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Banning Bans on New Reproductive and Novel Genetic Technologies

Matthew Herder[†]

Abstract:

Commentators argue that statutory prohibitions with the force of the criminal law should not be used to regulate new reproductive technologies (NRTs) and novel genetic technologies (NGTs). Bill C-13, the *Assisted Human Reproduction Act*, however, codifies 10 criminal bans. This paper considers the merits of the various arguments levied against Bill C-13, and the corollary claim that only a “non-prohibitive” model of legislation befits NRTs and NGTs.

Three types of arguments are used to critique criminal bans:

- (1) **“Structural” arguments** hinge on the constraints of the Canadian legal system — legislation complete with prohibitions runs afoul of the *Constitution Act 1867*, violates the *Canadian Charter of Rights and Freedoms*, and cannot keep pace with scientific progress.
- (2) **“Consequentialist” arguments** focus on the potential results of enacting a statute carrying criminal bans — criminalization will chill research, drive research underground, encourage researcher forum shopping, fuel public misperception by reinforcing genetic determinism, and effectively foreclose important dialogue on NRTs and NGTs.
- (3) **“Theoretical” arguments** relate to the very nature of criminal law — prohibitions will be unenforceable; the criminal law, a model of “command and control”, will be ineffective in shaping research practice; and moral ambiguity can support only regulation, as consensus is a *sine qua none* for criminal bans.

All the arguments in opposition to criminal bans prove unpersuasive; moreover, they fail to substantiate a non-prohibitive alternative for NRT–NGT regulation. Bill C-13 should therefore be proclaimed into law; per-

haps then commentators will actually theorize about the harms, or lack thereof, of particular NRTs and NGTs.

Introducing the Arguments

Commentators argue that NRTs and NGTs should not be regulated, even if only in part, by way of statutory prohibitions with the force of the criminal law. In essence, they claim legislation without criminal bans is better. The Canadian Parliament, however, may not be persuaded. Bill C-13, the *Assisted Human Reproduction Act*, which includes several criminal bans, has already passed second reading.¹ In this paper, I consider the merits (and demerits) of all the arguments that have been levied in protest of Bill C-13’s current form, and the corollary claim that, taken together, these arguments favour a “non-prohibitive” or “regulatory” model of legislation for NRTs and NGTs.

It is not my aim to review the extensive legislative history of Bill C-13, and the variety of initiatives that preceded the Bill, though the specifics of those initiatives do factor into the analysis, adding context to the arguments that are identified. In fact, the literature from which the arguments are abstracted largely predates Bill C-13, and grew in response to past initiatives. Articles attacking the provisions of Bill C-13 essentially recycle many of the same arguments, supporting the contention that attempts to utilise the criminal law power have stymied legislative action up to this point. This paper aims to decipher whether that should be the case; insofar as the identified arguments can be substantially undermined, the debate needs to take a new direction.

Bill C-13 combines a regulatory scheme with statutory prohibitions.² The controversy centres on the 10 prohibited activities, however, listed in section 5 of the Bill.³ Only these statutory prohibitions, which attach maximum penalties of a \$500,000 fine and/or 10 years’ imprisonment,⁴ have attracted explicit criticism as “blunt instruments” of the criminal law. Yet Bill C-13

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provides that all other contraventions of the Bill itself, or regulations made under it, or the terms and conditions of a licence, are punishable by a maximum fine of \$250,000 and/or imprisonment for up to five years.⁵ Any breach of section 5 can attract prosecution as an indictable offence or as a summary conviction offence; the same applies for a breach of any of the other provisions, regulations, or licence terms. Commentators have not always been careful to articulate whether their criticism of Bill C-13's use of the criminal law extends beyond section 5. This suggests that commentators are less concerned about the use of the criminal law in principle, and more about what precisely is the subject of prohibition.

