

CHILDREN'S HUMAN RIGHTS TO NATURAL BIOLOGICAL ORIGINS AND FAMILY STRUCTURE

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ABSTRACT

Over the millennia of human history, the idea that children—at least those born into a marriage—had rights with respect to their biological parents was taken for granted and reflected in law and public policy. But with same-sex marriage, which gives same-sex spouses the right to found a family, that is no longer the case.

Likewise, children's rights with respect to their biological origins were not an issue when there was no technoscience that could be used to manipulate or change those origins: a baby could only be conceived in vivo through sexual reproduction. But with assisted human reproductive technologies (ARTs) and genetic technologies, that, too, is no longer the case.

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So, in light of these new realities, what are our obligations, as societies, to children with respect to their biological origins and biological families? What protections do children need and deserve?

I propose that the most fundamental human right of all is a child's right to be born from natural human biological origins and that children also have human rights with respect to knowing who their biological parents and families are, and that these rights must be recognized. Children also have a right to be reared within their biological families and to have a mother and a father, unless an exception can be justified as being in the 'best interests' of a particular child.

The connection among adoption, the use of new reproductive technologies, and same-sex marriage is that they all unlink child-parent biological bonds. Each context raises one or more of three important issues: children's right to know the identities of their biological parents; children's right to both a mother and a father, preferably their own biological parents; and children's right to come into being with genetic origins that have not been tampered with; that is, 'designing' our children should be prohibited.

Such 'designing' would result in losses with implications far beyond those persons directly affected and far beyond the present time. It would undermine the rights to equality and freedom of future generations. Because the liberty and equality of all citizens is at the heart of democratic societal institutions and of the values that democratic societies promote, to create people who are neither free nor equal undermines those institutions and values. In short, not to prohibit 'designer children' would undermine the very foundations of our Western democratic societies.

INTRODUCTION

Some old and new phenomena—adoption is old, assisted reproductive and genetic technologies and same-sex marriage are new—have recently thrown the issue of children's rights with respect to their biological origins, biological families, and family structure into the public policy spotlight and public square debate.

Adoption has long given rise to concerns as to children's rights with respect to their biological families. Early in the twentieth century, societally condoned sperm donation presented a similar challenge. In the

last thirty years, assisted reproductive technologies (ARTs) and genetic technologies have brought, and will continue to bring, unprecedented challenges. And, most recently, same-sex marriage has done so.

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Over the millennia of human history, the idea that children—at least those born into a marriage—had rights with respect to their biological parents was taken for granted and reflected in law and public policy. And children's rights with respect to their biological origins were not an issue when there was no technoscience that could be used to manipulate or change those origins: a baby could only be conceived in vivo through sexual reproduction. But with ARTs that is no longer the case.

What, ethically, do we owe children whose lives result from the use of ARTs? So far, we have largely failed to address this question. Our ethical focus on ARTs has been almost entirely on adults' right to access these technologies so as to found a family. But as the first cohort of children born as a result of their use reaches adulthood and connect with one another through the Internet, they are changing our focus. We are now asking, what are their rights with respect to their biological origins and biological families? And what are our obligations as a society to these children? What protections do they need and deserve?

In this article, I propose that the most fundamental human right of all is a child's right to be born from natural biological origins, that children have human rights with respect to their biological parents and families, and that these rights must be recognized. The articulation of human rights is an ongoing process. Children must move from being the 'voiceless citizens' to becoming the new kids on the human rights block, and

² Margaret Somerville, *Children's Rights and Unlinking Child-Parent Biological Bonds with Adoption, Same-Sex Marriage and New Reproductive Technologies*, 13 J. FAM. STUD. 179 (2007).

nowhere is that more important than with respect to rights regarding their biological origins and biological families.

I. CHILDREN'S RIGHT TO BE BORN FROM NATURAL BIOLOGICAL ORIGINS

In the more than twenty-five years since Louise Brown, the first 'test-tube baby', ushered in the brave new world opened up by ARTs, advances in the technologies have made more and more previously impossible interventions possible. Those 'advances' make it necessary to formulate new rights for children in relation to their biological origins that would have been unimaginable until very recently.

A child's right to be conceived with a natural biological heritage is the most fundamental human right and should be recognized in law.³ Children have a right to be conceived from untampered-with biological origins, a right to be conceived from a natural sperm from one identified, living, adult man and a natural ovum from one identified, living, adult woman. Society should not be complicit in—that is, should not approve or fund—any procedure for the creation of a child, unless the procedure is consistent with the child's right to a natural biological heritage.

