no one believes any more in the sanctity of individual human life. To Singer, only people who can anticipate and plan for their future should enjoy a right to live. According to his line of reasoning, defective newborns and the mentally ill therefore qualify for euthanasia.

Today's trends toward the legalization of euthanasia, including PAS, are bolstered by what commentators call the "new eugenics."²⁷ Remarkable advances in reproductive and genetic technology, including in vitro fertilization, genetic screening, sex selection and sperm banks, indicate that a new wave of eugenics is in the ascendancy. In the early twenty-first century some ethicists are hailing a "liberal eugenics" based on the doctrine of personal autonomy to defend the right of parents to use whatever technological means at their disposal to "insure for their descendants the best genetic endowment." The trouble is that in a

society that accepts elective eugenics, children with imperfections (and their parents who brought them into the world) would feel as stigmatized as ever. As U.S. political philosopher Michael J. Sandel shrewdly noted in 2004, "removing the coercion does not vindicate eugenics." A society based on liberal eugenics "would be a world inhospitable to the unbidden, a gated community writ large." If history is any guide, by denigrating the less fortunate, the new "liberal eugenics" improves the chances of electing representatives who advocate the legalization of PAS.²⁸

In summary, the history of the struggle over euthanasia strongly points to the

conclusion that at its core is a conflict between competing world views, "between fundamentally different moral visions of human life—individual and collective," as James Davison Hunter has argued.²⁹ Euthanasia is an "edge-of-life" issue that haunts the moral consciences of countless Canadians as well as other citizens of the world. An historical perspective on euthanasia is indispensable for patients, families, governments and the health care community who debate when it is time to let go of life. Upcoming events in society's debate over this and other "edge-of-life" issues will form the next chapter in a history that shows few signs of ending anytime soon.

endnotes

- 1 Tibbetts, J. (2004, November 18) Ottawa to revisit right to die debate: It's time to renew debate on assisted suicide: Minister, *National Post*, p. A1.
- 2 Aly, G., Chroust, P., & Pross, C. (1994). *Cleansing the Fatherland: Nazi Medicine and Racial Hygiene*. (Belinda Cooper, Trans.). Baltimore: Johns Hopkins University Press. Burleigh, M. (1994). *Death and Deliverance: "Euthanasia" in Germany, 1900-1945*. Cambridge: Cambridge University Press; Friedlander, H. (1995) *The Origin of Nazi Genocide: From Euthanasia to the Final Solution*. Chapel Hill: University of North Carolina Press; Proctor, R.N. (1988). *Racial Hygiene: Medicine Under the Nazis*. Cambridge: Harvard University Press; Weindling, P. (1989). *Health, Race, and German Politics Between National Unification and Nazism, 1870-1945*. Cambridge: Cambridge University Press.
- 3 Darwin, C. (1871). *The Descent of Man and Selection in Relation to Sex*. (Vols 1-2). New York: D. Appleton, Vol 1 pp. 205-206, 212-213, 216-2.
- 4 Stepan, N. L. (1991). "The Hour of Eugenics: Race, Gender, and Nation in Latin America." Ithaca: Cornell University Press; Broberg, G. & Roll-Hansen, N. (Eds). (1996). *Eugenics and the Welfare State: Sterilization Policy in Denmark, Sweden, Norway, and Finland*. East Lansing: Michigan State University Press.
- 5 Shaw, G.B. (1905) Comment, *Sociological Papers: Vol. 4* (p. 74) London: Macmillan.
- 6 Wiggam, A. E. (1923) *The New Decalogue of Science*. Indianapolis: Bobbs-Merrill, p. 22. In I. Dowbiggin, *A Concise History of Euthanasia: Life, Death, God, and Medicine* (p. 54). Lanham: Rowman and Littlefield; Dowbiggin, I. (2003). *A Merciful End: The Euthanasia Movement in Modern America*. New York: Oxford University Press, p. 16.
- 7 Larson, E.J. & Amundsen, D. W. (1998). *A Different Death: Euthanasia and the Christian Tradition*. Downers Grove: InterVarsity Press, pp. 9, 27.
- 8 Weikart, R. (2004). *From Darwin to Hitler: Evolutionary Ethics, Eugenics and Racism in Germany*. New York: Palgrave Macmillan, p. 329.
- 9 Weikart, *From Darwin to Hitler*, p. 336.
- 10 Binding, K. & Hoche, A. (1992). *Permitting the Destruction of Unworthy Life* (W.E. Wright, P.G. Derr, & R. Salomon, Trans.). *Issues in Law and Medicine*, 8, 231-265.
- 11 Weikart, *From Darwin to Hitler*, p. 215.
- 12 Dowbiggin, *A Concise History of Euthanasia*, p. 80.
- 13 Friedlander, *The Origin of Nazi Genocide*.
- 14 The best accounts of the history of U.S. eugenics are Haller, M.H. (1985) *Eugenics: Hereditarian Attitudes in American Thought*. New Brunswick: Rutgers University Press; Ludmerer, K.M. (1972). *Genetics and American Society: A Historical Appraisal*. Baltimore: Johns Hopkins University Press; Kevles, D.J. (1985). *In the Name of Eugenics: Genetics and the Uses of Human Heredity*. New York: Knopf; Larson, E.J. (1995). *Sex, Race, and Science: Eugenics in the Deep South*. Baltimore and London: Johns Hopkins University Press; Reilly, P.R. (1991) *The Surgical Solution: A History of Involuntary Sterilization in the United States*. Baltimore and London: Johns Hopkins University Press; Kline, W. (2001). *Building a Better Race: Gender, Sexuality, and Eugenics From the Turn of the Century to the Baby Boom*. Berkeley: University of California Press; Stern, A.M. (2005). *Eugenic Nation: Faults and Frontiers of Better Breeding in Modern America*. Berkeley: University of California Press. For a penetrating examination of how eugenics informed the U.S. birth control movement, see Franks, A. (2005). *Margaret Sanger's Eugenic Legacy: The Control of Female Fertility*. Jefferson and London: McFarland and Co.
- 15 Pernick, M.S. (1996) *The Black Stork: Eugenics and the Birth of 'Defective' Babies in American Medicine and Motion Pictures Since 1915*. New York: Oxford University Press, p. 41.
- 16 Dowbiggin, *A Merciful End*, pp. 50-56.
- 17 McLaren, A. (1990). *Our Own Master Race: Eugenics in Canada 1885-1945*. Toronto: McClelland and Stewart, pp. 99-100, 112-113, 117-126; Dowbiggin, I.R. (1997). *Keeping America Sane: Psychiatry and Eugenics in the United States and Canada*. Ithaca: Cornell University Press, 1997, pp. 133-190.
- 18 McLaren, *Our Own Master Race*, p. 114.
- 19 Dowbiggin, *A Concise History of Euthanasia*, pp. 113, 114.
- 20 Marrus, M.R. (1999) The Nuremberg Doctors' Trial in Historical Context. *Bulletin of the History of Medicine*, 73, 106-123.
- 21 Kevles, *In the Name of Eugenics*, p. 251.
- 22 Dowbiggin, I. (2002). 'A Rational Coalition': Euthanasia, Eugenics, and Birth Control in America, 1940-1970. *Journal of Policy History*, 14, 223-260, p. 229.
- 23 Vansendelft, W.R. (1978). *A History of the Association for Voluntary Sterilization, 1938-1964*. Unpublished doctoral dissertation, University of Minnesota.
- 24 Critchlow, D.T. (1999) *Intended Consequences: Birth Control, Abortion, and the Federal Government in Modern America*. New York: Oxford University Press, pp. 16-18, 20-33, 150-154.
- 25 Dikotter, F. (1998). *Imperfect Conceptions: Medical Knowledge, Birth Defects and Eugenics in China*. New York: Columbia University Press, pp. 160-161.
- 26 Smith, W.J. (2003, January 6). Doc Knows Best [Electronic version] National Review Online Retrieved from <http://www.nationalreview.com/comment/comment-smith010603.asp>.
- 27 Neuhaus, R.J. (1988, April). The Return of Eugenics. *Commentary*, 15-26; Duster, T. (1990). *Backdoor to Eugenics*. New York: Routledge.
- 28 Sandel, M. (2004, April). The Case Against Perfection. *The Atlantic Monthly*, 51-62.
- 29 Hunter J.D. & Davis, J.E. (1996). Cultural Politics At the Edge of Life. In D.T. Critchlow (Ed), *The Politics of Abortion and Birth Control in Historical Perspective* (p. 106) University Park: Pennsylvania State University Press.

MORALITY MORTALITY

Will modern medicine kill our respect for human life?

BY SUE MARTINUK

FOR MORE THAN A DECADE, scientists collaborated in a massive, worldwide research endeavour to decipher the genetic code that controls the creation and development of human life. The HUMAN GENOME PROJECT (HGP) produced the first map of this code in 2003, ostensibly revealing the very mysteries of creation itself. Indeed, some scientists claim that this knowledge is the key to enter a biological utopia where science is capable of manipulating human life, curing disease and perhaps even conquering death itself.

The discovery was one giant step forward for science, but there remains tremendous uncertainty as to whether it represents a step forward for mankind. The goal of healing and even eliminating disease has positive implications, but as society gains more knowledge about how that is accomplished, it is evident that we are unprepared to deal with the ethical, medical, legal and societal issues that represent the inevitable consequences of genetic technology.

One question lies at the core of all these issues: How will the power to manipulate the human genome affect our respect for human life, including our attitudes toward, and support for, those who are born with genetic anomalies that lead to diseases and disabilities?

THE POWER OF GENETIC TECHNOLOGY

The HGP has contributed to the exponential growth of a new science called human GENOMICS (the study of the human genome). GENES that control the onset of breast cancer, cystic fibrosis, Huntington's disease, muscular dystrophy and a host of other diseases have been discovered, and at least 250 genetic diseases (the number is growing rapidly) can now be detected by genetic testing.

Genetic technology can be combined with reproductive technologies (termed REPROGENETICS) to ensure or prevent the inheritance of a particular gene. For example, a couple who suspects they may pass on defective genes to their children may choose to utilize reproductive technologies (such as IN VITRO FERTILIZATION) to create embryos that can be screened for genetic mutations using PRE-IMPLANTATION GENETIC DIAGNOSIS (PGD). If the embryos are free from mutations, they are implanted for pregnancy. But if genetic abnormalities are detected, the embryo is discarded or used for research.