Therein lies the superficiality of the present debate. Critics are, for the most part, squabbling over the alleged features of the criminal law, as opposed to proffering why (or why not) they view a particular activity as appropriate for prohibition (or not). In keeping with the literature, I will restrict my focus to section 5⁶ and the appropriateness of criminalizing those activities in an effort to move the debate past this level of superficiality. To avoid a taxonomy dispute, only the offences created by section 5 of Bill C-13 will be regarded as "true crimes".⁷

Furthermore, I do not question whether legislation (of any kind) is needed.⁸ Existing mechanisms such as self-regulation and established civil and criminal laws are, in my view, not adequate responses to NRTs and NGTs.⁹ I will also assume that the statutory prohibitions are drafted with precision sufficient to satisfy the "principle of legality" — the requirement that the law be knowable in advance.¹⁰

The paper is divided according to argument type. In my estimation, there are three different types of arguments used to critique criminal bans: "structural" arguments, "consequentialist" arguments, and "theoretical" arguments. **Structural arguments** hinge on the constraints of the Canadian legal system bearing upon Bill C-13 — legislation complete with prohibitions potentially runs afoul of the division of powers set out by the *Constitution Act, 1867*¹¹ and/or violates the *Canadian Charter of Rights and Freedoms*,¹² and legislation cannot keep pace with scientific progress (it is too difficult to amend). **Consequentialist arguments** highlight the potential effects of enacting a statute that carries the force of criminal law — criminalization will chill research, and/or drive the research underground beyond regulation, and/or encourage forum shopping, and/or fuel public misperception by reinforcing genetic determinism, and/or put an end to dialogue. **Theoretical arguments** relate to the very nature of criminal law — these prohibitions will be unenforceable; the criminal law, a model of "command and control", will be ineffective in shaping research practice; and moral ambiguity can support only regulation, as consensus is a *sine qua none* for criminal bans.

The paper takes on all these arguments in that order. Compartmentalizing arguments in this fashion reveals significant crossover of premises and claims. The structural argument that criminal bans are inflexible appears to underpin several other claims, including, for example, that prohibitive legislation will not be effective in the NRT–NGT context. Compartmentalization is thus analytically profitable; if a claim is demonstrably suspect, the force of a "new" claim, which relies on the suspect claim, is weakened — reassertion is not persuasive argument.

One claim, however, transcends nearly all the arguments made against the use of prohibitions: legislation, which codifies a purely regulatory approach, is better suited for NRTs and NGTs. The arguments against criminal bans are, in opponents' minds, markedly less problematic when applied to a non-prohibitive scheme. To assess this corollary claim, it is essential to envisage an alternate form of Bill C-13 throughout this paper. Timothy Caulfield sketches the following:

There is an alternate, non-prohibition model that would allow the federal government to achieve its stated policy goals and produce a more flexible and effective regulatory environment.

The federal government could create a regulatory body empowered to both issue licences for a defined set of activities ... and produce, modify, and monitor a "moratorium list." This list would contain the activities which, at this time, should not be allowed (e.g., reproductive cloning). One of the primary advantages of such an approach is that the list could be amended and interpreted by the regulatory body instead of by Parliament. In addition, the law could set out a specific consultation process, thereby facilitating and promoting an ongoing, interdisciplinary dialogue on these important issues. By doing so, the regulatory body could respond to the issues associated with reproductive genetics in a more precise and flexible manner.¹³

Caulfield and other spokespersons for the non-prohibitive alternative are looking primarily at the framework in place in the United Kingdom. The *Human Fertilisation and Embryology Authority* (the HFEA), created pursuant to the *Human Fertilisation and Embryology Act* (the HFE Act) has regulated NRTs for over a decade and NGTs more recently.¹⁴ This experience presents a wealth of information, which Canadian legislators should carefully scrutinize. The operation of the HFEA and the UK legislation is analysed in the context of several of the arguments below.¹⁵ However, it is worth noting at the outset that this legislation contains general prohibitions under threat of criminal sanction.¹⁶

Indeed, Bill C-13 and the HFE Act illustrate the defects of a prohibitive/non-prohibitive dichotomy. Various classifications can be devised for the range of legislative approaches.¹⁷ After due consideration of all the arguments canvassed in the course of this paper though, a fair assessment of the two competing legislative models (prohibitive and non-prohibitive) should emerge.

Structural Arguments

Structural arguments question whether the federal government *can*, in the legal abstract, legislate in respect of NRTs and NGTs. Merely invoking the spectre of constitutional challenge is a specious argument. If that were sufficient, Parliament might never enact laws. Still, because structural arguments have been made on repeated occasion, in the Canadian context and abroad,¹⁸ they merit more generous analysis. The arguments in this part, however, depend uniquely on the Canadian Constitution and law-making processes in Parliament generally.