The addition of the words *man* and *woman* in defining the right to a natural biological heritage, rather than simply referring to sperm and ovum, as would be more common, is not superfluous. It is theoretically possible to create an embryo with the genetic heritage of two women or two men, including by making a sperm or ovum from one of the adult's stem cells and using a natural gamete from the other person, or perhaps by using two ova or maybe by making an 'ovum' from an enucleated egg fused with a sperm and fertilizing it with another sperm. The word *natural* excludes opposite-sex couples from using this technology to make an artificial sperm from an infertile man or artificial ovum from an infertile woman.

³ MARGARET SOMERVILLE, THE ETHICAL IMAGINATION: JOURNEYS OF THE HUMAN SPIRIT 95–156 (2006); Margaret Somerville, *The Importance of a Basic Presumption of Respect for the Natural*, 13 SACRED WEB: A J. OF TRADITION AND MODERNITY 113 (2004).

The requirement that the gametes come from adults preempts the use of gametes from aborted fetuses; it prevents children being born whose biological parent was never born. And the requirement that the donors be living excludes the use of gametes for postmortem conception. The right to bear children should not include the right to deny children at least the chance, when being conceived, of meeting their biological parents. Conceiving children with gametes from a dead donor, as an Australian court authorized,⁴ denies them this opportunity. In that case, as is so often true, the judge considered only the rights and wishes of the adults involved.

II. 'DESIGNER CHILDREN' AND SOCIETAL VALUES AND INSTITUTIONS

A topic linked to the previous one of a right to come from untampered-with human origins, is the ethical acceptability of the enhancement of one's children using genetic technologies. The central question raised is whether or not this offends human dignity, whether of the child as an individual or of humans in general. Some commentators argue it does and others that it does not. I will not explore, here, however, the extensive literature on the ethics of designing our children by genetically altering them, whether for the better or the worse—when they are embryos. Rather, I want just to mention some important philosophically based objections to doing that, which have not been widely discussed.

Because creating 'designer children' involves genetic manipulation of human embryos, it destroys the essence of their humanness and, ultimately, the essence of the humanness of all of us.⁵ Genetic manipulation interferes with the intrinsic being of a person—with their very 'self'. As philosopher Søren Kierkegaard put it, designed persons are not free to fully become themselves, which is the essence of freedom.⁶

⁴ Richard Kerjab, *Wife Gets Sperm of Dead Husband*, THE AUSTRALIAN, December 21, 2005, at 3.

⁵ MARGARET SOMERVILLE, *supra*, notes 2 and 3.

⁶ SØREN KIERKEGAARD, EITHER/OR, PART 2 (Howard V. Hong & Edna H. Hong, eds. & trans.) In 4 KIERKEGAARD'S WRITINGS (Howard V. Hong, ed., 1987), as cited in Habermas, *infra*, note 7, at 5–11.

The power to fully become oneself requires that the person has non-contingent origins. People need to have a sense that they can go back and start again to remake or actualize their very selves, and, in order to have that, they must not be preprogrammed or designed by another. German philosopher Jürgen Habermas⁷ agrees that designed persons no longer can own themselves, as they must do in order to make their beings and their lives fully their own. Lacking self-ownership, people are not fully free. They are deprived of the liberty that comes from the fact that no one has interfered with the essence of their being. This lack of interference means their genetic makeup has come into existence through chance, and that it do so in that way is a necessary condition for such liberty. Moreover, because these children are not equal to the designer, they are deprived of equality.

This loss of liberty and equality affects the humanness of all of us because, first, we would all be complicit in such manipulation by not prohibiting it. And second, as Habermas explains, because tampering with some people's origins destroys a necessary condition for establishing a moral base for a secular society—that all people must be free from others' interference in their intrinsic being if they are to have the capacity to take part in the human interaction from which a shared morality arises.⁸

The injustice of one generation imposing its will over another generation (if the first generation designs its own children) would also result in other losses that have implications far beyond those people directly interfered with and the present time. The use of these technologies by one generation challenges the basic human rights of equality and freedom of future generations. And because the liberty and equality of all citizens is at the heart of democratic societal institutions and of the values which democratic societies promote, to create people who are neither free nor equal undermines those institutions and values. In short, not prohibiting 'designer children' undermines the very foundations of our Western democratic societies.

⁷ JÜRGEN HABERMAS, *THE FUTURE OF HUMAN NATURE*, 53–66 (2003).

⁸ *Id.*

III. CHILDREN'S RIGHTS AND DONOR CONCEPTION

We must explore two lines of enquiry in relation to children's rights and donor conception: Is donor conception ethically acceptable? And, if so, under what conditions, in particular, do children have a right to know the identities of their gamete donors?

Is Donor Conception Ethically Acceptable?

Many people have come to see gamete donation and donor conception as acceptable for opposite-sex couples who do not regard it as immoral. But, as I discuss below, some donor-conceived people adamantly disagree. Whether it should be available to same-sex couples or single women is a much more contentious issue. It merits noting in this regard that some sperm banks report that more than half of the women who use their services are single.⁹ It's also worth noting that the use of artificial insemination can be reduced by prohibiting the sale of sperm or preventing the donors from remaining anonymous. Many men would refuse to donate if they would not be compensated or if their paternity might become known.