Such destruction or experimentation isn't problematic to those who view embryos as mere biological waste. But if one accepts that human life begins at conception, then these options are highly objectionable and diminish mankind's respect for all human life. After all, if society accepts the use of genetics as biological criteria to determine who should live or die (even in an embryonic stage), it then implicitly 1) creates societal conditions/attitudes that devalue the lives of those who live with genetic abnormalities or disease, 2) allows a high-tech EUGENICS policy to take root and, 3) pushes mankind further down the path of biological re-creation. After all, the selection of only healthy embryos may, over time, eliminate the

THE HUMAN GENOME PROJECT (HGP): an international, collaborative research effort to sequence and map the human genome. It was completed on April 14, 2003. (<http://www.genome.gov/10001772>)

GENOMICS: the study of genes and their functions. It addresses all genes and their interrelationships in order to identify their combined influence on the growth and development of the organism. (<http://www.who.int/genomics/geneticsVSgenomics/en/index.html>)

GENES: the functional and physical unit of heredity. Genes are pieces of DNA, and most genes contain the information for making a specific protein. (<http://www.genome.gov/glossary.cfm?key=gene>)

REPROGENETICS: the merging of reproductive and genetic technologies; these combined technologies will become more common in the near future as techniques like preimplantation genetic diagnosis become more available and more powerful. (<http://en.wikipedia.org/wiki/Reprogenetics>)

IN VITRO FERTILIZATION: a technique in which egg cells are fertilised (combined with sperm) outside the woman's body. (http://en.wikipedia.org/wiki/In_vitro_fertilization)

PREIMPLANTATION GENETIC DIAGNOSIS (PGD): a method to examine the genetic material of eggs prior to fertilization or embryos before they are implanted in the uterus. (http://en.wikipedia.org/wiki/Preimplantation_genetic_diagnosis)

mutant gene and its resulting disease, effectively re-engineering man's genetic code.

All of these consequences become possible once we accept genetics as the sole determiner of the value of life.

Prenatal genetic screening (analyzing the genetic material of the unborn) includes the use of enhanced forms of ultrasound, amniocentesis and chorionic villus sampling to detect errors in the biological machinery of an unborn child. These capabilities may allow doctors to treat disease in utero or as soon as the child is born. One such example is retinoblastoma, an extremely rare eye cancer that can be hereditary. If detected in utero, treatment immediately after birth can prevent loss of eyesight. But such treatments are rare. For the vast majority of diseases, the predictive technology is far more advanced than any treatment options, and gene therapies that would, in theory, allow researchers to correct anomalies (perhaps by inserting a "normal" copy of the gene) remain largely unproven.

In more than 80 per cent of cases, the pregnancy is terminated when genetic abnormalities are found,¹ but termination rates do vary with the diagnosis. Abortion rates range from 64 per cent for spina bifida (which has varying degrees of severity) to 84 per cent for anencephaly (where the child will die shortly after birth) and 92 per cent with a diagnosis of Down syndrome.² These statistics closely reflect the Canadian situation, although rates do vary from province to province³ and from country to country.⁴ This determination to eliminate the imperfect is particularly disturbing when one considers that about 5,000 genetic diseases exist and we each possess at least five gene mutations.

CONCERNS

Advances in biotechnologies have already had a significant impact in determining how we reproduce, whether we reproduce and what kind of child we want to produce. We may support the personal right of individuals to make such choices, but their collective impact now radiates beyond hospital treatment rooms to the public square where it has substantially altered our perception of humanity, giving rise to the following legitimate ethical and moral concerns:

1 *Creating a genetically-engineered race:* There is considerable speculation that broad acceptance of genetic screening, coupled with advances in the understanding of gene function, will lead to an all-out quest to gain control over every aspect of a child's destiny. This would include, for example, all genetic characteristics, height, sex, athletic and musical abilities or intelligence.⁵ Genetic engineering would create a societal divide between genetically enhanced and non-enhanced humans and, as it becomes more common, there will be tremendous pressure on all couples to only give birth to genetically-enhanced, disease-free children.⁶

This scenario represents the worst fears of bioethicists and luddites, but it is not likely to become a reality anytime soon. These fears are primarily based on the presupposition that complex physical characteristics and attributes are controlled by individual genes, a theory that was widely accepted when it was estimated that the HUMAN GENOME consisted of

at least 100,000 genes. But the HGP proved that there are only about 30,000 genes, suggesting that rather than having individual roles, many genes must have multiple functions or act in combinations or groups. When multiple numbers of genes are involved, the manipulation of one gene could have an untold number of repercussions on other genes.

The idea that we will be able to use genetics to manipulate the characteristics of man is theoretically possible, but not in the near future. The HGP has determined the physical positions of genes on chromosomes, but it will take decades to determine all gene functions and interactions.

In the meantime, focusing discussion on manipulating genes to suit our egocentric or most vile purposes has created a distorted perception of what genetics can realistically achieve. More disturbing than that, it has distracted us to the point where we have virtually ignored the current impact that genetics has on our society.

2 *Rising expectations that the imperfect should not be born:* A far greater threat to the public good is the current use of genetic technology to screen embryos (in vitro) and unborn children (in utero) for GENETIC ANOMALIES, with the ultimate goal of discarding/terminating them if any are found. As stated above, this often results in the destruction of embryos based on minute imperfections that, until now, have been an accepted part of the genetic gamble of reproduction. Allowing this procedure to continue on a broad scale is precipitating an indistinct, yet profound, transformation of health care from a reactive model (of treating disease based on symptoms) to a proactive model (of predicting and eliminating disease based on genetics).⁷ This transformation not only threatens to lead to the wholesale destruction of human embryos, but also to a diminished respect and support for those who are afflicted, and live with, genetic disease.⁸

The expectations of parents are already shifting. Many feel there is no longer any reason to leave the genetics of the unborn to chance, and they are increasingly feeling obligated to utilize the technology and only give birth to a fully healthy baby. This thinking fuels a greater use of technology and eventually creates a spillover effect to the public—whereby the public expects parents to use technology to ensure that only healthy children are born. Should this expectation become entrenched, society's tolerance for individuals with any genetic imperfections will diminish, as will societal and even

EUGENICS: a social philosophy which advocates the improvement of human hereditary traits through social intervention. (<http://en.wikipedia.org/wiki/Eugenics>)

HUMAN GENOME: the genetic material that directs the development and growth of the human species (Homo sapiens). The human genome consists of about 30,000 genes located on 23 chromosome pairs that reside in each human cell.

GENOME: an organism's complete set of deoxyribonucleic acid (DNA, a chemical compound that contains the genetic instructions to control the growth and development of that organism). (<http://www.genome.gov.11006943>)

GENETIC ANOMALIES: mutations that occur in the DNA of a particular gene and alter the function of the gene. As a result of mutations, genes send the wrong information to the body, resulting in varying degrees of disease or dysfunction. (<http://www.primo.it/pediatric-rheumatology/information/UK/13.htm>)

medical support. After all, some may say, “Why should society cover the extensive costs of a lifelong disease if the parents had an opportunity to make sure their baby was born healthy?”

This intolerance will continue to foment in circular fashion: As potential parents view society’s intolerance and diminishing support, they will increasingly view screening technology (and termination if defects exist) as a necessary component of human reproduction, and so the cycle continues.

3 *A growing tendency to define human behaviour through science alone:* Media reports have widely proclaimed the discovery of genes or “genetic links” that may be responsible for human behaviours/traits such as happiness, obesity, sexuality and even infidelity. But most of these studies have yet to be corroborated, and it is well-accepted among scientists that complex human behaviours/traits will be linked to interactions among various genes, rather than the product of individual genes.

Media reports tend to focus more on the potential of such discoveries than on the scientifically-valid details and applications. Such spin has fuelled societal and/or non-academic speculations that our behaviours and actions may be dictated more by genetics than by our environments and personal choices, thereby suggesting that man is little more than a pre-programmed genetic machine who has little control over his own actions.

This interpretation of gene function led to the creation of a philosophy called “transhumanism” that advocates taking control of human evolution through gene modification.⁹ But, more than that, it fosters a strictly science-driven understanding of mankind that equates man with other members of the animal kingdom. In doing so, it ignores the distinctly human attributes that define us and enable us to rise above the simple evolutionary strategies of the animal kingdom: the will (to choose our actions), the intellect (to reason), the conscience (to understand right from wrong) and the soul (the intangible, spiritual nature of man).

4 *Genetic technologies may be implementing eugenics policies via individual choice:* Given the potential of genetic technology to manipulate human life, there are legitimate reasons for society to govern its use. Yet Canadian society currently affords absolute value to individual rights, including the right to “absolute reproductive freedom.” Consequently, there is little public will to interfere with/regulate individual decisions to terminate a pregnancy or discard an embryo. But as G.K. Chesterton has written, “To have a right to do a thing is not at all the same as to be being right in doing it.”¹⁰

Thousands of individual decisions to eliminate diseased embryos and fetuses may already be subtly establishing an unstated, laissez-faire-style eugenics policy that medicine and society are inadvertently accepting. According to Dr. Margaret Somerville, a bioethics professor at McGill University, our ready recognition of individual rights to make such determinations has essentially allowed “...an outcome that would never be acceptable as public policy [to be] implemented through the accumulation of individual choices.”¹¹

5 *A shift from sanctity of life to quality of life as the basis for medical decision-making:* Perhaps the greatest concern (and one that is at the core of all other concerns) is how the new genetics has subtly diminished our respect for human life. In the past, this respect was based on the fundamental principle that all humans are created equal and have equal value, regardless of their abilities and capacities. Genetic technology is pushing both doctors and society to shift from this ethic to a more subjective understanding of “personhood.” Under this supposedly ethical principle, only some individuals have rights and humans must possess certain cognitive capabilities, be fully conscious and capable of acting autonomously to be deemed legal “persons” with rights and moral value.¹²

Human embryos and fetuses are not “persons,” and therefore, society has no moral obligation to protect them. The increasing acceptance of this theory has given genetic technology free reign to seek out genetic errors and eliminate embryos or fetuses that possess them.

Our wildest fears of genetic engineering may never come true, but our worst fears of the deconstruction of humanity may have already come true. The 21st century notion that humanity is both subjective and selective is no longer contained to the realm of science.

In medicine, this understanding of humanity is clearly leading to a model of care that directly contravenes the spirit and understanding of the Hippocratic Oath. This oath has traditionally governed a physician’s duty to care for the sick and uphold the sanctity of life, but some applications of biotechnology are now leading physicians to focus on quality of life instead of sanctity of life.¹³

In the public square, it has precipitated and fuelled a philosophical trend in which society judges technology on the basis of an individual’s “right” to use it rather than society’s obligation to give equal value and respect to all human life.

Both consequences are to be expected when the miraculous is reduced to mere scientific methodology. Conversely, redirecting discussions from their current emphasis on individual rights to a new focus on the uniqueness of human life may act to stem the tide of diminishing respect for humanity. This shift is possible because many of the above presumptions are not yet well-entrenched in mainstream society.

SOCIETY’S RESPONSE

The discussion must shift from individual rights to what is best for society at large. The common good can best be ascertained outside the realm of rights by asking the simple questions, “Is this inherently wrong?” and “Does it respect human life?”¹⁴ Only then, once we have assessed its moral good, can we decide if – and in what circumstances – it is ethical to proceed.

Most members of society still experience a sense of compassion and respect for those who are disabled or suffer from disease. We may silently allow the unborn to be eliminated based on faulty genetics but, on a personal level, it is anathema for most of us to look at a newborn child or someone suffering from cystic fibrosis and believe that they are any-

thing but fully human and fully alive. Their courageous lives inspire our understanding and respect for the innate strength and depth of the human spirit.

Such experiences demonstrate the intrinsic value that is associated with caring for one another. All individuals, at some point, are placed in the position of either receiving or giving care, from or to family, friends or loved ones. Most of us have a subconscious recognition that our own lives will be impoverished if we cease to care – whether that be in the most practical sense of the word or by giving in to the notion that some are less human or less valuable than others.