The Division of Powers

The division of powers argument, broadly speaking, is that Bill C-13 is inconsistent with the federal government's sources of jurisdiction as entrenched in the *Constitution Act, 1867*.

As a federal state, Canada divides powers or responsibilities between the federal government and the provincial governments. The heads of power for each level of government are listed in sections 91 and 92 of the *Constitution Act, 1867*, respectively. Legislation outside the authority of the enacting government (contrary to the division of powers) is *ultra vires* and therefore of no force and effect. The division of powers test involves two steps: first, the primary aim of the legislation — its “pith and substance” as distinguished from its “merely incidental effects” — is deciphered; second, whether the pith and substance of the legislation falls within the powers of the government seeking to enact is determined.¹⁹ To effectively engage with the arguments against federal legislation affecting NRTs and NGTs, which turn on the second step of the division of powers test, it is necessary to characterize the pith and substance of Bill C-13.

Bill C-13 in Pith and Substance

The text itself is the logical starting point. Section 2 of Bill C-13, a statutory declaration, reads as follows:

(2) The Parliament of Canada recognizes and declares that

- (a) the health and well-being of children born through the application of assisted human reproductive technologies must be given priority in all decisions respecting their use;
- (b) the benefits of assisted human reproductive technologies and related research for individuals, families and for society in general can be most effectively secured by taking appropriate measures for the protection and promotion of human health, safety, dignity and rights in the use of these technologies and in related research;
- (c) while all persons are affected by these technologies, women more than men are directly and significantly affected by their application and the health and well-being of women must be protected in the application of these technologies;
- (d) the principle of free and informed consent must be promoted and applied as a fundamental condition of the use of human reproductive technologies;

- (e) persons who seek to undergo assisted reproduction procedures must not be discriminated against, including on the basis of their sexual orientation or marital status;
- (f) trade in the reproductive capacities of women and men and the exploitation of children, women and men for commercial ends raise health and ethical concerns that justify their prohibition; and
- (g) human individuality and diversity, and the integrity of the human genome, must be preserved and protected.

This declaration strives to strike a balance: a balance between the potential benefits that NRTs and NGTs are thought to hold, and the harms that those technologies potentially bring to bear.²⁰ That the legislation may not be the most effective means of securing this balance or that the harmfulness of the activities that it prohibits is subject to question does not detract from its pith and substance.²¹ Bill C-13, unequivocally, is directed at safeguarding the public interest in NRTs and NGTs. The Bill recognizes that these technologies may deliver tremendous health benefits to Canadians while acknowledging that they bring into play fundamental issues of morality affecting women and children in particular, but also humanity as a whole.

The Legislation is *Ultra Vires* Parliament

NRTs and NGTs are nonetheless nebulous subject matter. The issue, then, is whether they are amenable to any of the listed sources of federal jurisdiction. In the past, the Royal Commission on New Reproductive Technologies claimed that legislation would be grounded in several heads of power, including peace, order, and good government (POGG), the criminal law, trade and commerce, and the spending power.²²

Martha Jackman posits instead that legislation like Bill C-13 may be unconstitutional because it is akin to public health legislation,²³ and “health” is subject matter that has traditionally been assigned to the provinces.²⁴ However, a comment by Jennifer Llewellyn, Jocelyn Downie, and Robert Holmes, in relation to research involving humans (RIH), which applies equally to NRTs and NGTs, is apposite in effectively answering this objection:

It is important to recognize ... the opening words of s. 92 “[i]n each province” as a limitation to the scope of provincial jurisdiction ... The limit is intended not only to protect against provincial intrusion into the federal sphere of authority, but also to ensure one province cannot trench on the powers of another province ... This may pose significant difficulties in the context of RIH given the extent to which research projects are integrated and carried out simultaneously in different locations in different provinces. It is generally necessary for research protocols to be consistent in all locations and thus the regulations of one province are bound to have effects on the conduct of researchers engaged in the same project in other provinces. Further, even in cases where the research is located within the boundaries of a single province, the results and effects of the research are not. The products of such research will reach those beyond the territory or province.²⁵ [footnote omitted]