The emphasis in the ethical and legal analysis of the use of ARTs, including donor conception, has been on the rights and wishes of the adults involved - for instance, the gamete donors or prospective "parents". Some donor-conceived people strongly object to this approach. They argue that the rights and well-being of children born through the use of these technologies must be central to decision-making, which could mean that some of these technologies should not be used at all.

The impact of ARTs, including donor conception, on children born through their use, other than that on their physical health, has been largely ignored; it has been readily assumed that no major ethical or other

⁹ Jessica Yadegaran, *No Mr. Right? More Women Start Families via Artificial Insemination*, CONTRA COSTA TIMES, August 16, 2010, available at <http://www.parentcentral.ca/parent/babiespregnancy/pregnancy/article/848516--no-mr-right-more-women-start-families-via-artificial-insemination> (accessed October 1, 2010).

problems arise in creating children from donated gametes, and that opposition to the creation of these children is almost entirely based on religious beliefs. Such assumptions have been dramatically challenged in the last few years as the people in the first cohort born through the use of these technologies reach adulthood, become activists, and call for change. They describe powerful feelings of loss of identity through not knowing one or both biological parents and their wider biological families, and describe themselves as ‘genetic orphans’.¹⁰ They ask, ‘How could anyone think they had the right to do this to me?’

It merits keeping in mind in this discussion that we are speaking of a very large number of people who could believe they have been harmed in these ways. Although precise numbers do not exist, it’s estimated that in the United States, alone, 30,000 to 60,000 children are born each year through sperm donation¹¹ and, in 2005, about 6,000 babies were born from ova donation.¹² It is also not irrelevant to this discussion that in America the fertility industry brings in \$3.3 billion annually.¹³

A common strategy used to dismiss the arguments against donor conception is that there is no ‘proof’ that donor-conceived persons, either as children or later, as adults, are harmed in any important way. Studies carried out on young donor-conceived children, who declare themselves perfectly happy with their parents and families, are often put forward as evidence that no harm is caused. In contrast, donor-conceived adults’ claims of identity confusion, loss of connection to half their genetic kin, psychological distress, and so on, tend to be dismissed as anecdotal and irrelevant, and they are challenged to prove empirically the harm done to them.

But that is to ask the impossible. Sociology is not hard science, and qualitative research can indeed be a valid way to proceed. In addition, it’s very difficult to find a large random sample of donor-conceived people:

¹⁰ See Chad Skelton, *Searching for Their Genes: Family Ties*, VANCOUVER SUN, April 22, 2006.

¹¹ ELIZABETH MARQUARDT, NORVAL D. GLENN & KAREN CLARK, MY DADDY’S NAME IS DONOR 5, Institute for American Values (2010), available at http://www.family scholars.org/assets/Donor_FINAL.pdf

¹² *Id.*, at 17.

¹³ *Id.*, at 5.

most parents never tell their children about their origins. Moreover, this secrecy is itself likely to cause harm to many donor-conceived people, but it is impossible to study that either.

Studies on young donor-conceived children, which purport to show there is no harm, do not capture harms experienced only later. For instance, in early adulthood, when we are forming a mature self-identity, knowing our origins and biological family helps us to find that identity.¹⁴

The ethical doctrine of anticipated consent is relevant in deciding what we owe ethically to children brought into being through ARTs, including donor conception. Anticipated consent requires that when a person seriously affected by a decision cannot give consent, we must ask whether we can reasonably anticipate they would consent if able to do so. If not, it's unethical to proceed. So, ethically, we must listen to what donor-conceived adults are saying about gamete donation to decide whether we can anticipate consent to it.

They—like adopted children—tell us of their profound sense of loss of genetic identity and connection. They wonder: Do I have siblings or cousins? Who are they? What are they like? Are they 'like me'? What could I learn about myself from them? These questions raise the issue of how our blood relatives help each of us to establish our human identity.¹⁵ Humans identify closely with their close genetic families, and it seems that we also identify with traits in our family members that we like (we try to develop the same traits in ourselves), and that we dislike (we vow not to be like that—the positive power of negative identification).¹⁶ In short, from what many donor-conceived adults tell us we cannot anticipate consent to anonymous gamete donation—or, indeed, to gamete donation itself.

¹⁴ See David J. Vellaman, *Family History*, 34 *PHIL. PAPERS* 357 (2005).