New technology that gives us an unprecedented view of fetal development also inspires public respect and understanding for the humanity of embryonic life. Ultrasound images of fingers and toes; kicking and jumping; thumb sucking and responding to familiar voices all make it difficult to deny that the fetus is fully human. The enhanced and evolving recognition of fetal rights in the United States demonstrates that there may still be opportunity to educate individuals about the intrinsic value of the unborn – before they make decisions about genetic screening.

An individual's right to a unique genetic identity must be upheld. This argument is typically used in the cloning debate,¹⁵ but if an individual's right to natural genetic diversity governs the use of cloning technology, then it should also govern genetic screening. The recognition and application of this right upholds genetic diversity as a positive component of human life, and suggests that alterations to one's genetic code are to be celebrated rather than disparaged.

We must act to preserve the rights of the disabled in all aspects of medical care and societal support. Advocates for the disabled, families of those afflicted and the disabled themselves must become principle stakeholders in discussions about how to use this technology and how to deal with its medical, ethical, legal and social implications. Decisions about medical care are increasingly being driven by a perceived belief that a scientific imperative exists (“If we can do it, we should do it”) and the idea that the use of genetic technology to identify and eliminate man's genetic imperfections is inherently right. Those faced with the prospects of utilizing genetic technology should be obligated to hear from stakeholders, including the genetically disabled.

CONCLUSION

“The road to genetic hell could be paved with good scientific intentions.”¹⁶

Indeed, our society seems too content to let technology push the ethical boundaries of medicine because we believe that it will ultimately lead to our benefit and comfort. But, as suggested throughout this article, the road to achieving this end is much longer and more complicated than that. It is a path that inevitably leads to the ranking, devaluing and discarding of our fellow humans, even while the dream of gene therapies for genetic diseases may never be successfully realized.

Sickness and imperfection are as much a part of life as the joy we take in living. We will surely become a less civilized society if we allow modern medicine to descend into an institution that views life and treats individuals on a strictly utilitarian basis. After all, allowing medicine to take the lives of the imperfect and the sick will surely establish a hierarchy of value in which, at some point, we will all be found lacking.

RESTATEMENT OF THE OATH OF HIPPOCRATES

I swear in the presence of the Almighty and before my family, my teachers, and my peers that according to my ability and judgement, I will keep the Oath and Stipulation:

To reckon all who have taught me this art equally dear to me as my parents and in the same spirit and dedication to impart a knowledge of the art of medicine to others. I will continue with diligence to keep abreast of advances in medicine. I will treat without exception all who seek my ministrations, so long as the treatment of others is not compromised thereby, and I will seek the counsel of particularly skilled physicians where indicated for the benefit of my patient.

I will follow that method of treatment which according to my ability and judgement I consider for the benefit of my patient and abstain from whatever is harmful or mischievous. I will neither prescribe nor administer a lethal dose of medicine to my patient even if asked, nor counsel any such thing, nor perform act or omission with direct intent deliberately to end a human life. I will maintain the utmost respect for every human life from fertilization to natural death and reject abortion that deliberately takes a unique human life.

With purity, holiness and beneficence I will pass my life and practice my art. Except for the prudent correction of an imminent danger, I will neither treat any patient nor carry out any research on any human being without the valid informed consent of the subject or the appropriate legal protector thereof, understanding that research must have as its purpose the furtherance of the health of that individual. Into whatever patient setting I enter, I will go for the benefit of the sick and will abstain from every voluntary act of mischief or corruption and further from the seduction of any patient.

Whatever in connection with my professional practice or not in connection with it I may see or hear in the lives of my patients which ought not to be spoken abroad I will not divulge, reckoning that all such should be kept secret.

While I continue to keep this Oath unviolated may it be granted to me to enjoy life and the practice of the art and science of medicine with the blessing of the Almighty and respected by my peers and society, but should I trespass and violate this Oath, may the reverse be my lot.

endnotes

- 1 Dr. A Chudley (personal communication). Medial Director, Genetics and Metabolism and Professor, Pediatrics and Child Health/Biochemistry and Medical Genetics. University of Manitoba, Winnipeg, Manitoba.
- 2 Mansfield, C. et al. (1999) Termination Rates after Prenatal Diagnosis of Down Syndrome, Spina Bifida, Anencephaly, and Turner and Klinefelter Syndromes: A Systematic Literature Review. *Prenatal Diagnosis* 19: 808-812, 1999.
- 3 Dr. A Chudley (personal communication).
- 4 Mansfield, C. et al. (1999) Termination Rates...
- 5 Silver, L.M. (2000) Reprogenetics: How do a Scientist's own Ethical Deliberations Enter into the Process? *Humans and Genetic Engineering in the New Millennium*. Copenhagen: Danish Council of Ethics.
- 6 Silver, L.M. (2000) Reprogenetics...
- 7 Bernstein, A. (2001, February 14) Balancing Act: Science and Society. *The Globe and Mail*, p. A13
- 8 Smith, W.J. (2000, April 3). Is Bioethics Ethical? *The Weekly Standard*.
- 9 Smith, W.J. (2002, September 20). The Transhumanists: The Next Great Threat to Human Dignity [Electronic version]. *National Review*, Retrieved from <http://www.nationalreview.com/comment/comment-smith092002.asp>.
- 10 Chesterton, G.K. (1917). *The War of the Usurpers. A Short History of England*, London: Chatto and Windus Ltd.
- 11 Somerville, M. (2002, October 10). New genetics functions as eugenics. *National Post*, p. A22
- 12 Smith, W.J. (2002, September 20). The Transhumanists...
- 13 Irving, D. (2001, May) The Bioethics Mess. *Crisis*
- 14 Somerville, M. (2001) *The Ethical Canary: Science, Society and the Human Spirit*. Toronto: Penguin Canada.
- 15 Somerville, M. (2001) *The Ethical Canary*...
- 16 Pinkerton, J. (2000, July 10) *Scripps Howard News Service*.

WHEN DOES IT ALL BEGIN?

The embryo: of what importance; how sacred; and when does it become human?

by Gordon Giesbrecht, Ph.D.

I asked myself this question as I sat in my office preparing to testify before the House of Commons Standing Committee on Health regarding stem cell research. It was a daunting task, trying to convince this committee that they should include prohibition of research on embryonic stem cells in the government's proposed Bill C-13 (now C-6), An Act respecting human assisted reproduction and related research (passed and given Royal Assent on March 29, 2004).

What would I say? What was my position? Not wanting to risk spouting off rhetoric I had absorbed throughout a life of evangelical indoctrination, I started from scratch and got to the heart of the matter: when does human life begin? There is a vast diversity of opinion on this question. Several physical and time-based criteria are used to signify the start of life. What tipped the balance for me was more of a spiritual or metaphysical criterion; the acquisition of a soul. Although we do not often hear of this criterion, it should be considered since 83.5 per cent of Canadians identify with a religion that professes belief in a human soul. The definition of the start of human life is important since destruction of human embryos—and therefore human life—is central to the issue of stem cell research.

What are we talking about?

The discovery of stem cells has caused great excitement and expectations from physicians, researchers and the general public, especially in the past five years. These cells can differentiate into every type of body cell and tissue, making the potential for medical benefits enormous. Some current and proposed uses of stem cells include the possibilities of A) being isolated *in vitro* (outside the body) and manipulated to form new tissues for transplantation, B) being cultured *in vitro* for drug testing, and C) being implanted *in vivo* (in life) into traumatized or diseased areas of the body to replace defective or dying tissue. Seemingly, the sky is the limit and any disease can, theoretically, one day be cured.

At the heart of the ethical controversy over stem cell research is the source of stem cells themselves. Adult stem cells are derived from somatic (body) cells taken from various body tissues. Sources include skin, bone and even blood from the umbilical cord of newborns, and harvesting the cells does not harm the donor. On the other hand, embryonic stem cells are found in the human embryo and the harvesting process destroys the embryo. Thus the debate revolves around the moral status of the embryo and a corollary question, "When does human life begin?"

A basic overview may help the non-medical person get up to speed on this issue. The process of reproduction starts at conception (see Figure 1). Special reproductive cells, called gametes, are provided by the male (sperm) and female (egg). Each of these cells contains twenty-three chromosomes, which provide one half of the genetic material from each parent. Fertilization occurs when the sperm fuses with the egg, forming a zygote.

Zygote formation marks the beginning of a fascinating journey. This single cell is unique in that it contains the totality of hu-

man genetic information and is genetically unique from any other embryo. It has forty-six chromosomes and more than thirty thousand genes. This tiny cell has all the programming required for cell division, differentiation into various tissues and organs, biological system integration and production of human proteins and enzymes. Sex is determined and any genetic strengths and weaknesses are predetermined. All that is required for this single cell to develop through the embryonic (first eight weeks) and foetal (final seven months) phases of pregnancy to full-term birth is a suitable environment...and time!

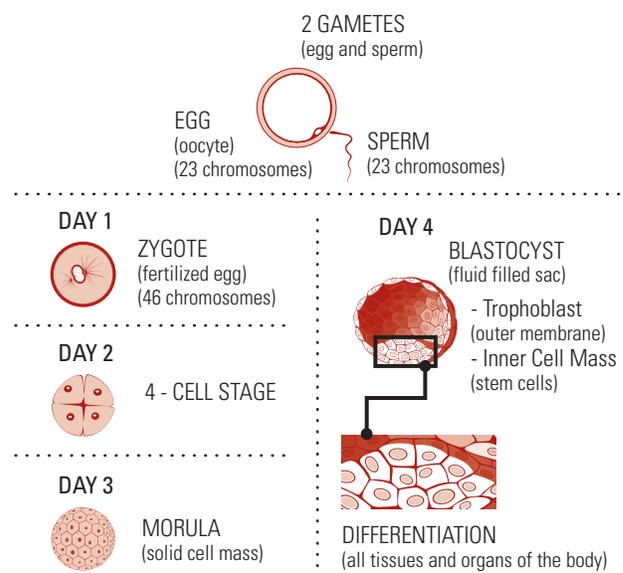


Figure 1

Essentially this single cell, through continued division and differentiation, forms the full human body. Differentiation is the process whereby dividing cells change to more and more specific types of cells. Each and every human cell has exactly the same genetic material. What is different is how the cell machinery implements different aspects of the genetic program to form different cell types. This is much like a complex computer program. Subroutines of the program may be used to create graphics, while different subroutines of the same program could be used to create a text document. In fact, thousands of different products can be produced by merely triggering different codes of the same program.

The embryo progresses through continued cell division to form a solid sphere of cells, the morula, by day three after fertilization. By day four, the cells then start to differentiate to form a fluid-filled sac, the blastocyst. The outer layer of the blastocyst, the trophoblast, is one-cell thick; these cells eventually differentiate further to form the placenta and amniotic tissue. Inside the blastocyst, an aggregation of a few dozen cells make up the inner cell mass (ICM). These ICM cells are stem cells in the earliest stage, which will eventually comprise every different type of tissue in the body. They first differentiate into three distinct germ layers.