Laws targeting public health issues have, moreover, been upheld as valid exercises of federal jurisdiction,²⁶ but not on the basis of the POGG power.²⁷ Rather, such legislation is constitutionally sound if tied to the criminal law power. The federal government has made this link express, stating in May 2001 that, “[t]he draft legislation is founded upon federal responsibility for criminal law, as is other health protection legislation such as the *Food and Drugs Act* and the *Tobacco Act*.”²⁸ That the Bill is decidedly about morality, a purpose central to criminal law,²⁹ is plain from the statutory declaration and also the very nature of NRTs and NGTs:

In much the same way as the courts have found that only Parliament has the jurisdiction to criminalize (or conversely, decriminalize) abortion, similar authority would exist it seems for the criminalization of such controversial practices as cloning, the creation of human/animal hybrids, use of fetal tissue and stem cells, etc.³⁰ [footnote omitted]

Thus Parliament can enact Bill C-13 as it presently stands pursuant to subsection 91(27) of the *Constitution Act, 1867*, jurisdiction over the criminal law.³¹

Parliament Cannot Enact a Regulatory Regime

Jackman, as well as Allison Harvison Young and Angela Wasunna, alternatively suggest that predominantly regulatory legislation escapes federal authority.³² While Bill C-13 is referred to as prohibitive throughout this paper, it potentially fits this description.³³ Nevertheless, as Llewellyn, Downie, and Holmes persuasively explain, recent Supreme Court of Canada jurisprudence gives ample scope to use the criminal law power to deploy a complex regulatory scheme.³⁴

There are some limits on this deference, however, and one in particular is germane in view of the non-prohibitive alternative described above. Caulfield advocates for a “moratorium list” of proscribed activities, as opposed to full-fledged criminal bans, which could be modified by a regulatory body. In a recent decision, the Supreme Court held that a regulatory body that has the authority to “define offences” is outside the proper exercise of the criminal law power.³⁵ This significantly undermines the claim that a non-prohibitive approach is optimal, from a division of powers perspective.

The Charter

The other line of attack under the Constitution relies on the *Canadian Charter of Rights and Freedoms* (the Charter). If any of the statutory prohibitions in the Bill are found to contradict the rights and freedoms proscribed by the Charter, then that prohibition may be declared of no force or effect. In theory, the proposed Act in its entirety could be struck down.³⁶ If, however, there is only a chance of conflict with constitutionalized rights and freedoms, legislation respecting NRTs and NGTs should not be forestalled. Ban opponents advance two possible Charter infringements: infringement of freedom of expression and infringement of the right to liberty, contrary to paragraph 2(b) and section 7, respectively.

Banning Cloning Violates Freedom of Expression

Barbara Billingsley argues that the prohibition on cloning, which encompasses both so-called “reproductive” and “therapeutic” cloning,³⁷ potentially violates the freedom of expression guarantee.³⁸ She concludes that, “the question of whether the [cloning ban] unjustifiably violates s. 2(b) of the Charter is a very good question indeed” because the answer is “complex and not easily determined”.³⁹ For the following reasons, I disagree.

To qualify as expression for the purposes of paragraph 2(b), the alleged expression has to convey meaning.⁴⁰ Billingsley anticipates the argument that “the physical procedure itself does not communicate a message”, and the related claim that the ban does not prohibit research writ large, but rather “only one element of research”.⁴¹ In response, she offers a different view of research: therapeutic cloning, or the conduct of an experiment involving therapeutic cloning, conveys meaning inasmuch as it is viewed as part of a scientific process, emanating from a scientific hypothesis, in which the act of choosing to do one experiment over others is reflective (or communicative) of that hypothesis. This process — generation of a hypothesis followed by experimentation to test that hypothesis — she argues, conveys meaning “regardless of whether the experiment’s results are recorded or disseminated”.⁴²

The difficulty with her reasoning is that it assumes that the hypothesis underlying an experiment is discernable from the choice of experiment. But the exact experiment could be performed to test the hypothesis “X” (e.g., cell growth) and “not X” (e.g., no cell growth). If cell growth results, the experiment provides support for the hypothesis “X”. If cell growth does not result, the experiment provides support for the hypothesis “not X”. Because the hypothesis cannot be deciphered when only the experimental procedure is known, the meaning of the experiment is lost. In terms of paragraph 2(b) of the Charter, the conduct of an experiment by itself is not communicative when, by definition, the experiment’s hypothesis could either be “X” or “not X”.

