Designer Babies, Stem Cells, and the Market for Genetics: The Limits of the Assisted Human Reproduction Act

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Hailed by liberal activists and policymakers as one of the most significant pieces of legislation worldwide to address human genetic and reproductive technologies, Bill C-6, An Act Respecting Human Reproduction and Related Research (popularly known as the Assisted Human Reproduction Act, or the AHRA), was approved by the Canadian senate on March 11, 2004. The act grew out of the Royal Commission on Reproductive Technologies, which was established by the federal government in 1989. Its passing marked the formal end to a long and arduous consultative and legislative process that spawned three previously unsuccessful attempts to create a law governing human genetic and reproductive technologies (HGRTs).

In practice, however, the act is yet to be implemented and discussion about how to regulate the technologies in question is far from over. As these deliberations continue, there is a vital need to acknowledge feminist concerns about the cultural-commercial preoccupation with the production of perfect babies, a preoccupation that has, in many respects, become a routinized aspect of reproductive healthcare. Discourse on the act has largely skirted this issue and, with concern about the embryo front and centre, women’s bodies have become all but invisible. Moreover, in the context of the unprecedented control now exercised by a supranational biotechnology industry over the development and commercialization of human genetic and reproductive technologies, it behooves us to recognize the limits of national law in facing the social and economic challenges presented by new HGRTs.

The most visible emblem of the ongoing tension that characterizes discussions about assisted human reproduction is the new government agency charged with developing and overseeing regulations and monitoring the fertility clinics and research facilities whose activities involve human gametes or embryos. The Assisted Human Reproduction Agency of Canada was formally established in January 2006, but it took until December 2007 for Prime Minister Stephen Harper to name appointees to its board, provoking charges on the part of women’s health campaigners that the AHRA is merely a “paper dragon” (Lippman & Nisker, 2006). When the names of the board members were announced, more-
over, critics from the fertility, stem cell research, and medical ethics communities cried foul, claiming that the panel is stacked with “social conservatives” (Brennan, 2007).

A recent article in the *Globe and Mail* (“Canada: Destination for Infertile Couples,” Gazze 2007) draws attention to the degree to which the fertility industry continues to grow, apparently unfettered, in the face of inaction and political conflict. According to the article’s author, Mary Gazze, since the agency has yet to outline regulations on acceptable costs for surrogacy arrangements some couples seeking children “are dishing out more than expenses” to their surrogates. Concern about the potential for the exploitation of women in commercial surrogacy contracts was one of the major reasons for the creation of the AHRA. The fact that questionable arrangements persist three years after the passing of the legislation highlights the extent to which the role of human genetic and reproductive technologies within Canadian society remain unresolved.

Given this state of affairs, it is important to keep pushing the debate about the AHRA and its potential effectiveness beyond the realm of politics with a capital “P” and into the broader context in which the legislation will ultimately operate. In other words, it is crucial to keep questions related to women’s bodies and to global capitalism in play if we are to avoid losing sight of the social and economic forest for the regulatory trees.

**The terms of the act**

For those concerned about the social implications of HGRTs, the act is, relative to legislation passed elsewhere in the world, a fairly progressive piece of legislation. The U.S.-based Center for Genetics and Society claims that this is at least in part because its authors arrived at their determinations by drawing on the input of a broad range of constituencies, including members of the women’s health community. According to its supporters, the legislation is welcome because it draws clear boundaries “prohibiting unacceptable applications of the new technologies while allowing beneficial applications in a socially accountable manner” (Center for Genetics and Society, 2004). It does so by banning those practices that have caused most concern among feminists and others on the left—the exploitation of poor women through commercial surrogacy, sex selection (except to prevent, diagnose, or treat a sex-linked disorder), and cloning—and by permitting but regulating procedures such as sperm and egg donation, which are now viewed by many in these camps as central components of reproductive freedom. Other prohibited practices include the development of human embryos solely for research, the alteration of human DNA that would pass from one generation to the next, the creation of human/non-human hybrids and chimeras, and the sale of sperm, eggs, embryos, or any other human reproductive material. Research involving human embryos, including stem cell research, is permitted using embryos created but not used during in vitro fertilization and abortion procedures. The act also allows for the continuation of non-commercial surrogate mothering alongside the donation of sperm, eggs, and other reproductive material.