Each layer further differentiates into a specific set of tissues—for instance the ectodermal layer differentiates to form skin cells and the nervous system, the mesodermal layer differentiates to form the musculoskeletal and cardiovascular systems and the endodermal layer differentiates to form several internal organs such as the lungs, liver, pancreas and intestines.

What's the big deal?

Two main ethical issues pervade the discussion of stem cell research: 1) the morality of destroying human embryos for research or disease treatment; and 2) the ethical implications of using cloning techniques to produce embryos for destruction.

Rights of the embryo

As stated above, adult stem cells are derived from body cells and harvesting them does not harm the donor. But harvesting embryonic stem cells does destroy the embryo. If you believe that life begins at conception, and the resultant embryo should be protected, you might ask, “Why not concentrate on adult stem cells and avoid the ethical debate?”

The drive to study embryonic stem cells emanates from the potentially greater ‘potency’—the ability to differentiate into a larger range of tissues—than adult stem cells. Theoretically, during the first three days of development, cells progressing from the zygote to the morula are totipotent—they can become any cell type in the body. Blastocyst cells are pluripotent because they can form most but not all of the cell types. Trophoblast cells differentiate into the placenta and amniotic tissues, while only the inner cell mass cells can form all of the body cell types. Finally, cells in each of the three germ layers are multipotent and their differentiation is limited to specific types of cells (e.g. mammary stem cells can differentiate to form all the cells in a mammary gland).

As cells move toward more specific function, their potency—or ability to differentiate—diminishes and the scope of tissues that can be formed becomes more restricted. It is also believed that cells cannot move backwards and be coaxed into forming different cell types. It is this limitation that makes pluripotent embryonic stem cells more attractive to some researchers than adult stem cells, which are thought to be only multipotent. Although much of the research community, politicians and the public advocate this position, in actual fact adult stem cell research has been surprisingly successful.

Where does the embryo come from?

For a few decades, *in vitro* fertilization (IVF) clinics have helped many couples who were having problems achieving successful pregnancy. Essentially, IVF involves removing several eggs from a woman’s ovary and initially freezing them. At some point, one or more of the eggs are thawed and introduced to sperm in a test tube, in the hopes that fertilization occurs. If successful, the embryo is incubated until a blastocyst is formed. After five or six days, the embryo is then introduced back into the uterus to implant itself in the uterus wall and, ideally, lead to a successful pregnancy. If and when this occurs, several other embryos may still remain in the frozen state. These ‘left over’ embryos have been a target source for embryonic stem cells (see Figure 2).

More recently, the term “cloning” has moved from science fiction to reality. Normally human cells have two sets of chromosomes (twenty-three from the father and twenty-three from the

mother). A human clone is an embryo that has been manipulated such that both sets of chromosomes are from the same—living or deceased—human being, fetus or embryo. In other words, the cell essentially has the same genetic material as its single ‘parent’ cell.

There are different procedures and categories for cloning. Cloning can be accomplished by techniques such as parthenogenesis and embryo splitting and somatic cell nuclear transfer (see Figure 2). From an outcome perspective, reproductive cloning—which is almost universally condemned—involves nurturing a cloned embryo and implanting it in a woman’s uterus in order to produce a cloned human baby. This sounds abhorrent, but several groups of scientists are actively pursuing this goal and several unsubstantiated announcements of successful clone-pregnancies have been made. Alternatively, therapeutic cloning involves the destruction of the cloned blastocyst in order to collect the inner cell mass for stem cell research.

The state of the art today

There is still a significant number of Canadians who feel that destroying embryos for research—whether they are ‘left over’ from IVF clinics, or are therapeutically cloned—is unacceptable because this process ends human life.

What are the actual results of this research? Despite the great furor in the press about the promise of embryonic stem cell (ESC) research, it is surprising to see the comparative progress on the

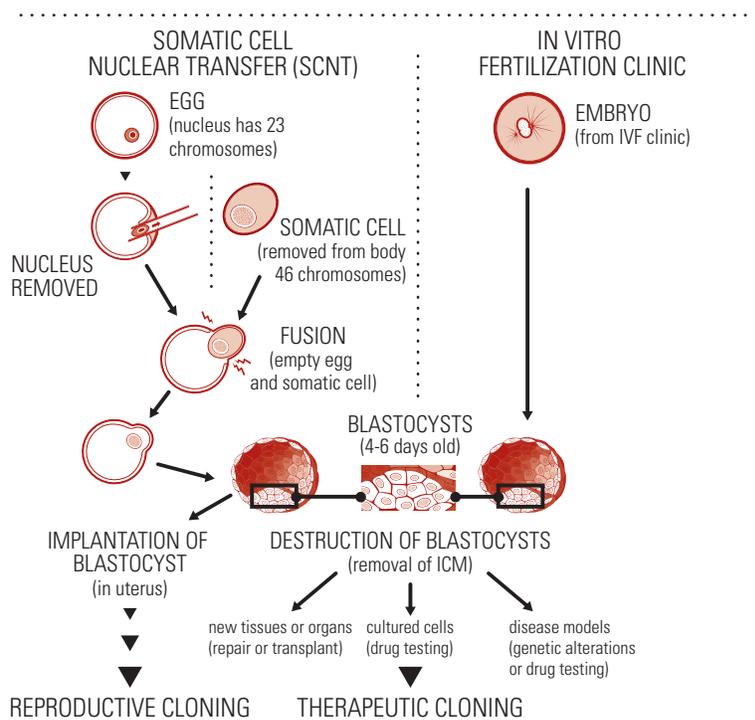


Figure 2 illustrates the somatic cell nuclear transfer (SCNT) method used for cloning an embryo. An egg has its nucleus removed. This nucleus contained the female donor’s genetic material, but since the egg is a reproductive cell, it contains only half of the full genetic complement (or twenty-three chromosomes). A somatic, or body, cell (which contains a full complement of genetic material, e.g. forty-six chromosomes) is removed from a human being, fetus or embryo. Normally a somatic cell—for instance a skin cell—cannot become anything different than what it already is. However, with SCNT, this cell is then fused with the empty egg. The resulting zygote essentially has the same genetic material as the donor and the egg provides an environment to sustain the life of the somatic cell nucleus which can now divide and create a blastocyst and a source for embryonic stem cells.

embryonic and adult stem cell fronts. In the United States, the Bush administration has limited funding for ESC, an event which may have focused more research on adult stem cells. In Canada, several other exciting studies have disproved the belief that adult stem cells have limited potency. For example, in British Columbia, stem cells have been isolated from breast tissue of mice that can regenerate an entire milk-producing mammary gland. Other research in Toronto has, for the first time, demonstrated stem cells in human skin that retained the ability to differentiate into neural, muscle and fat cells. The research shows that adult stem cells from several tissues in humans and/or other animals have properties of pluripotency. Thus, medical potential for adult stem cells seems impressive.

DoNoHarm: The Coalition of Americans for Research Ethics lists documented benefits of stem cell research to human patients. They state that sixty-five different diseases and injuries have been treated successfully with adult stem cells. A downloadable file lists 140 referred scientific publications in journals such as the New England Journal of Medicine and Lancet, that report successful treatments of cancer, autoimmune disease, immunodeficiencies, anemias, wound care and heart damage repair. It is difficult to find similar documented examples of successful treatments derived from embryonic stem cells.

Where do we go from here?

Whether or not embryonic stem cells provide medical advantages, one's own position on embryonic research should be based on a matter of principle: the moral status of the embryo itself. ESC research has been justified on the basis that at four to six days post-fertilization, the blastocyst is merely a clump of cells. Many authorities have set the threshold for human life at fourteen days post-fertilization. This period corresponds to two main events: 1) this is the approximate time when an embryo has completed its implantation in the uterus (it would not survive otherwise), and 2) the primitive streak usually starts to appear, which indicates the genesis of neural material.

Not only are these criteria not exact, there is another event that might be considered. When does the embryo receive its soul and begin its life? It is difficult to choose any time during gestation other than the point of conception itself. Based on this criterion, destruction of a blastocyst, no matter how small it may be, would be considered the ending of human life and therefore unethical.

I have noticed an interesting paradox related to this issue. Some strongly pro-life groups actually condone destructive embryonic research because of the potential medical advances. On the other hand, some pro-choice advocates actually oppose destructive embryonic research because the rights of the mother are not at issue.

When I testified before the Committee on Health in 2001, I found an unexpected ally. Maureen McTeer, a former commissioner on the Royal Commission on New Reproductive Technologies, and also the wife of former Prime Minister Joe Clark, caused a stir in the room when she advocated protection of embryos:

“There is a need to finally begin to recognize that these technologies force us all to rethink, and to do so outside of the context of the abortion debate, because there are two competing interests...in this case, where you deliberately create human life in vitro, you have the opportu-

nity to in fact enlarge law's definitions to provide protection because it is human life...I wanted the principle to be clear: that what is threatening here is the notion of the human body being trivialized, the notion of human being trivialized.”

In North America more than 1.5 million abortions are performed annually. This death rate is fifty per cent higher than the Jewish holocaust of the Second World War, or alternatively be compared to 9/11 occurring every day. There is a new form of abortion infiltrating our medical research system today. If we believe that life begins at conception, then every set of embryonic stem cells harvested equates to an abortion. This is cause for alarm for many and should be an integral part of the debate surrounding stem cell research.

Canada's Bill C-6 prohibits creation of human embryos for research but under some circumstances does allow research on embryos created in IVF clinics for reproductive purposes but are no longer wanted. A study published in 2003 reported that 299 embryos from Canadian IVF clinics had been donated for research, representing two per cent of cryopreserved embryos. A subsequent study addressed whether IVF clinics adhered to Bill C-6 and rules set out by the Canadian Institutes of Health Research. Unfortunately only one of the fourteen IVF clinics responding to the survey, were operating in full accordance of the law. Thus, there is great potential for abuse of the system, and it may only get worse.