Billingsley does, to a limited extent, recognize that the meaning of an experiment may be plural:

a scientist [who] decides to test his or her hypothesis about cell growth by using only certain types of cells ... may be conveying the message that the hypothesis is applicable only to certain cells, that the use of other cells is unethical or immoral, or that the hypothesis is most easily demonstrated by the selected cell group.⁴³

However, these various possible implications all follow from a prior understanding of the cell growth hypothesis, which is not self-evident from the experimental procedure. Thus the objection Billingsley anticipates — the conduct of the experiment itself is non-communicative — is not answered.

Alternatively, Billingsley suggests that even if the conduct of this research lacks meaning, it is logically inseparable from recording and disseminating the results

of that research.⁴⁴ However, it is logically possible to conduct the experiment without recording or disseminating any results. Of course a scientist could attempt to clone a human being without writing anything down. Thus, while the recording and dissemination may be expression, the cloning itself is not.

Billingsley's arguments in support of the claim that the act of experimentation itself qualifies as expression protected by paragraph 2(b) are unconvincing; as such her section 1 Charter analysis does not merit further discussion.

Banning Cloning Violates Liberty of the Person

Another possible argument against Bill C-13 is that prohibiting reproductive cloning violates the right to liberty of the person because it is a denial of "procreative liberty". To date this argument has not surfaced in the Canadian debate.⁴⁵ Notable American commentators, including John Robertson and Ronald Dworkin, have put forth this claim in relation to the American Constitution, however, so it is worthy of brief consideration in light of Canadian jurisprudence.⁴⁶

The liberty interest enshrined by section 7 of the Charter is "engaged where state compulsions or prohibitions affect important and fundamental life choices" (i.e., it protects individuals' personal autonomy).⁴⁷ However, such "autonomy is not synonymous with unconstrained freedom".⁴⁸ To attract section 7 protection, it appears that paramount importance would have to be placed on an individual's desire to have a genetically related child. But this borders on the absurd:

It cannot be just the genetic tie that is important in human reproduction, because if it were, this could be accomplished by having one's twin brother have a child with one's wife — the genetic tie would be identical, yet few, if any, would argue that this method of reproduction should satisfy the twin's right to have a "genetically-related child."⁴⁹ [footnote omitted]

There are strong countervailing concerns (e.g., harm to the resulting cloned child and breaches of the child's section 7 rights), which many argue demand this limit on reproductive freedom, if it can even be termed reproduction.⁵⁰ Thus a ban on reproductive cloning constitutes a perfectly legitimate constraint on individual liberty and is in accordance with the principles of fundamental justice; that a court in Canada might decide otherwise appears unimaginable at this stage.⁵¹

The paragraph 2(b) and section 7 Charter arguments against Bill C-13, specifically the prohibition on cloning delineated in paragraph 5(1)(a) of the Bill, are spurious. Indirect support for a non-prohibitive piece of legislation is therefore wanting. A latent concern about the flexibility of statutory bans as compared to regulations seems to underlie Billingsley's analysis;⁵² this structural argument is dealt with next.

Law-Making Processes

Commentators have questioned the appropriateness of statutory prohibitions because legislation, allegedly, takes too long to enact or amend, whereas regulations can be issued more rapidly. This poor timeliness is seen as particularly problematic in the area of NRTs and NGTs because it is "characterised by rapid scientific and clinical developments".⁵³ I will consider these two related criticisms claims in succession.

Legislation is More Difficult To Amend or Enact Than Regulations

It has already been pointed out that legislation can in theory be enacted in as few as 24 days in Canada,⁵⁴ while Bill C-13 establishes a regulation-enacting procedure that can require 60 days.⁵⁵ Caulfield, one of the primary advocates of the timeliness claim, concedes the fact but cautions that swift Parliamentary action is exceptional, maintaining that, "the pace at which Parliament typically moves to enact or amend legislation [contrasts readily with] the flexibility and responsiveness that would characterize a regulatory body."⁵⁶ This claim is based on a misperception of the speed of regulatory action. More importantly, his rebuttal misses the point: it is all about political will. Parliament acts quickly when it wishes to do so. The form of law — legislation versus regulation — is not controlling. The amendments to the statutes governing remuneration of members of the House of Commons and Senate provide an all too perfect example. Bill C-28, as it was called, was introduced on June 4, 2001, and received Royal Assent only 10 days later.⁵⁷ In sharp contrast, efforts to revamp Canada's blood safety system by the enactment of new regulations under the *Food and Drugs Act* have been underway for an extended period. Health Canada expects the new regulations, which are to be based upon "safety standards" first drafted in 1997 but still under development, to be fully implemented sometime in 2005.⁵⁸