**The public response**

Certain sections of the new law are still contested (Center for Genetics and
Society, 2004). Some organizations representing fertility clinics and infertile couples objected to the ban on payments for sperm and women’s eggs citing an already precarious supply of reproductive materials in Canada (Mulholland, 2004). Anti-choice groups were unhappy with the legislation for allowing any form of embryonic research and for leaving the meaning of “human being” undefined (Campaign Life Coalition, 2004). On the other end of the political spectrum, disability rights activists have called for tighter restrictions on pre-implantation genetic testing to avoid promoting a medical model of disability. As Catherine Frazee noted in a 2002 speech to the ARCH Disability Law Centre:

The bill prohibits identifying the sex of an embryo created for reproductive purposes. However, and perhaps not surprisingly, it places no comparable restriction upon the identification of disability-related characteristics. If sex selection symbolically declares females of less worth than males, then isn’t it equally true that disability selection symbolically declares people with disabilities of less worth than non-disabled people? (Frazee, 2002)

Other detractors included representatives of the genetic and reproductive technology industries, alongside critics on the left, who, for different reasons, argued that the criminal sanctions for prohibited activities are excessive (Valverde & Weir, 1997). For those of us concerned about intensified criminalization and the growth of the prison-industrial complex in Canada, these certainly represent valid concerns.

Moreover, as Mariana Valverde and Lorna Weir (1997) have argued, while some feminist concerns were addressed by the report of the Royal Commission (around commercial surrogacy, for instance), questions pertaining to democratic control over commercial genetic research, and the incorporation of Aboriginal women’s disquiet about Eurocentric and individualistic notions of health and family, were largely overlooked.

The provision to permit legislative review after three years, however, allowed those who were not completely happy with the measure, but thought that it was better than nothing, to support it. Witnesses at Senate hearings argued that it was particularly important to pass the act in order to end what the Vancouver Sun called “Canada’s dubious distinction as the only Western country without a regulatory framework on embryonic technologies” (Greenaway, 2004, p. A5).

**Women’s bodies and the stem cell debate**

The act constructs embryos and their medical use, in Rebecca Sullivan’s (2005) words, “as part of the public good of Canada that must be protected from private sector commodification” (p. 51) in several ways: by insisting that all research be treated as public regardless of how it is funded, by prohibiting the cloning of embryos solely for the purpose of stem cell research, and by banning commercial surrogacy.

Even so, Sullivan continues, some sections of the act “create the conditions for the economic exchange of embryos as patentable therapeutics” (p. 51). Notable here are those sections that allow researchers, with the donor’s written consent, to
use embryos that are left over from fertility treatments and abortion clinics. Scientists only have to argue that their research is “necessary” and that there is no other way to approach a particular research question. As Abby Lippman, a McGill researcher and Co-Chair of the Canadian Women’s Health Network points out, this leaves the door open for cloning in stem cell research since it is hard to imagine a scenario in which an interested scientist could not describe their work as “necessary.” Lippman’s observation thus brings into question the meaningfulness of this particular aspect of the legislation (2002, p. 2).

In her very provocative discursive analysis of the debate over the AHRA, Sullivan also suggests that by allowing embryos to be culled from regulated clinics, the act distinguishes between two kinds of embryos: “reproductive embryos,” which qualify as almost human life and cannot therefore be bought and sold, and “replicative embryos,” whose potentiality is not in producing life but in producing health benefits and which may therefore be inserted into a system of economic exchange. This fuzzy distinction, Sullivan argues, can be sustained because what is at stake in the AHRA is not “life” so much as “health,” which is, of course, central to hegemonic national identity in Canada. Lawmakers deemed it in the best interests of the Canadian public that “surplus” embryos be used in the development of new treatments for disease and, by defining infertility as a public health issue, were also able to justify strict governmental regulation of the fertility industry.