¹⁵ See generally T. Freeman, V. Jadva, W. Kramer & S. Golombok, *Gamete Donation: Parents' Experiences of Searching for their Child's Donor Siblings and Donor*, 1 *HUMAN REPRODUCTION* 1 (2009), especially at pages 7–9, where it is reported that children were usually positively affected by meeting siblings and that close bonding often resulted. Available at <http://www.oxfordjournals.org/eshre/press-release/freepdf/den469.pdf> (accessed September 10, 2010).

¹⁶ David J. Vellaman, *supra*, note 14; ELIZABETH MARQUARDT ET AL., *supra*, note 11.

Two stories concerning the donation of gametes that raise additional questions have appeared recently in the media. One related that a ‘virtual’ sperm and egg bank is being established that will only accept offers to donate from ‘beautiful’ people. Internet polling will determine who is sufficiently beautiful. The goal—informed by the principle that ‘everyone deserves a beautiful child’—is to enable ‘ugly’ people to have beautiful children.¹⁷ If we tack on surrogate motherhood to this ‘service’, a person could order a custom-made child and collect it nine months later.

The other story reported that New Zealand will possibly allow ‘double donation’; that is, would-be parents would be able to use both donated ova and sperm to create embryos (a practice that is not legally prohibited, although still fairly uncommon, in Canada). As Diane Allen of the Infertility Network argues, this ‘cannot be construed as any form of infertility “treatment”, but, rather, the deliberate manufacture of babies to meet consumer demand’.¹⁸

Donor conception may be a completely avoidable human tragedy in the making, one for which we might be holding a truth and reconciliation commission at some future date, when offspring ask, as some are already doing, ‘How could you have done this to us? How could you have allowed this to happen?’

Is donor conception the twenty-first century version of the wrongs we now recognize we did to some children in the twentieth century? Are we repeating in a new context and in new ways the terrible errors and grave injustices that occurred with Australia’s ‘stolen generation’ of aboriginal children, the United Kingdom’s ‘home children’ sent to Canada and other British Commonwealth countries, and the ‘scoop’ of native children from reserves into Canadian residential schools and white adoptive homes, all of which deliberately separated children from their biological families?

In all these instances, our intentions were, just as our intentions are at present in regards to donor conception, to ‘do good’. In donor conception,

¹⁷ *Dating Site Creates Online Sperm and Egg Bank*, NEWSWEEK, available at <http://www.newsweek.com/blogs/techtonic-shifts/2010/06/21/dating-site-creates-online-sperm-and-egg-bank.html> (accessed September 30, 2010). The dating site is BeautifulPeople.com

¹⁸ Personal email communication from Diane Allen, Infertility Network, to Margaret Somerville, June 28, 2010.

however, we primarily intend to ‘do good’ to the adults who want a child, rather than to the child; whereas in the instances of the other historical wrongs I have mentioned, the perpetrators sometimes acted out of the belief—although a grossly mistaken belief—that their policies were good for the children. As an old human-rights axiom warns, an unalloyed intention to ‘do good’ has its dangers: ‘Nowhere are human rights more threatened than when we act purporting to do only good’. Our desire to do good can blind us to the risks and harms that are involved. Is that true of gamete donation?

An argument that is used to support donor conception is that the child would not exist otherwise and, therefore, should not complain. One young donor-conceived woman, confronted with this argument, responded, ‘If I were the result of rape, I would still be glad to be alive, but that doesn’t mean I or anyone else should approve of rape’.

Children’s Right to Know the Identities of their Biological Parents

If, however, the practice of donor conception continues, what are our obligations to people conceived in this way with respect to giving them access to information about their biological origins?

It is one matter for children not to know their genetic identities as a result of unintended circumstances. It is quite another matter to deliberately destroy children’s links to their biological parents, and especially for society to be complicit in this destruction. It is now being widely recognized that adopted children have the right to know who their biological parents are whenever possible, and legislation establishing that right has become the norm. The same right is increasingly being accorded to children born through gamete donation. For instance, the United Kingdom has passed laws giving children conceived after April 1, 2005, this right at 18 years of age.¹⁹

¹⁹ Human Fertilisation and Embryology Act, ch. 22, § 24 (2008), amending § 31 of the 1990 Act, by adding section 31ZA. The act provides that donor-conceived people conceived after April 1, 2005, when they reach 16 years old, are able to apply to the

Ethics, human rights, and international law²⁰—as well as considerations such as the health and well-being of adopted and donor-conceived children—all require that children have access to information regarding their biological parents. And it is not just these children who have this right, but their descendants as well. Children deprived of knowledge of their genetic identities—and their descendants—are harmed physically and psychologically.

If donor conception continues, respect for children's rights in these regards requires that the law prohibit anonymous sperm and ova donation, establish a donor registry, and recognize children's rights to know the identities of their biological parents and, thereby, their own biological identities.