In conclusion, several things are clear. Embryonic stem cell research will be conducted throughout the world. Although most work is strictly controlled for medical treatment purposes now, more sinister uses like reproductive cloning and genetic engineering could become more prevalent. It is still worth continuing our own personal and national debate as we may eventually have to make decisions about using treatments derived from embryonic stem cell research. We still have to determine in our own minds at what stage an embryo is worthy of protection. We need to get the correct answer to the first question “Where does it all begin?” Only then will we be able to address the next question, “Where will it all end?”

sources

- Airey, J., Kogler, G., Muchen, M., Sensken, S., Trapp, T., et al. (2004). A new human somatic stem cell from placental cord blood with intrinsic pluripotent differentiation potential. *J Experimental Medicine*, 200, 123-135.
- Bagli, D., McKenzie, I., Miller, F., & Toma, J. (2005). Isolation and characterization of multipotent skin-derived precursors from human skin. *Stem Cells*, 23, 727-737.
- Baylis, F., Beagan, B., Johnston, J., & Ram, N. (2003). Cryopreserved human embryos in Canada and their availability for research. *J Obstetrics and Gynaecology Canada*, 25.
- Baylis, F., & Ram, N. (2005). Eligibility of cryopreserved human embryos for stem cell research in Canada. *J Obstetrics and Gynaecology Canada*, 27, 949-955.
- Canada. Parliament. House of Commons. (2004). Assisted Human Reproduction Act. Bill C-6, 37th Legislature, 3rd Session, 2004. Ottawa: Public Works and Government Services Canada – Publishing.
- Canada. Parliament. House of Commons. Standing Committee on Health. (2001). Evidence regarding legislation governing assisted human reproduction. Ottawa: Public Works and Government Services Canada, November 21, 2001.
- Choi, D., Eaves, C., Eirew, P., Li, H., Ricketson, I., Shackleton, M., Stingl, J., & Vaillant, F. (2006, January). Purification and unique properties of mammary epithelial stem cells. [Electronic version]. *Nature*. Retrieved from <http://www.nature.com/nature/journal/v439/n7079/abs/nature04496.html>
- Cibelli, J., Cunniff, K., Kiessling A., Lanza, R., Richards, C., West, M. (2001) Somatic Cell Nuclear Transfer in Humans: Pronuclear and Early Embryonic Development. *Journal of Regenerative Medicine*, 2, 25-31.
- DoNoHarm. (2005, July). Benefits of stem cells to human patients. [Online]. Retrieved from <http://www.stemcellresearch.org/facts/treatments.htm>.
- Kruse, C., Birth, M., Rohwedel, J., Assmuth K., Goepel, A., Wedel, T. (2004). Pluripotency of adult stem cells derived from human and rat pancreas. *Applied Physics A*, 79, 1617-1624. Retrieved from <http://www.uni-luebeck.de/aktuelles/pressemitteilungen/2004/040528s00339-004-2816-6.pdf>
- Scott, C. (2006). *Stem Cell Now: From the experiment that shook the world to the new politics of life*. New York: Pi Press.
- Zhao, Y., et al. (2003). A human peripheral blood monocyte-derived subset acts as pluripotent stem cells. *Proc Natl Acad Sci USA*, 100, 2426-2431.

CANADIAN MARRIAGE POLICY A TRAGEDY FOR CHILDREN

by SEANA SUGRUE, D.C.L.

IT HAS BECOME FASHIONABLE TO BELIEVE that marriage and children share only an incidental connection. Marriage is, according to many intellectuals and jurists, first and foremost about the companionate and emotional needs of consenting adults.¹ For this reason, it is contended that the rules governing marriage laws ought to be purged of any expectation that children are begotten from adult sexual unions. Moreover, there ought to be no expectation that children ought to be raised by their mother and father within the institution of marriage.

If marriage and children are to become as severable as the “companionate” view of marriage suggests, then it follows that there ought to be no expectation that parental responsibilities flow from adult sexual relations. Children ought not, in any meaningful sense, belong to a mother and a father. A consistent advocate of the companionate view of marriage would hold that children ought to be assigned to the care of guardians, or “legal parents.” The “legal parents” may be the biological mother and father, but only in the event that the parental role is chosen by both of them.

Such is the direction in which Canadian marriage law is heading as it legalizes same-sex marriage. To level the playing field for gays and lesbians so that they can marry legally, mothers and fathers are being replaced, both explicitly and implicitly, by the gender-neutral category of “legal parent.”² In this way, gays and lesbians, it is hoped, will not be discriminated against for not being able to reproduce. It follows from this that procreation should not necessarily determine parenthood. What should matter for the purpose of assigning responsibility for the rearing of children is not biological kinship, but the desire to be a parent.

WHY THE COMPANIONATE VIEW OF MARRIAGE HURTS CHILDREN

There are a number of serious ethical problems with the attempt to eradicate, by law, the significance of a mother and a father to a child, as well as marriage as the institution within which a mother and a father are expected to procreate and rear their children. First, it represents a radical paradigm shift in the focus of marriage from a duty-driven, child-centred institution to one that is to accommodate antinomian hedonism among adults. Even John Locke, that great defender of liberty as the sine qua non of government, recognized that the potential for children renders marriage, or conjugal society, an institution that has at its normative foundation the needs of children. In Locke’s words:

*Conjugal society is made by a voluntary compact between man and woman; and tho’ it consist chiefly in such a communion and right in one another’s bodies as is necessary to its chief end, procreation; yet it draws with it mutual support and assistance, and a communion of interests too, as necessary not only to unite their care and affection, but also necessary to their common off-spring, who have a right to be nourished, and maintained by them, ‘til they are able to provide for themselves.*³

Where duty is subordinate to choice, or where adults are to be parents only to the extent that they choose to be parents rather than because they are mothers and fathers, children are placed at risk

in a number of ways. The ability to choose to be a parent has as its corollary the ability to choose not to be a parent, or to abdicate responsibility where parenthood is not desired. As the state undermines the duty-based and child-focused nature of marriage, it increases the likelihood that marital duties, especially to children, will be abdicated and that adults will place their sexual desires above their responsibilities to their children. Indeed, there is substantial evidence that existing reforms of marriage, especially as these relate to the liberalization of divorce laws, have had precisely this effect⁴ and that the results have been disastrous for children.⁵ It should be noted that it has taken over 30 years for the empirical evidence to be established beyond dispute that divorce is generally harmful for children. At the time that divorce reforms were being passed, it was fashionable among intellectuals to contend that the best interests of adults also serve the best interests of children.⁶ This formerly conventional wisdom has proven to be costly, just as determining parenthood, with the belief that mothers and fathers don’t matter to children, is apt to be.

Second, the attempt to render parenthood a matter of choice, rather than a moral obligation when children are born, encourages the commodification of children. After all, if one chooses to be a parent, then why can’t one also choose the child, or a package of desirable traits?⁷ As marriage becomes companionate, children become not the focus of the family but additions to it that enhance or detract from a chosen lifestyle. Children that “fit” a lifestyle, such as those that are low-maintenance or attractive, will be selected over those who do not. This lesson, however, is one that is apt to be learned by the “chosen” children. It can be anticipated that they, like their parents, will increasingly come to view themselves and others not as intrinsically valuable, but as instrumentally so. Such an approach to familial relations is antithetical to unconditional love and a belief in the intrinsic value of all persons, regardless of their specific traits, which is the very foundation of human equality.

Third, the ethical issue that arises from the attempt to redefine marriage as serving the needs of adults, not children, is that it invites, over time, greater state intrusions into family life. This is necessitated by the fact that the state must increasingly intervene into the realm of the family to determine who owes obligations to whom. Where marriage is the union of one man and one woman who are responsible for the rearing of their begotten children and for one another, the state generally need not intervene to determine to whom children within such unions belong. The state’s role is primarily a supportive one of recognizing what the parents, and society at large, take to be obligatory because of established familial relations. Once it can no longer be assumed that children belong to a mother and a father, where it is possible for children to be claimed by two mothers, or two fathers, or some other combination, then it is imperative for the state to intervene to settle the question of belonging and of responsibility. Such uncertainty and instability is not good for children.⁸ Moreover, even when the state settles the question of legal belonging, the very foundation of the family unit remains a frail one, being entirely a creation of legal convention.

HOW SUPPORTERS OF THE COMPANIONATE VIEW OF MARRIAGE ERR

Marriage reformers defend the contention that marriage and procreation are, and ought to be, only incidentally connected in two ways. First, they argue that marriage and children are severable by pointing to evidence of declining sexual mores. Noting widespread use of contraceptives, ready access to abortion and reproductive technologies that expand reproductive possibilities, marriage reformers contend that it is simply too late in the day to turn back the clock to a time when being a mother or father was not a matter of choice.⁹ With the sexual revolution and the rise of liberal egalitarianism, it is thought to be regressive and oppressive to contend that marriage should entail the union of a man and a woman for the purpose of procreation as well as for their mutual support. Second, supporters of the companionate view of marriage argue that marriage as between a man and a woman unfairly discriminates against other adults, especially gays and lesbians. It is said that marriage entails not only responsibilities, but also a host of tangible and intangible benefits, ranging from financial entitlements to domestic stability.¹⁰ These are denied to adults who cannot marry because of their sexual orientation or lifestyle choices.

Marriage reformers are quite right to argue that marriage has suffered since the advent of the sexual revolution in the late 1960s, but this is no reason to accept a trend that has been harmful for children. Same-sex marriage, like prior marriage reforms, will also harm children by further weakening the normative connection between marriage and procreation. As same-sex couples cannot procreate themselves, if they are to become parents, a mother-child and/or father-child bond must be severed. Hence, the corollary of the expectation that same-sex couples ought to be able to be parents is societal acceptance of biological parents forsaking responsibility toward their children.

Moreover, the argument that marriage is not “only” about procreation, but primarily serves the companionate needs of adults, misconstrues the type of institution that marriage is.¹¹ As a social institution, marriage, like all institutions, is not governed by logic such that it is necessary in all cases for certain conditions to hold true for marriage to exist. What matters is not that procreation is a necessity within marriage but that it is normative to procreate within marriage. For procreation and the rearing of children to be normative within marriage means that: a) most of the time children are being raised by their mother and father who are married to one another; and b) society expects that mothers and fathers ought to raise their own children within marriage.

Same-sex marriage guts the normative underpinnings of marriage for it is founded on the premise that marriage is nothing more than a union of two consenting adults for their mutual betterment. Once this is accepted, marriage no longer serves the interests of children. Without marital norms, adults have little reason to believe that they owe duties to the children they beget. Children become chosen, not begotten. They are thereby treated as appendages to a marriage, as commodities, and as problems for the courts to decide. Antinomian hedonism, not just among

homosexuals, but among all adults, triumphs in the private realm. As children are raised within a culture of narcissism, they are not apt to find happiness but a pervasive sense of anomie.¹³

To this argument, supporters of the companionate view of marriage counter that there are weighty ethical reasons for supporting same-sex marriage. First among these is that marriage as between a man and a woman is unfairly discriminatory. By excluding certain adults from the institution of marriage, the state treats them as second-class citizens and thereby damages their sense of dignity and personhood. Equality before the law and the demands of personal autonomy require, according to supporters of companionate marriage, that the institution of marriage include all adults.¹⁴

...(CHILDREN) WILL INCREASINGLY
COME TO VIEW THEMSELVES AND
OTHERS NOT AS INTRINSICALLY
VALUABLE, BUT INSTRUMENTALLY SO.

This argument assumes that the institution of marriage exists primarily to serve the emotional and financial needs of adults, which it does not, at least not where marriage is limited to one man and one woman. The argument that traditional marriage is discriminatory begs

the question of whether marriage ought to be simply companionate, or whether it makes sense to preserve child-centred marriage norms. If the best interest of children is the standard by which marriage reforms are to be assessed, same-sex marriage cannot be justified.

The reason for this is that marriage between a man and a woman, who are expected to rear their begotten children, is the most successful institution for the rearing of children who thrive.¹⁵ There is little to no empirical evidence as to how children fare in same-sex homes.¹⁶ Even presuming, as the Ontario Court of Appeals mandates,¹⁷ that same-sex couples are capable of making fine “legal parents,” it remains hard to believe that this social experiment with the lives of children will end well for the simple reason that the child-centred norms of traditional marriage are destroyed by the companionate view of marriage that is invoked to justify same-sex marriage. Children are being subjected to a

CHILDREN ARE BEING SUBJECTED
TO A BOLD SOCIAL EXPERIMENT.

bold social experiment. In this, all children have to rely upon is the good will of those in whose custody they are placed. Good will falters even among the best of people, and

when it does, companionate marriage provides little incentive for couples, and especially for men, to remain committed to rearing their children.¹⁸ Companionate marriage is inherently unstable as it is tied solely to variable human emotion. Instability of this sort is bad for children.