This distinction also helps protect the most lucrative aspect of in vitro fertilization procedures—the development of patents derived from human DNA and genetic tests. We are all familiar with the images of youthful seniors glowing with health, sick children, and disabled adults, that are circulated by biotech companies and their allies in medical research and the large health foundations in order to promote the need for embryonic stem cell research. But critics like Abby Lippman argue that there is no scientific or moral imperative to do such research at this time: The reason researchers wish to clone human embryos is to mine them for stem cells, since mass production of such material would be more profitable for pharmaceutical companies (Felesky, 2002). Moreover, most illness and disability is not genetically endowed and Lippman, like others who are skeptical of the capacity of a government agency to make decisions about research “needs,” argues that resources might best be directed towards adult stem cell research, which is at present under researched (Lippman, 2002).

It is beyond the confines of this commentary to make a well-developed argument for or against embryonic stem cell research. But since this issue is so closely tied to the politics of assisted human reproduction, it might be useful to reframe the dominant terms of the debate, as it has been constructed in Canada and the United States, through an analytical lens that foregrounds women’s reproductive health. In popular discourse, the debate pits proponents of scientific research, who argue that such work will produce cures for a range of diseases and conditions, against pro-lifeers, who are invested in the legal protection of embryos and fetuses. Left out of this picture, with its obsessive focus on the embryo as an independent entity, or on miraculous cures, is a concern with the intrusions on and the exploitation of women’s bodies. Rarely mentioned, for example, is the fact that
researchers hoping to secure patents on genetic tests and human genes or to clone human embryos from stem cells require women to sign away their rights to their fertilized eggs after they have, in Abby Lippman’s words, “achieved a pregnancy, stopped trying, or simply run out of money” (Felesky, 2002, p. 34).

Moreover, as feminist writer Judith Levine (2002) argues, when questions about women are raised, often by pro-choice advocates, they too frequently fall into dualistic thinking due to a fear that any perceived concern about embryos will cede territory to anti-choice forces. But, as Marcy Darnovsky of the Center for Genetics and Society puts it, “Ending an unwanted pregnancy is apples, and mucking around with genes is oranges” (Levine, 2002, p. 28). Pro-choice opponents of genetic modification, of creating embryos solely for the purposes of research, or of embryonic stem cell research itself, do not propose to give cells rights. Rather, they worry that cloned embryos might be used to take advantage of infertile women, that a focus on “choice” and “personal freedom” for women can lead us to overlook the potential for economic exploitation and oppression bound up with procedures such as genetic modification and stem cell research, and that human life and its various processes are becoming mere research tools or manufactured commodities.

In fact, as Rebecca Sullivan points out, while the bracketing of the abortion question in the AHRA might be read as a deliberate strategy to avoid debilitating debates about the sanctity of life at human conception, it also serves to further narrow the definition of reproductive technologies as related only to fertility assistance, rather than regulation through conception and abortion. This is significant because although women have the right to terminate a pregnancy in Canada, there is no law to say that these services must be provided or that they must be provided for free—a situation that often leaves women in more isolated or conservative parts of the country unable to find someone to do the procedure. As Sullivan writes, “By emphasizing the creation of new life for infertile people and ignoring the other side of the technologies, the government can also integrate therapeutic biotechnologies that use embryos as raw material by subsuming life under the rubric of public health and public good” (p. 52).

**The trouble with “choice”**

While the AHRA in fact does much to limit the kinds of choices available to infertile couples that have most troubled feminist critics over the past two decades—most notably commercial surrogacy—it does not, and cannot, forestall the ways the fertility industry has hijacked the language of “choice” in order to sell their products during this same period. Certainly, in terms of being able to have children, reproductive technologies offer one kind of choice to women who can afford them. But IVF clinics and biotech researchers who oppose regulation argue that public oversight impinges on women’s choice in general. Of course, for some women and men, the new regulations in Canada will limit the range of alternatives their money can buy. What these regulations do not do, however, is either address the broad cultural preoccupation with the production of “perfect” babies, or the social conditions that are implicated in much infertility.