Adoption is our longest-standing experience of dealing with a situation where children have been intentionally disconnected from their biological parents and, often, did not know and could not find out who their biological parents and relatives were. In the past, adoption records were permanently sealed. We now recognize that as being harmful to the adopted person and potentially to the birth family, and unethical. Yet donor-conceived Canadians do not know who at least one of their biological parents is, because donors in Canada are allowed to remain anonymous, which is no longer the case in a growing list of countries (including Britain, Australia, and New Zealand, among many others²¹). That also is unethical and, if we continue with gamete donation, it must be changed.

HFEA to receive the *non-identifying* information that their donor provided (all information given by the donor except for his or her name and last-known address). Donor-conceived people conceived after April 1, 2005, when they reach 18 years old, are able to apply to find the information their donor provided, including *identifying* information. Note that it is only non-identifying donor information that can be provided at age 16. In order to get identifying information, donor-conceived people have to wait until they are 18.

²⁰ Convention on the Rights of the Child, GAOR 44/25, annex, 44 U.N. GAOR Supp. (No. 49) at 167, U.N. Doc. A/44/49 (1989), entered into force Sept. 2, 1990, available at <http://www1.umn.edu/humanrts/instatee/k2crc.htm>

²¹ MARQUARDT ET AL., *supra*, note 11, at 77.

Adoptive parents were once advised by ‘professionals’—as the parents of donor-conceived children have been and still often are—not to tell their children of their origins; they were told that secrecy was best. This, too, should be changed, not least because people excluded from a secret that relates to them in some major way often sense that they are being excluded. Their not knowing what the secret is creates a situation of doubt, which can be very difficult for them to cope with psychologically. Moreover, such secrets can damage—sometimes even destroy—family relationships once they come to light, as most inevitably do, often in traumatic situations (for example, divorce or death).

Adoptive parents were also told that children were a blank slate, that they would be just fine and would not experience loss because of their adoptive family loving them, really ‘wanting them’, ‘going through so much to get them’, and so on. For many adopted children, even those who deeply love their adoptive parents, this has not proven to be true, as is also the case for some donor-conceived children. Now, prospective adoptive parents are counselled during the home-study process to expect and accept this sense of loss as normal.

Birth parents were told—as gamete donors are today—that it was in their own best interests to ‘put it behind them and get on with their lives’, that their relinquished children would be just fine, that they were doing a ‘wonderful, selfless’ thing in helping people become parents who couldn’t otherwise do so. But this ‘moving on’ was not always possible for the birth parents, as is also true for some gamete donors.

The Ethical Way Forward

I suggest that the first step in dealing, ethically, with the issues I have identified in this section, and with other related issues, is to place the future child, and the child’s human rights and our obligations as a society to him or her, at the centre of the decision-making as to what should be required, allowed, or prohibited—that is, what we must, may, or must not do, respectively—in the use of assisted human reproduction technologies, including gamete donation.

The child cannot tell us what he or she would consent to, but other people conceived in these ways can. As I’ve explained already, we must listen to them in order to apply the ethical doctrine of ‘anticipated

consent'; that is, if we cannot reasonably assume that someone affected by our decision, who is not present, would consent if present, it is not ethical to proceed.

The 'precautionary principle', currently most commonly used in environmental ethics, might also help: we should exercise wise ethical restraint—prudence—until we are reasonably certain that it is safe and ethical to act. And that safety goes beyond assessing only physical harm to the future child. It also includes taking into account existential harm to him or her, and risk and harm to our societal values and ethics.

What impact, especially on important values on which we found our shared societal ethics, would wanting only beautiful children have on our concept of unconditional parental love? Hitherto, we have believed we love our children simply because they are our children. Does the selection and purchase of gametes to conceive a child make the child into an object or thing, rather than a person? How will the child feel knowing that a genetic parent sold what is (as one donor-conceived woman put it) 'the essence of my life for \$25 to a total stranger, and then walked away without a second look back? What kind of a man sells himself and his child so cheaply and so easily?' Is there something gravely ethically wrong with the commercialization of the miracle of the passing on of human life? Canadians decided there was, and that leads to yet another recent donor-conception news story.

In 2005, the Canadian Parliament enacted the Assisted Human Reproduction Act that made it a criminal offence to buy or sell gametes or embryos.²² Assisted Human Reproduction Canada—the agency that was established to oversee the implementation of this statute—has just been challenged with allegations it is failing to fulfill its obligations by not seeking prosecution of those who take part in the continuing sale of sperm and ova in Canada.²³

²² Assisted Human Reproduction Act, ch. 2, § 7 (2004).

²³ Tom Blackwell, *Third Board Member Quits Fertility Industry Watchdog*, NATIONAL POST, May 31, 2010, available at <http://www.nationalpost.com/news/story.html?id=3094251#ixzz117FaV0xL> (accessed October 1, 2010).