As the companionate view of marriage triumphs in Canadian marriage policy, the result is an increased risk for children. It is children who are being unfairly discriminated against by marriage reforms, including same-sex marriage. As gays and lesbians claim victory, children are being deprived of the one institution in which it is known that they are most apt to thrive: that is a marriage between a child’s mother and father. Children, the most vulnerable of all members of Canadian society, are those who are placed at greatest risk by the companionate view of marriage. In a society that values equality for all, it is a travesty of justice that the least among us will continue to suffer the most.

endnotes

- 1 "Marriage, from the point of view of the secular state authority," opined the Law Commission of Canada, "is a means of facilitating in an orderly fashion the voluntary assumption of mutual rights and obligations by adults committed to each other's well-being." See Law Commission of Canada. (2001). The Legal Organization of Personal Relationships [Electronic version]. *Beyond Conjugality: Recognizing and Supporting Close Personal Relationships*. Retrieved from http://www.lcc.gc.ca/about/conjugality_toc-en.asp.
- 2 The explicit change in the parent-child relationship is found in the "consequential amendments" portion of *Bill C-38* s. 10-12, passed on July 29, 2005. It makes "legal parent" status relevant under the *Income Tax Act* for child support payment purposes. The new law also implicitly changes the parent-child relationship by its very definition of marriage, which is simply "the lawful union of two persons to the exclusion of all others."
- 3 Locke, J. (1980). *Second Treatise of Government*. Indianapolis and Cambridge: Hackett Publishing Co.
- 4 Stetson, D.M., & Wright, Jr., Gerald C. (1975). The Effects of Divorce in American States. *Journal of Marriage and the Family*, 37, 537-545. Nakonezny, P.A., & Shull, R.D. The Effects of No-Fault Divorce Law on the Divorce Rate Across the 50 States and Its Relation to Income, Education and Religiosity. (1995). *Journal of Marriage and the Family*, 57, 477-488. Friedberg, L. (1998). Did Unilateral Divorce Raise Divorce Rates? Evidence From Panel Data. *American Economic Review*, 88, 608-627 at 620. Abernathy, Jr., Thomas J., & Arcus, M.E. (1977). The Law and Divorce in Canada. *The Family Coordinator*, 26, 409-413. For a contrary view, see Peters, H.E. (1986). Marriage and Divorce: Informational Constraints and Private Contracting. *The American Economic Association*, 76, p. 454.
- 5 Studies have consistently shown that children of divorced parents are disadvantaged compared to children raised by their mother and father. See generally, Cherlin, A.J., & Furstenberg, Jr., F.F. (1991). *Divided Families: What Happens to Children When Parents Part*. London: Harvard University Press; Amato, P.R. (1993). Children's Adjustment to Divorce: Theories, Hypotheses, and Empirical Support. *Journal of Marriage and the Family*, 55, 23-38. McLanahan, S.S., & Sandefur, G. (1994). *Growing Up with a Single Parent: What Hurts, What Helps*. London: Harvard University Press. See also infra note 8.
- 6 Nye, F. I. (1957). Child Adjustment in Broken and in Unhappy Unbroken Homes. *Marriage and Family Living*, 19, 356-371. Landis, J.T. (1962). A Comparison of Children from Divorced and Nondivorced Unhappy Marriages. *The Family Coordinator*, 11, 61-65. Goode, W.J. (1956). *Women in Divorce*. New York: The Free Press.
- 7 Kass, L., & Wilson, J.Q. (1998). The Wisdom of Repugnance. *Ethics of Human Cloning*. Landham: AEI Press.
- 8 Similar instability exists for children when divorce occurs, requiring the state to intervene and determine to whom children belong. As with same-sex parenting, divorce creates a situation in which two or more adults claim legal rights over children, potentially to the exclusion of others. As with same-sex parenting, divorce undermines one of the constitutive norms of the institution of marriage. The evidence that divorce is harmful to children is abundant. See Blakeslee, S., Lewis, J.M., & Wallerstein, J.S. (2001). *The Unexpected Legacy of Divorce: A 25 Year Landmark Study*. New York: Hyperion. Whitehead, B.D. *The Divorce Culture*. (1917). New York: Alfred A. Knopf. Wilson, J.Q. (2002). *The Marriage Problem: How Our Culture Has Weakened Families*. New York: Harper Collins. Children of divorced families experience depression and a deep desire for the absent parent. See Kelly, J.B., & Wallerstein, J. (1996). *Surviving the Breakup: How Children and Parents Cope with Divorce*. New York: Basic Books. Moreover, children of divorce experience depression and related emotional problems into adulthood as well. Landsdale, C., Lindsay, P., Cherlin, A.J., & McRa, C. (1998). Effects of Parental Divorce on Mental Health Throughout the Life Course. *American Sociological Review*, 63, 239-249. In boys, family instability due to divorce is correlated with a decrease in academic scores, an increase in antisocial behaviour and an increase in depression. Forgatch, M.S., & Martinez Jr., Charles R. (2002). Adjusting to Change: Linking Family Structure Transitions with Parenting and Boys' Adjustment. *Journal of Family Psychology*, 16, 107-117. In girls, parental divorce substantially increases the likelihood of having a child raised out of wedlock. Teachman, J.D. (2004). The Childhood Living Arrangements of Children and the Characteristics of their Marriages. *Journal of Family Issues*, 25, 86-111. Children of both sexes who have experienced parental divorce are more apt to have sexual intercourse during their teen years. Hobcraft, J., & Kernan, K.E. (1997). Parental Divorce During Childhood: Age at First Intercourse, Partnership and Parenthood. *Populations Studies*, 51, 41-55. For a valuable resource offering summaries of empirical studies on marriage and family matters, see Maher, B. (Ed.) (2004). *The Family Portrait*. Washington, D.C.: Family Research Council. The extent in which conclusions are drawn as to how same-sex marriage will affect children, many researchers consider the most appropriate comparison group to be children of heterosexual divorced parents, given that many children raised by gay or lesbian parents have undergone the divorce of their parents. See Parke, M. (2003). Are Married Parents Really Better for Children? What Research Says About the Effects of Family Structure on Child Well-Being. *Center for Law and Social Policy* Brief No. 3, 6, cited in Gallagher, M. (2006). (How) Does Marriage Protect Child Well-Being? In George, R.P. and Elshain, J.B. (Eds.). *The Meaning of Marriage: Family, State, Market, & Morals*. Dallas: Spence. This suggests that how children fare in stepfamilies is also highly relevant. For evidence that children do not thrive as well in these alternative family structures, see infra, note 14. The limitations of existing social scientific studies that draw conclusions as to how children fare when raised by same-sex couples are canvassed in sources cited infra, note 15.
- 9 See Halpern v. Canada (A.G.), 2003 CanLII 26403 (ON C.A.) [hereinafter "Halpern"] at s. [122]: "As previously stated, same-sex couples can have children by other means, such as adoption, surrogacy and donor insemination. A law that aims to encourage only 'natural' procreation ignores the fact that same-sex couples are capable of having children."
- 10 See Eskeridge, Jr., W. (1996). *The Case for Same-Sex Marriage: From Sexual Liberty to Civilized Commitment*. Free Press. See also Sullivan, A. (1989, August). *Here Comes the Groom: A Conservative Case for Gay Marriage*. The New Republic, [Electronic version]. Retrieved from <http://www.tnr.com/arch/search.mhtml>.
- 11 Halpern, supra, s. 94: "Importantly, no one...is suggesting that procreation and childrearing are the only purposes of marriage, or the only reasons why couples choose to marry. Intimacy, companionship, societal recognition, economic benefits, the blending of two families, to name a few, are other reasons that couples choose to marry."
- 12 These conditions correspond to Hart's 'external' and 'internal' points of view about the normativity of law. Hart, H.L.A. (1961). *The Concept of Law*. Oxford: Oxford University Press. "At any given moment the life of any society which lives by rules, legal or not, is likely to consist in a tension between those who, on the one hand, accept and voluntarily co-operate in maintaining the rules, and so see their own and other persons' behaviour in terms of the rules, and those, who, on the other hand, reject the rules and attend to them only from the external point of view as a sign of possible punishment." See also Maier, B., & Stanton, G.T. (2004). *Marriage on Trial: The Case Against Same-Sex Marriage and Parenting*. Downers Grove: Intervarsity Press.
- 13 See Lasch, C. (1991). *Culture of Narcissism: American Lie in an Age of Diminishing Expectations*. New York: W.W. Norton.
- 14 See *Law v. Canada* (Minister of Employment and Immigration), (1999) 1 s.c.r. 497 at 530, In Halpern: "Human dignity means that an individual or group feels self-respect and self-worth. It is concerned with physical and psychological integrity and empowerment. Human dignity is harmed by unfair treatment premised upon personal traits or circumstances which do not relate to individual needs, capacities, or merits."
- 15 This conclusion has been most eloquently and forcefully made by Gallagher, M. (How) Does Marriage Protect Child Well-Being? In R.P. George and J.B. Elshain, (Eds.). *The Meaning of Marriage: Family, State, Market, & Morals City?: Spence.* "In the last thirty years, thousands of studies evaluating the consequences of marriage for children and society have been conducted in various disciplines...In virtually every way that social scientists know how to measure, children do better, on average, when their parents get and stay married (provided those marriages are not high-conflict or violent). By contrast, every major social pathology that can trouble an American child happens more often when his or her parents are not joined by marriage: more poverty, dependency, child abuse, domestic violence, substance abuse, suicide, depression, mental illness, infant mortality, physical illness, education failure, high school dropouts, sexually transmitted diseases, and early unwed childbearing (and later) divorce." Among the well-known sources Dr. Gallagher cites are: Amato, P., & Booth, A. (1997). *A Generation At Risk: Growing Up in an Era of Family Upheaval*. London, Harvard University Press. Gallagher, M., & Waite, L.J. (2000). *The Case for Marriage: Why Married People are Happier, Healthier and Better-Off Financially*. New York: Doubleday. McLanahan, S., & Sandefur, G. (1994). *Growing Up with a Single Parent: What Hurts, What Helps*. London: Harvard University Press. Doherty, W.J. et al. (2002). *Why Marriage Matters: Twenty-One Conclusions from the Social Sciences*. New York: Institute for American Values (Is this the publisher?). Among the conclusions social scientists have reached regarding concrete ways children thrive in marriages between their biological parents are as follows: Children raised with their married biological parents spend more time with their fathers, and receive more affection and warmth from them, than do those living with a cohabiting father figure or a stepfather. Anderson, K.G., & Hofferth, S.L. (2003). Are All Dads Equal? Biology Versus Marriage as a Basis for Parental Investment. *Journal of Marriage and Family*, 65, 213-232. Adolescents living with their biological parents are the least likely to use illicit drugs. Johnson, R.A., & Hoffmann, J.P. (1998). A National Portrait of Family Structure and Adolescent Drug Use. *Journal of Marriage and the Family*, 60, 633-645. Adolescents living with their married biological parents are less likely to engage in delinquent behaviour than are their peers in stepfamilies. Lamb, K.A., & Manning, W.D. (2003). Adolescent Well-Being in Cohabiting, Married, and Single-Parent Families. *Journal of Marriage and Family*, 65, 876-893. Children living in stepfamilies are at higher risk of physical abuse than those living with their biological parents. Giles-Sims, J. (1997). Current Knowledge About Child Abuse in Stepfamilies. *Marriage and Family Review*, 25, 215-229. Studies on the effects of same-sex marriage suffer from a number of flaws, including a lack of longitudinal studies, a lack of representative sampling and control groups and prejudice on the merits. See Biblarz, T.J., & Stacey, J. (2001). Does the Sexual Orientation of Parents Matter? *American Sociological Review*, 66, 159-183. See George, R.P. and Elshain, J.B. (Eds.). *The Meaning of Marriage* (Spence, 2006), 200-203. For evidence that children do not tend to thrive well in alternative family structures, see supra, notes 8 and 15.
- 17 Halpern, supra, s. 123.
- 18 With the companionate view of marriage, society has witnessed a proliferation of out of wedlock births, divorces and alternative relationships, with these, the problem of absentee parents, especially absentee fathers. Births to unmarried mothers are at a record high in Canada and the United States. In Canada, 28 per cent of births were out of wedlock in 2002; this compares to 13 per cent in 1980. In the United States, the rate of out of wedlock births has increased from 18 per cent in 1980 to 34 per cent in 2002. See Eberstadt, N., & Torrey, B.B. (2005, August/September). The North American Fertility Divide. *Policy Review* 132. [Electronic version]. Retrieved from <http://www.policyreview.org/aug05/torrey.html>. Based on current divorce trends, 40-50 per cent of marriages today are likely to end in separation or divorce in the United States. National Marriage Project (2003). *The State of Our Unions 2003: The Social Health of Marriage in America* (5th ed.). Piscataway: Rutgers University. In Canada, the marriage rate is only 60 per cent of the American marriage rate as Canadians tend to enter common law relationships in greater numbers, marry later in life and divorce less frequently. See Torrey and Eberstadt, 4-5. In both countries, the number of children living in single-parent families has more than doubled since the 1960s and more than 80 per cent of children in single-parent families live with their mother. See U.S. Bureau of the Census. (2003). Table CH-1. *Living Arrangements of Children Under 18 Years Old: 1960 to Present*. Washington, D.C.: Printing Office. Also found in Maher, B. (Ed.). (2004). *The Family Portrait*. Washington, D.C.: Family Research Council; Statistics Canada. (1992). *Lone Parent Families in Canada* (Collin, L.). Ottawa: Government of Canada. The consequences to children of being raised without a father are only currently being researched, but the evidence substantiates the conclusion that the results are harmful to children. See generally, Blankenhorn, D. (1996). *Fatherless America: Confronting Our Most Urgent Social Problem*. London: Harper Perennial. Popenoe, D. (1996). *Life Without Father*. New York: U.S. Dept of Health and Human Services (2004). The Importance of Fatherhood for the Healthy Development of Children. *Child Abuse and Neglect User Manual Series*. Washington, D.C.: Wilcox, W.B.; Haglund, B., Hjern, A., Rosen M., & Weitof, G.R. (2003). Mortality, Severe Morbidity, and Injury in Children Living with Single Parents in Sweden: A Population-Based Study. *The Lancet*, 361, 289-295. Kurtz, Stanley. (2004). The End of Marriage in Scandinavia. *The Weekly Standard*, 9(20); Wilcox, W.B. (2005). Who's Your Daddy? There's More to Fatherhood than Donating DNA. *The Weekly Standard*, 11(13).