With regards to the former, it is important to note that there are two major markets for human reproductive technologies: women who wish to circumvent
infertility or the need for a male partner and couples at risk of passing on a particular genetic disorder. When the latter group opts for invitro fertilization, they do it so that their embryos can be tested and only those that seem healthy are implanted. But the thinking behind this procedure also informs much more routinized aspects of planning and undergoing a contemporary pregnancy. Pre-natal technologies such as amniocentesis and genetic screening, for example, encourage people to seek out the perfect baby, the quality child. As this occurs, more and more conditions that would be otherwise viewed as a routine part of human variation become medicalized and problematized. It is true, of course, as disability scholars and activists argue, that it can be quite challenging to look after a child with a disability or with health problems, but this difficulty has less to do with the child, than with the way society is organized. My critique here is not so much of the law itself—the answer to this preoccupation is not, I think, to ban pre-natal testing or genetic screening. Rather, we must build a broader social awareness of the ways these technologies are enforcing discrimination and of the need for social structures that allow children with disabilities and their parents to have a full life.

The eugenicist tendencies enshrined in the new reproductive technologies are exacerbated by the fact that although there are still relatively low cost, low-tech ways to help lesbians and single straight women conceive, many of the more advanced technologies are only open to the most privileged women. At the same time, we live in a culture in which poor women continue to be more frequently offered long-acting contraceptives and are discouraged from having children at all. In regard to the issue of addressing infertility “upstream” there is also a need—not recognized by the law—to address antiquated career structures that do not accommodate women, environmental degradation which effects both men and women’s reproductive capacities, and the prevalence of undiagnosed STDS.

Cloning and the Global Marketplace

If truth be told, within the context of the growth of a formidable transnational biotech industry, the Canadian ban on certain terms of cloning represents a mere drop in the ocean. Jeremy Rifkin, a prominent critic of the industry, revealed in a 2001 column for the Los Angeles Times that in January 2000, the British Patent Office granted a patent to Dr. Ian Wilmut—creator of Dolly the sheep—for his cloning technology. The patent, now owned by the Geron corporation, covers the cloning process and all the animals that are produced by it. What is not widely known, however, is that the Geron patent also covers all cloned human embryos up to the blastocyst stage of development (the stage where stem cells emerge). By allowing companies like Geron to claim embryos as intellectual property between conception and birth, do we, Rifkin asks, “risk a new era where the creation of life itself will fall under the control of commercial forces?” And he adds that “failure to examine the commercial implications of embryo and stem cell research could trap us in a commercial eugenics future that we neither anticipated nor chose.”

Even as the AHRA has been ratified and the new regulatory body established, the march towards such a future continues apace. Biotechnologies in Canada are, for Rebecca Sullivan, “ushering in a postmodern society of fragmented identities
not merely at the level of the social, but also at the level of our genetic material, which is increasingly being viewed as a natural resource that will lead us to greater prosperity and well-being as a nation” (p. 41). This is evidenced by, among other things, the Canadian government’s substantial investment in genetic research through Genome Canada ($600 million by February 2006) and its aim to see Canada emerge as one of the top five industrial leaders in the biotechnological sector by 2010 (www.genomecanada.ca; Sullivan, 2005). Indeed, according to the Canadian Biotechnology Advisory Committee, Canada already ranks second in number of biotech firms and third in revenue generation among all nations (Sullivan, 2005).

The question that emerges from all of this, it seems to me, is: how might we prevent the emergence of what Rifkin calls a “commercial eugenics civilization” in the name of public health and social equality, while also supporting women’s ability to control their fertility? Moreover, how might we do this within a framework that is cognizant of the fact that Canadian legislation is not impermeable to transnational capitalism and other agents of geneticization within and outside of the nation-state?

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References