IV. CHILDREN'S RIGHT TO BE REARED WITHIN THEIR OWN BIOLOGICAL FAMILIES

The general norm or default position in Western societies has long been that parents have obligations to care for their biological children, at least those born into a marriage. In more recent times those obligations have extended to all their biological children. That means that children have correlative rights with respect to their biological parents and family structure. As adoption law impliedly recognizes, a child has a right to be in contact with his or her biological parents within a family structure—that is, to be reared by their biological mother and father within their genetic family—unless an exception is unavoidable in the ‘best interests’ of a particular child. In short, adoption can be viewed as a default position where neither the biological mother nor father is capable of adequately parenting the child.

It might be objected that there is no magic in biological matching. It might also be supposed that genetically controlled development and environmentally determined development run on entirely different tracks, so that the suitability of a couple to parent a particular child can be determined with little reference (except perhaps in exceptional cases such as those presented by special-needs children) to the genetic structure of the child, and still less reference to some sort of matching between the genetic structure of the couple and that of the child. This conclusion might have been unchallenged orthodoxy until recently. However, scientific research is giving us possible clues to the contrary. This research indicates that when we mess around with Nature in the context of human reproduction, we may have no idea of all the implications of what we are doing. Let me briefly refer to just two examples.

Research is showing that smell can indicate whether an opposite-sex partner is more or less genetically compatible in relation to reproduction: women who are not pregnant find the smell of men who are ‘immunologically dissimilar’ from them—that is, men who are likely to have genomes different from their own—more attractive than the smell of men with similar genomes. Genetic difference between the parents

increases the likelihood of more immunologically robust offspring.²⁴ Such studies raise interesting questions about the desirability of having parents who have selected one another the old-fashioned way, rather than through the impersonal mechanisms of artificial insemination by donor or ovum donation. They also raise questions about the advisability of women who are taking oral contraceptives, which affect pheromones and the sense of smell, selecting partners for marriage or with whom to reproduce.

And a breakthrough in a new field of scientific research called ‘epigenetics’,²⁵ which investigates the interaction of genes and environment, breaches the barrier between environment and genetics by revealing that some genes are imprinted—‘activated’—by parenting practices²⁶ and

²⁴ Suma Jacob, Martha K. McClintock, Bethanne Zelano & Carole Ober, *Paternally Inherited HLA Alleles Are Associated with Women’s Choice of Male Odor*, 30 NATURE GENETICS 175 (2002); Karl Grammer, Bernhard Fink & Nick Neave, *Human Pheromones and Sexual Attraction*, 118 EUR. J. OBSTETRICS & GYNECOLOGY & REPRODUCTIVE BIOLOGY 135 (2005).

²⁵ ‘Epigenetics refers to functionally relevant modifications to the genome that do not involve a change in nucleotide sequence. Such modifications include chemical marks that regulate the transcription of the genome. There is now evidence that environmental events can directly modify the epigenetic state of the genome. Thus studies with rodent models suggest that during both early development and in adult life, environmental signals can activate intracellular pathways that directly remodel the ‘epigenome’, leading to changes in gene expression and neural function. These studies define a biological basis for the interplay between environmental signals and the genome in the regulation of individual differences in behavior, cognition, and physiology’. Tie-Yuan Zhang & Michael J. Meaney, *Epigenetics and the Environmental Regulation of the Genome and Its Function*, 61 ANN. REV. PSYCH. 439 (2010), available at http://www.annualreviews.org/doi/abs/10.1146/annurev.psych.60.110707.163625?url_ver=Z39.88-2003&rfr_dat=cr_pub%3Dncbi.nlm.nih.gov&rfr_id=ori%3Arid%3Acrossref.org&journalCode=psych (accessed September 12, 2010).

Ian C. G. [Weaver](#), [Nadia Cervoni](#), [Fances A. Champagne](#), [Ana C. D’Alessio](#), [Shakti Sharma](#), [Jonathan R. Secki](#), [Sergiy Dymov](#), [Moshe Szyf](#), & Michael J. Meaney, *Epigenetic Programming by Maternal Behavior*. 7 NATURE NEUROSCIENCE 847 (2004), available at <http://www.nature.com/neuro/journal/v7/n8/full/nn1276.html> (accessed September 11, 2010). The extensive debate which has ensued from this well-known study is reviewed in Lizzie Buchen, *Neuroscience: In their*

other environmental factors (and that epigenetic changes can be passed on to future generations, including through the behaviour of the parents).

It may emerge, therefore, that the optimal parenting practices for a child depend in part on that child's genetic inheritance—the child's genome or DNA/RNA—and its amenability to activation by one or another set of parenting practices. Good parenting for one child might be mediocre parenting or worse for another depending on their genomes. A further insight that might emerge is that parenting practices themselves are in part a product of genetics and epigenetics, and that biological parents may be more likely to be matched by nature in such a way as to lead their parenting behavior to be optimal for their own biological offspring. Confirmation of these possible outcomes must await further research.²⁷ I hasten to add that in articulating these possibilities I am not endorsing 'genetic reductionism', the claim that we humans are nothing more than the functioning of our genes or 'gene machines'.