Recent experience in the UK is also significant in this regard. In response to a judgment issued by the High Court, which excepted embryos created by somatic cell nuclear transfer from the purview of the HFE Act,⁵⁹ Parliament passed the *Human Reproductive Cloning Act 2001*.⁶⁰ The judgment was dated November 15, 2001, and the statute was given Royal Assent on December 4, 2001. Though the decision was later overturned at the Court of Appeal,⁶¹ the UK Parliament did not delay, for fear that someone might create a human clone. By contrast, while many commentators have applauded the UK's model of regulation for its adaptability and (primarily) non-prohibitive approach, it does not follow that such a model is necessarily more streamlined. The HFEA has not acted on a research licence application filed by

the Roslin Institute to do therapeutic cloning, one way or the other, for more than a year.⁶²

Statutory Prohibitions Cannot Keep Pace With Scientific Change

The argument that criminal bans are more cumbersome than regulations affecting the instant technologies is further weakened by observing that the rate of scientific change is not as rapid as it often appears. There is supposedly a race amongst the 'mad scientists' and groups like the Raelians to be the first to clone a human being. Assuming that cloning a human was not considered undesirable, current best estimates place safe cloning of human beings (i.e., reproductive cloning) a hundred years away.⁶³ If the "other" kind of cloning dubbed therapeutic cloning, based on the very same scientific technique, takes even one-tenth the time to become safe, an existing ban could be repealed or modified 56 times over.⁶⁴

According to Dorothy Wertz, Marie-Hélène Régnier, and Bartha Knoppers, time is not enough. They write, "[t]oday's laws become tomorrow's embarrassments when new technologies appear", citing Germany, Sweden, and Denmark as examples of jurisdictions where destructive embryo research is criminalized.⁶⁵ Wertz *et al.* assume that because the onset of embryonic stem cell research has engendered political debate in those countries over pre-existing laws, and the laws have not been repealed or modified as a result of those debates, the laws have proven "impossible to change".

This ignores the possibility that the deliberating governments decided that it was not preferable to alter those laws.⁶⁶ Consider the German experience. The *German Embryo Protection Act*, which prohibits the destruction of embryos for any purpose, came into force in 1991.⁶⁷ Following the now-infamous 1998 experiments reporting on the therapeutic potential of embryonic stem cells, German researchers found a legal loophole and argued that importing stem cells derived abroad does not contravene the law.⁶⁸ The central public funding organization for academic research in Germany (the DFG) published a press release affirming this opinion in March 1999.⁶⁹ The Study Commission on Law and Ethics in Modern Medicine, and the German National Ethics Council (GNEC), both created by Parliament, issued separate reports on 12 November 2001, and 20 December 2001, respectively. Members in each were deeply divided, with the majorities reaching opposing conclusions.⁷⁰

Yet the ultimate decision incorporated aspects from both bodies:

On 30 January 2002, the German Parliament voted with a large majority to uphold embryo protection, emphasizing the strict prohibition of any research on embryos that leads to embryo destruction. It voted for prohibiting, in principle, the import of ES cells and, at the same time, decided that a law should be passed to establish criteria for the exceptional import and use of ES cells in Germany. . . The Stem Cell Law

was passed on 25 April 2002 and came into force on 1 July 2002.⁷¹

Thus in Germany the laws were not impossible to change *per se*; rather, the government chose not to change them in the direction that Wertz *et al.* appear to have desired. The debate did take time, but far from being counterproductive. It is also critical to note that the DFG, the research funding body, was paralysed during all this notwithstanding the fact that it did not consider stem cell imports to be illegal. The DFG received an application to do such research in the summer of 2000, but it withheld approval until the day after Parliament voted in January 2002; the funds were frozen until the new law came into being seven months later.⁷²

Scientific advance is likely to test the scope and precision of laws. However, it does not follow that regulatory bodies will feel empowered with sufficient authority to make controversial decisions, absent specific guidance from government. This belies any claim that non-prohibitive legislation dependent on the promulgation of regulations by a regulatory body can respond to scientific development more swiftly than Parliament.⁷³

Consequentialist Arguments

This category of argument speaks to the potential consequences of enacting a statute that includes statutory prohibitions backed by criminal sanction. Critics of Bill C-13 and other proposals claim that negative consequences will ensue if legislation with prohibitions is passed. I consider five overlapping arguments in this part of the paper.