AND THEN THERE WERE NONE

by Derek Rogusky

ONE OF THE GREATEST SERVICES *families provide to society is the bearing and rearing of children. In doing so, Canadian parents provide the next generation of producers, investors, consumers, volunteers and taxpayers. However, for several years the birth rate in Canada has remained well below replacement levels. And as many parts of Europe have discovered, serious economic and social challenges follow when countries fail to replace themselves.*

There is growing recognition of the problem, but unfortunately little is being done. Just as the issue has society-wide impact, it will take a society-wide commitment to address it. One area worth examining is the impact tax policy has on families. A quick review of comments on family tax policy reveals three key issues in need of attention:

1. There is insufficient recognition of the financial costs that families with children bear;
2. Single-income families can face more than double the federal tax bill that similar double-income families face; and,
3. Some lower income families are forced to deal with obscene marginal tax rates.

Together, these issues result in a tax policy that penalizes families with children at a time when discouraging child rearing is one of the worst policy moves Canada could make.

RECOGNIZING THE COST OF RAISING CHILDREN

For nearly every Canadian parent, their children are a great source of pride and joy. Some even say children are a gift from God. Children may be a gift, but raising the next generation is still expensive. One study pegged the basic costs of raising a child from birth to the end of the eighteenth year to be in excess of eight thousand dollars per year.¹ And that does not include college or university tuition. However, for many families, Canada's tax policy fails to recognize the full extent of these costs.

Some will claim that families with similar income should pay similar taxes regardless of whether they have children or not. However, there are valid reasons why Canadian tax policy should recognize the financial impact of children on families.

Spending on children is non-discretionary. Once you have children there are some expenses that are absolutely essential. There are basic needs (clothing, food, shelter, etc.) that

simply cannot be avoided. There is certainly a difference between designer sneakers and a basic pair of shoes, but there is a minimum level of expenses that parents must cover. In fact, a parent who fails to provide these basic needs can face severe legal consequences.

It is also true that parents generally control the decision to have children (although the exact timing of childbirth is harder to control). However, children are very different than consumer goods. They are not objects; rather, they are human beings with necessary and essential living expenses. Yet, as Canadian economist Jonathan Kesselman pointed out in 1993, "...the costs of raising children are [treated, as if they are] simply consumer outlays like the childless family's choice to purchase a fancy boat."²

A 2001 Status of Women Canada study stated:

The principle of horizontal equity would seem to demand that taxpayers responsible for dependent children should be treated differently than families without dependent children for tax purposes. Despite this, there has been no universal recognition of the effects of children on ability to pay in Canada since 1992. At that time, an income-tested benefit replaced the child tax credits and the Family Allowance formerly available to all Canadians. Canada became only one of two Organization for Economic Co-operation and Development (OECD) countries to have a tax system which fails to recognize the effect of children on their parents' ability to pay.³

To achieve horizontal equity there must be some recognition of these non-discretionary expenses that all families with children face.

Raising children is a public good. Successfully bringing up children provides a benefit that goes beyond them and the other family members. If Canadian parents collectively raise

their children into a productive, energetic and respectful generation of producers, investors, consumers and volunteers, all of society benefits immensely, whether they have children or not. Whereas, if Canadian families collectively maintained their “fancy boats” in mint condition, the benefit to all of society would be minimal. In other words, Canadian parents as a whole provide a free service to the rest of Canadians.

With a dramatically aging population, that service is now more important than ever. Yet, one of the top reasons parents give for putting off having children are financial challenges.⁴ Recognizing the non-discretionary expenses associated with child rearing and the public good parenting serves, may raise fertility rates.

THE SINGLE-INCOME PENALTY

Canada’s tax system penalizes single-income families when compared to double-income families. In 2006, a typical double-income family of four, earning \$40,000, paid about \$783 in federal income taxes. Meanwhile, a typical single-income family of four also earning \$40,000 could expect to pay \$2,950.⁵ That is more than double the level of taxation the double-income earner family faces.

2007 FEDERAL INCOME TAX AMOUNTS

TOTAL INCOME	ONE-INCOME FAMILY OF FOUR	TWO-INCOME FAMILY OF FOUR	DIFFERENCE
\$30,000	\$(900)	\$(301)	\$1,201
\$40,000	\$2,950	\$783	\$2,167
\$60,000	\$7,646	\$3,928	\$3,718
\$75,000	\$10,968	\$6,636	\$4,332

This difference results primarily from the progressive nature of Canada’s income tax system and the Child Care Expense Deduction (of which double-income families are more likely to make use). Under Canada’s approach to income tax, individuals with higher income not only pay more taxes, they also pay a higher rate of tax. Thus, a double-income family with one individual making \$30,000 and the other making twenty thousand dollars ends up paying less tax than a single-income family of four with one individual making fifty thousand dollars. Both families face similar financial demands, yet the single-income family pays over twice the amount in taxes. Although the new \$1,200 per year Universal Child Care Benefit recognizes the contribution of all parents, the inequity in taxes still remains.

Given that a stay-at-home parent is often kept very busy, it could be argued that when one family member chooses to stay at home, that family receives a benefit in services (such as handling family finances, household cleaning, preparing meals, etc.), tax free. However, with the exception of possibly the highest income families, it is rare that a similar double-income family is purchasing these household services in a significantly greater quantity and thereby paying taxes on

the same services. The exception, of course, is child care and work-related expenses. As was already mentioned, child care costs are covered by the CCED. The question must be asked if those additional expenses justify double the tax bill.

Beyond the simple issue of fairness, it is important to note that families with a stay-at-home parent tend to have more children. If a low fertility rate is a challenge for economic and social policy, does it make sense to penalize single-income families?

CANADA’S REGRESSIVE TAXATION SYSTEM?

As a result of the claw back provisions in the Canada Child Tax Benefit (CCTB), some lower income families are hit with the highest marginal tax rates in Canada. The marginal tax rate is the amount of tax on the next dollar an individual earns. Economists are generally more concerned with marginal than average tax rates because the decision to work more is impacted by how much of that new money a worker actually gets to keep.

Since the various programs that make up the CCTB are income-tested, as a family’s income increases they become eligible for a smaller portion of the CCTB. This means that every extra dollar a family earns, through a raise or overtime, is offset to some extent by a reduction in the benefit they receive. Combine that with progressive tax rates as income increases and according to reports, some lower income families experience marginal tax rates as high as 70 per cent.⁶ Although recent measures to lower overall tax rates have reduced this marginal rate, lower income families can still face some of the highest marginal tax rates in Canada. Keeping only thirty or forty cents of each new dollar earned is discouraging for working families that are trying to get ahead for the sake of their children.