This new knowledge also gives rise to questions about criteria for adoption. It raises the question whether there should be a presumption, subject to an exception, where an exception would be in the 'best interests' of a particular child, that children should be adopted by couples comprised of a man and a woman.

V. CHILDREN'S RIGHT TO BOTH A MOTHER AND A FATHER

And that enquiry brings us to the issue of same-sex marriage, which has been legalized in Canada²⁸ and some other countries. Under both article

nurture, 467 NATURE 146 (2010), available at [http://www.nature.com/news/2010/100908/full/467146a.html?s=news_rss&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+news%2Frss%2Fmost_recent+\(NatureNews+-+Most+recent+articles\)#B3](http://www.nature.com/news/2010/100908/full/467146a.html?s=news_rss&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+news%2Frss%2Fmost_recent+(NatureNews+-+Most+recent+articles)#B3) (accessed September 11, 2010).

²⁷ I am indebted to Professor Scott FitzGibbon for suggesting the arguments related to epigenetics presented here.

²⁸ Civil Marriage Act, R.S.C. 2005, ch.33.

16 of the U.N.'s Universal Declaration of Human Rights²⁹ and domestic law, marriage is a compound right: the right to marry and to found a family.

Giving same-sex couples the right to found a family unlinks parenthood from biology. In doing so, it unavoidably takes away all children's right—not just those brought into same-sex marriages—to both a mother and a father and their right to know and be reared within their own biological family. It does so because marriage can no longer establish as the norm the natural, inherently procreative relationship between a man and a woman and the rights of children that flow from that norm: in particular, the right of children to both a mother and a father who are their own biological parents, unless an exception is justified as in the 'best interests' of a particular child, as in adoption.

The primary rule becomes that a child's parents are who the law says they are, and they may or may not be the child's biological parents.³⁰ That is, the exception to biological parenthood, which used to be allowed through adoption law, becomes the norm. In other words, same-sex marriage radically changes the primary basis of parenthood from natural or biological parenthood to legal (and social) parenthood as the Canadian Civil Marriage Act expressly legislates.³¹ That change has major impact on the societal norms, symbols, and values associated with parenthood.

²⁹ Universal Declaration of Human Rights, GAOR 217A (III), U.N. Doc. A/810 (1948), adopted December 10, 1948, available in the University of Minnesota Human Rights Library: <http://www1.umn.edu/humanrts/instrree/bludhr.htm> (accessed September 11, 2010). Article 16(1) provides: 'Men and women of full age, without any limitation due to race, nationality or religion, have the right to marry and to found a family'.

³⁰ See the very recent British Columbia White Paper on Family Act Reform, available at <http://www.ag.gov.bc.ca/legislation/pdf/Family-Law-White-Paper.pdf>. See also Todd Coyne, New BC family law could legalize having three parents, VANCOUVER SUN, July 19, 2010, available at <http://www.vancouversun.com/life/family+could+legalize+having+three+parents/3297731/story.html>

³¹ Civil Marriage Act, *supra*, n. 38, Consequential Amendments §§ 5–15. For example, the amendment to the Income Tax Act states: 'The amendments to sections 56.1 and 60.1 of the *Act* replace the existing term 'natural parent' with the term 'legal parent' to ensure that support amounts paid under a court order or written

The same issue of children's right to both a mother and a father is raised by society's involvement in intentionally creating single-parent households, for example, by funding single women's access to artificial insemination, which has been discussed above.

Same-sex marriage advocates argue that children don't need both a mother and a father, and 'genderless parenting' is just as good as, or even better than, opposite-sex parenting, because in the case of same-sex couples, all children are wanted children. Research is showing, however, that men and women parent differently³² and, as I've already explained, other research in epigenetics shows that certain genes in young mammals are activated by parental behaviour. Science may well show us that complementarity in parenting (having both a mother and a father) does matter for children's well-being in ways we have not previously understood. In short, mothers and fathers parent differently and, therefore, it would seem, confer different benefits on the child.

Two further considerations also need to be taken into account. They both rest on one prominent school of child-development thought which emphasizes that children develop through a process of 'modelling'.³³

agreement involving both opposite-sex and same-sex couples and their children will be recognized equally in federal law' (emphasis added).

³² See, for example, Gordon et al., Oxytocin and the Development of Parenting in Humans, 68 *BIOLOGICAL PSYCHIATRY* 377 (2010), in which the author identifies disparate parenting conduct, which is a function of oxytocins.