Chilling Research

It is argued that if prohibitions are proclaimed in force, scientists will not undertake "valuable" research. It is also argued that the stigma associated with the commission of a crime, or the perception thereof, is bound to compromise the research agenda. Scientists, inhibited by the threat of criminal sanction, will avoid any activity remotely resembling conduct that is prohibited.⁷⁴ The intent of scientists will have to be policed from inside the laboratory walls, adversely impacting the research environment.⁷⁵ Still, these are all "chilling effect" arguments that either lack empirical support or are countermanded by the provisions of Bill C-13, which I illustrate starting with the last:

Bans Will Require Excessive Policing of Scientific Intent

Bill C-13 establishes an inspection and enforcement regime. Inspectors are given broad powers⁷⁶ and there are some positive duties placed upon the owner-operators of research facilities to facilitate inspection.⁷⁷ However, inspectors may not simply enter research facilities at

will; they must reasonably believe that a “controlled activity is undertaken or that there is any material or information in respect of which this Act applies or any information pertaining to a controlled activity”.⁷⁸ If the location is a dwelling house, then a warrant must first be obtained,⁷⁹ and the inspectors’ expertise⁸⁰ should allay researchers’ fears of false criminal allegations for lawful activity.

Bans Will Cause Lawful Research to be Avoided

The suggestion that scientists are likely to avoid an activity because it might be seen to remotely resemble prohibited conduct is curious, given that expert inspectors should be able to keenly distinguish between prohibited and non-prohibited forms of research. Unless the prohibitions are vague⁸¹ or otherwise imprecise, then this is unpersuasive. For the purposes of this paper, however, I have assumed that vagueness is not a problem. (Definitional problems will hopefully be remedied prior to Bill C-13 passing.) Sticking to that assumption then, prohibitions may actually encourage researchers. At the moment, scientists in Canada express hesitation over proceeding in a vacuum; unequivocal rules may actually be less chilling than the status quo.⁸²

Bans Will Force Researchers to Forego Valuable Research

First, it is not known that any of the research activities prohibited by section 5 of the Bill will prove valuable. Proponents of this chilling effect argument are likely to respond that this is why the research must proceed. But is this in fact the underlying concern? Are critics motivated by a concern about lost therapeutic value or some other value (e.g., economic value)? And are such other ends equally worthy of pursuit? Or is a technological imperative — the idea that if something can be done it will be done, and even should be done — behind the rhetoric of scientific inquiry?

Cutting off an avenue of research, temporarily, might actually exert a positive effect. For example, the research agenda presently appears skewed in favour of embryonic stem cells, while studies evidencing greater pluripotency in stem cells derived from adult tissues than previously thought continue to appear.⁸³

Finally, additional risks attendant upon prohibited research activities countermand the relative value of those activities to some extent. Cloning to produce stem cells, for instance, poses an increased possibility of infinite cell growth and tumour formation.⁸⁴ Moreover, scientists are only beginning to identify the effects of cloning processes on the resultant organisms; one recent survey revealed a previously unrecognized pattern of defects in cloned animals.⁸⁵

Encouraging Forum Shopping

Commentators suggest scientists will leave the jurisdiction to pursue prohibited research in a foreign juris-

diction where it is not banned: “It will force U.S. scientists who have private funding to stop their research, and it will accelerate the brain drain to more enlightened countries.”⁸⁶ Those who are against including statutory prohibitions in Canadian legislation, posit the same.⁸⁷

Researchers Will Leave Canada

Researchers are certainly apt to move around. When the American President announced that research with stem cell lines derived after 9 August 2001, would be ineligible for federal funding, one leading scientist moved to the United Kingdom.⁸⁸ Researchers have also been drawn to Israel and Singapore, for their supposedly lax regulatory constraints, the lack of political controversy, and commercial ventures.⁸⁹

But to the extent that researcher movement has increased of late, the contention that it is motivated by anxiety or disdain for criminal prohibitions does not automatically follow. Jose Cibelli, for example, one of the first researchers to ever undertake somatic cell nuclear transfer experiments with human embryos while working for a private company in the U.S.,⁹⁰ recently resigned that position, accepting an offer from Michigan State University. In the state of Michigan, all cloning is criminally banned.⁹¹ Furthermore, because of the paucity of viable stem cells, there is an international eagerness to collaborate,⁹² notwithstanding the diversity of legal approaches to this research.