Reducing the high marginal tax rates faced by lower income families will go a long way in developing a family-friendly tax policy. So will eliminating the differences in taxes paid by single-income families compared to those with two incomes and recognizing the non-discretionary costs that families with children face. With an ageing population, a shrinking domestic labour market and growing global competition for immigrants, it is simply good policy, at the very least, reduce the financial burdens that discourage families from having children.

endnotes

- 1 Manitoba. Manitoba Agriculture and Food. (2002). *Family Finance: The Cost of Raising a Child: 2002*. Retrieved August 27, 2003 from <http://www.gov.mb.ca/agriculture/homeec/cba28so2.html>.
- 2 Kesselman, J.R. (1993). The Child Tax Benefit: Simple, Fair, Responsive? *Canadian Public Policy*, 19(2), 109-132.
- 3 Canada Status of Women. (2001, March). *Mothers as Earners, Mothers as Carers: Responsibility for Children, Social Policy, and the Tax System*. Freiler, C., Kitchen, B., & Stairs, F., with Cerny, J. Ottawa: Ministry of Canadian Heritage and Status of Women and Government Services Canada, p. 36.
- 4 The Strategic Counsel. (2002). *Canadian Attitudes on the Family: A Focus on the Family Canada National Survey Conducted by The Strategic Counsel, 2002* Langley: Focus on the Family Canada. p. 20.
- 5 Canada. Department of Finance, Budget 2006. (2006). *2006 Tax Savings Calculator*. Retrieved May 17, 2006 from http://www.fin.gc.ca/budget06/mm/flash_e.html.
- 6 Poscmann, F., & Richards, J. (2000). How to Lower Taxes and Improve Social Policy: A Case of Eating your Cake and Having it Too. *Commentary*, 336, p. 7.

• REVIEWS

ROOTS OF EMPATHY: CHANGING THE WORLD CHILD BY CHILD

GORDON, MARY. (2005). MARKHAM, THOMAS-ALLEN & SONS, LTD.

REVIEWED BY KELLY DEAN SCHWARTZ, PH.D

Roots of Empathy recounts the inspiring journey of one woman's passion to improve the moral, social and psychological well-being of children by a simple yet creative strategy: a child's relationship with a helpless, dependent infant. Author Mary Gordon turned a pilot project with two inner city Toronto classrooms into a national program reaching almost 65,000 kindergarten through grade eight children across Canada. Uniquely positioned against many programs that focus solely on remediating children's deficits, the program fosters emotional literacy in children to build more respectful and caring relationships, to reduce bullying and aggression, and to pass on a legacy of empathy to future generations.

Reading the descriptions of the Roots of Empathy program often echoes the narratives recorded by John Bowlby in his early research on parent-child attachment relationships. By involving children in the unfolding story of this most important of all human relationships, the program engages them in a world of social and emotional learning that examines the development of a human being on a green blanket stretched out across the classroom floor. Gordon devotes a good portion of the book to describing the "six strands of human connection," including love, temperament, attachment, emotional literacy, authentic communication and social inclusion. Each area is covered with a breadth and depth that leaves even the most critical reader convinced of its integrity and validity to the program.

As both a teacher and a parent, one of the most inspiring parts

of the book was a brief overview of the research being completed on the Roots of Empathy program by researchers at the University of British Columbia. Parenting materials and teaching curriculum are in abundance, but few devote the time and resources needed for rigorous empirical investigation to support the validity of their strategies. Preliminary results indicate that children who had experienced the Roots of Empathy program, compared to those who had not, were more advanced in their emotional and social understanding on almost all dimensions measured (i.e. proactive, reactive and relational aggression). This is good news for practitioners and educators who want to examine proven outcomes before devoting time and energy to such an initiative.

Through the eyes of children, the reader sees how a simple program using a baby and a parent operationalize the theories that developmental scientists tell us are the key to raising caring, competent adults. Boldly stating that the skills that children learn in the program will not only help them with relationships today, Gordon imagines that such learning will affect the quality of parenting expected of them in the next generation as well. While somewhat utopian in such grand desires, one cannot help but applaud the proactive and preventative contribution to the healthy development of thousands of Canadian children. This is a book and program certainly worthy of our attention and support as it finds its place in our children's classroom. 📖

THE GOLDEN CELL: GENE THERAPY, STEM CELLS, AND THE QUEST FOR THE NEXT GREAT MEDICAL BREAKTHROUGH

VAN KAMPEN, KAREN. (2005). TORONTO, HARPERCOLLINS PUBLISHERS LTD.

REVIEWED BY IMFC STAFF

"Regenerative medicine holds the power and promise of unlocking what is within all of us – life."

With these words, Karen van Kampen concludes her book *The Golden Cell* with the optimism that permeates the entire work. Using stories from the lives of the movers and shakers in regenerative medicine, van Kampen opens up a whole new world to those who would not normally venture into an analysis of this rather intimidating science.

The Golden Cell brings a realization to the reader that whether we are comfortable with it or not, technology has ushered in new potential for changing the very biological essence that shapes our lives. From a Canadian perspective, van Kampen successfully illustrates how the international scope of these technologies demands that policy makers must be aware of them, whether they approve of them or not. With the passing of the *Assisted Reproduction Act* in 2004, Canada has demonstrated that it is no exception to the rule.

For those who want to get a firm grasp on the issues surrounding regenerative medicine; including the development of stem cell research, the monumental achievement of mapping the human genome and the competitive battle to commercialize, patent and profit from biotechnology, this book is a worthy read. Each chapter's

theme is supplemented with stories about the scientists who had their hearts set on understanding the intricacies of the human cell and its potential for healing. Although these stories supply a wealth of information, the sheer number of stories and the broad scope of issues that comprise regenerative medicine will likely leave the reader overwhelmed.

A constant theme written between the lines of the book is the human drive, almost a frenzy, to master the biological essence of humanity. Although the book does discuss some ethical issues that arise when doing research with this controversial science (such as obtaining genetic information from people who do not realize the potential of this technology), the ethics of the technology itself (such as the philosophical and religious implications of 'playing God') is given little consideration. It would be understandable to leave the philosophy and morality aside if the scope of the book was strictly an objective account about reproductive technology and regenerative medicine. However, the entire book is laced with a utilitarian optimism about the potential life-saving results of this research, and no where does van Kampen adequately question whether science should consider this an ethical option. If she had, I suspect *The Golden Cell* would lose a little of its glimmer. 📖

BETWEEN TWO WORLDS

MARQUARDT, ELIZABETH. (2005). NEW YORK, CROWN PUBLISHING GROUP, A DIVISION OF RANDOM HOUSE INC.

REVIEWED BY IMFC STAFF

In her new book, *Between Two Worlds*, Elizabeth Marquardt has opened a new door to the effects of divorce on children. A child of divorce herself, she allows us to better understand the difficulties that she and other children have experienced by living through a family split. After interviewing adult children of divorced parents, she found that the socially accepted term “a good divorce” loses its validity in all but the most extenuating circumstances – that there are always consequences and effects of divorce.

Although Marquardt’s research was completed in the United States, the social parallel of divorce is mirrored in Canada. Millions of children across North America face personal battles and dilemmas that are rarely considered when parents are divorcing. The belief that children are resilient and will respond better when the disagreeing parents are separated has been disproved. In case after case, and in different scenarios, children of divorce suffer more deeply and experience more emotional battles than children of intact families. The only exception to this are divorces resulting from extreme circumstances, usually involving violence.

The dilemma through all of this is that “children are voice-

less.” Although they have been suffering they have not been able to articulate their needs. Marquardt has identified this problem and presented the challenge to social science researchers to better understand what effects the liberalization of divorce have had on many Canadian children and how society can best address these problems.

Marquardt speaks to a number of themes throughout her discourse, including her experience growing up in a broken home and how divorce forces children to be emotionally mature beyond their years. More importantly, she tackles the sometimes thornier topics of moral development, learned secrets and the “strong connection between children of divorce and belief in God.”

Without a doubt, *Between Two Worlds* will trigger a new round of social science research, re-examining the effect and repercussions of divorce. Perhaps it will cause marriage counsellors and parents alike to reconsider the long-term consequences of their decisions and the subsequent effects on their children. This book will interest children of divorce as well as their parents, as they grasp for a deeper understanding of the effect of divorce on their family. 📖

WHY GENDER MATTERS

SAX, LEONARD. (2005). DOUBLEDAY, A DIVISION OF RANDOM HOUSE, INC.

REVIEWED BY WILLIAM MORRISON, PH.D

In his new book *Why Gender Matters*, physician and researcher Leonard Sax attempts to bridge the gap between science and applied knowledge/practice on sex differences in children and youth. He begins his book with two case studies that depict school and home challenges in which gender differences initially go unrecognized. This results in misunderstandings and the adoption of inappropriate approaches. One of these involves the familiar example of a soft-spoken teacher with a young male student in an early elementary classroom who sits at the back of the room and displays difficulty following verbal directions. For many, the first notion is to suggest a diagnosis of potential Attention Deficit Disorder. Yet Sax draws readers’ attention to evidence that differences in how boys and girls hear may account for this situation.

The author’s central premise for this book is that both educators and parents often have inadequate understanding of gender differences. Sax takes issue with recent publications reinforcing the belief that effective child-raising practices should be gender-neutral. Similarly, he underscores the fact that many books advocating gender-specific approaches reinforce such stereotypes as, “Girls are more emotional than boys,” or, “Boys have a brain-based advantage when it comes to learning math.” His main criticism of such publications is that they do not contain evidence-based content or assumptions. Early in his book he commits to the reader to provide only insights that are grounded in scientific evidence presented in peer reviewed journals.

Sax’s approach to writing is both direct and personal. In some chapters he addresses the reader as a parent or guardian. In other instances, he speaks to the reader as an educator. In his discussion of

gender differences, he tackles a range of pressing issues facing families and schools today, including risk-taking behaviours, discipline, sexuality, problems with substance abuse and aggression. His frank discussion of issues sometimes contains depictions and language that some readers may not find appropriate. It should be noted by the reader that his discussion of issues related to gender differences and his interpretation of gender-based evidence does not necessarily reflect a particular political or religious affiliation.

Throughout his book, and more specifically in the final chapter, Sax provides positive support and compelling arguments for single-sex schools and single-sex activities. In this regard, he states that “co-ed schools tend to reinforce gender stereotypes, whereas single-sex schools can break down differences.” This sweeping statement casts all schools into one of two camps, while significant variations in educational philosophy and approach exist both across and within co-ed and single-sex schools in North America. Although this book provides a synthesis of current knowledge and is committed to evidence-based practices, the final conclusions lack sufficient breadth to support, without a doubt, a single option for education. In spite of this area of noted personal advocacy, Sax does achieve a degree of success in bringing current knowledge together with the intent of challenging existing biases and practices related to gender issues in parenting and education.

Overall, this book seeks to enhance the reader’s understanding and sensitivity in working with children and youth. Ideally, it will provoke discussion and provide a basis from which to reflect on current practices in the home and school contexts. 📖

• CLOSING WORDS

"...I will neither prescribe nor administer a lethal dose of medicine to my patient even if asked, nor counsel any such thing, nor perform act or omission with direct intent deliberately to end a human life. I will maintain the utmost respect for every human life from fertilization to natural death and reject abortion that deliberately takes a unique human life..."

• HIPPOCRATIC OATH

UPCOMING EVENTS

WWW.IMFCANADA.ORG

FALL 2006

The Role of Palliative Care in the Euthanasia Debate

Join palliative care physician, Dr. Margaret Cottle for a presentation and discussion on the advances in palliative care. Her research, teaching and personal insight add a rich, positive perspective to the euthanasia debate and the ethical and moral questions that go with it.

One of her most recent interviews is included in this issue of the IMFC Review.

For further details visit imfcanada.org.

**HAVE A SEAT.
FRONT AND CENTRE.**

reserved
MARRIAGE

reserved
FAMILY

imfcanada.org