³³ Gareth B. Matthews, *Concept Formation and Moral Development*. In *PHILOSOPHICAL PERSPECTIVES ON DEVELOPMENTAL PSYCHOLOGY* 175, at 185 (James Russell ed., 1987) ('A young child is able to latch onto the moral kind, bravery, or lying, by grasping central paradigms of that kind Moral development is . . . something much more complicated than simple concept displacement. It is: enlarging the stock of paradigms . . . developing better and better definitions of whatever it is that these paradigms exemplify; appreciating better the relation between straightforward instances of the kind and close relatives; and learning to adjudicate competing claims from different moral kinds . . .'). See also Lawrence J. Walker, Karl H. Hennig & Tobias Krettenauer, *Parent and Peer Contexts for Children's Moral Reasoning Development*, 71 *CHILD DEV.* 1033, 1047 (2000) (reporting that both parents and peers 'have a role to play'). See generally A. Bandura, *Social Cognitive Theory: An Agentic Perspective*, 52 *ANN. REV. PSYCHOL.* 1 (2001).

The first consideration is that a boy needs an adult male parent on whom to model himself and a girl an adult female parent; a same-sex couple will, therefore, fall short with either the male or the female children. The second consideration looks to the relationship between the parents: children benefit when they can model their own relationships with the opposite sex, in later life, on the relationship conducted by their parents.³⁴

One argument against same-sex marriage raised in the Canadian court cases was that same-sex couples could not found a family naturally and, therefore, marriage was not an appropriate way to publicly recognize their committed relationship. The Court of Appeal of Ontario³⁵ responded, however, that these couples could use reproductive technologies to found a family. The common thread between same-sex marriage and reproductive technologies is that both disconnect procreation from sexual intimacy between two humans: same-sex marriage involves sexual intimacy with no possibility of procreation; reproductive technologies involve procreation with no sexual intimacy.

The debate on legalizing same-sex marriage in Canada focused almost entirely on adults and their right not to be discriminated against on the basis of their sexual orientation. The conflicting claims, rights, and needs of children were barely mentioned. It's worth noting that legally recognizing civil unions, unlike the recognition of same-sex marriage, does not negate children's right to both a mother and a father, because it does not include the right to found a family. For that reason, I believe it represents the most ethical compromise between respect for the rights of homosexual people not to be discriminated against and the rights of children with respect to their biological families.

³⁴ Scott FitzGibbon, *Procreative Justice and the Recognition of Marriage*. In FAMILY LAW IN THE 21ST CENTURY, pp.1006 (M. Obi & K. Nijjima, eds., 2007), available at <http://lawdigitalcommons.bc.edu/lfp/208>; Scott FitzGibbon, *The Principles of Justice in Procreative Affiliations*, in WHAT'S THE HARM? DOES LEGALIZING SAME-SEX MARRIAGE REALLY HARM INDIVIDUALS, FAMILIES OR SOCIETY? pp. 125–54 (Lynn Wardle, ed., 2008).

³⁵ Halpern v. Canada (Attorney General), 225 D.L.R. (4th) 529 (2003).

VI. CONCLUSION

All these rights of children are of the same basic ethical nature—obligations of non-maleficence, that is, obligations to *first do no harm*. Consequently, as a society, we have obligations to ensure respect for these rights of children. It is one matter, ethically, not to interfere with people's rights of privacy and self-determination, especially in an area as intimate and personal as reproduction. It is quite another matter for society to become complicit in intentionally depriving children of their right to know and have contact with their biological parents and wider family, or their right to be born from natural biological origins. When society approves or funds procedures that breach these rights of children and, arguably, when it fails to protect such rights of children—for instance, by failing to enact protective legislation—society becomes complicit in the breaches of rights that ensue.

Those obligations extend also to future generations. We should clearly recognize that any genetic procedure that will turn out to be harmful to the future child or to a future generation, or contrary to their interests, is morally unacceptable and should be prohibited.

Knowing who our close biological relatives are and relating to them is central to how we form our human identities, relate to others and the world, and find meaning in life.

Children—and their descendants—who don't know their genetic origins cannot sense themselves as embedded in a web of people, past, present, and future, through whom they can trace the thread of life's passage down the generations to them. As far as we know, humans are the only animals who experience genetic relationships as integral to their sense of themselves. We are learning now that eliminating that experience is harmful to children, biological parents, families, and society. We can only imagine how much more damage might be done to a child born not from the union of a man's natural sperm and a woman's natural ovum, but from 'gametes' constructed through biotechnology.

To summarize, at the very least, children's human rights with respect to their biological origins are:

- (1) for the child's origins to be natural and untampered-with;
- (2) for the child to know the identity of the progenitors of those origins; and

(3) unless the contrary is unavoidable in the ‘best interests’ of a particular child, for the child to be in contact with those progenitors within a family structure—that is, to be reared by their biological mother and father within their genetic family.