Cutting-Edge Research Will Not Be Performed in Canada

It remains possible that some researchers will leave Canada to pursue research projects that are banned by Bill C-13. Banning select research activities, opponents argue, therefore “assumes that cutting-edge research will be done elsewhere”.⁹³

This proposition, however, presumes that such “cutting-edge” research is worthy of pursuit. While scientists frequently take the position that a scientific problem should be approached with many different methodologies, they do not necessarily advocate for utilizing every conceivable technology. For example, Janet Rossant, one of Canada’s leading stem cell researchers, has expressed hesitation over undertaking chimera research, even though it may be the “gold standard” for testing the pluripotency of stem cells.⁹⁴ Reports of an American fertility specialist’s work creating “she-male” chimeric embryos have been condemned internationally for want of scientific utility,⁹⁵ though the she-male embryos are nonetheless the products of cutting-edge research.

Whether the prohibited NRTs or NGTs, the creation of chimeras included, will prove harmful (in any sense) remains to be seen. There is evidence and opinion supporting both promise and peril. If the argument from critics really is that a particular technology is more beneficial on balance, then they should make that argument beyond simply labelling it cutting-edge. Even so, Parlia-

ment's jurisdiction to enact criminal prohibitions is not at all dependent on causal evidence of harm.⁹⁶

Driving Research Underground

Young and Wasunna claim, in relation to the prohibitions on commercial surrogacy and ovum donation,⁹⁷ that criminal bans may force activities "underground".⁹⁸ The Young and Wasunna argument is also applicable to the section 5 activities: if bans are enacted, researchers will nonetheless research the prohibited technologies underground, resulting in harmful consequences.⁹⁹ Young and Wasunna explain, analogizing to abortion:

Prohibitions against abortion merely stopped the practice by those physicians who did not want to break the law. In other words, one might argue that it stopped the "best" of the abortion practitioners. In driving the practice underground, the legislation masked the existence and stifled the outcry that might have resulted if the real horror and costs had been known. The big losers were the women, and generally less affluent women, who were forced to go underground and were powerless and vulnerable in the event that they were mistreated, overcharged or butchered.¹⁰⁰

There are analogous demands that could fuel underground research of the section 5 activities, which might carry similar adverse outcomes. For example, the Bill only permits embryos remaining from assisted human reproduction endeavours (i.e., "spare embryos") to be utilized in research. There is a prohibition on the creation of embryos solely for research purposes (i.e., "research embryos").¹⁰¹ Françoise Baylis has noted that Canada is probably in short supply of spare embryos;¹⁰² therefore, researchers might decide to secretly contravene the research embryo creation ban to keep embryos in supply. Such underground research is likely to engender abuses insofar as there are fewer incentives to obey the requirements of consent and non-commercialization set out elsewhere in the Bill when the activity is not licensable in the first instance.

Furthermore, research is already occurring underground in the absence of legislation. Experiments breaching existing research guidelines have apparently become somewhat commonplace in Canada. The Raelians' efforts to clone a human are well publicized, but aptly described as "renegade".¹⁰³ To suggest that prohibitions on chimera-making and cloning¹⁰⁴ would increase the number of such unsupervised projects lacks any evidentiary basis. Bill C-13 is importantly unlike the abortion prohibition in that it creates an inspection and enforcement regime that serves to guard against potentially harmful practices. Accepting that there is no reason to believe that regulatory offences will prove easier to enforce than criminal bans,¹⁰⁵ the claim that criminal bans will lead to increased underground research is suspect at best. Given that underground abuses are inimical to the stated objects of Bill C-13, it is fair to assume considerable effort will be expended to target research practices in violation of the law.

Fuelling Public Misperception

Caulfield is the chief proponent of this argument:

[G]overnments should not jump to pass anti-cloning laws, particularly criminal laws, until they have clear and consistent justifications for a long-term ban. The use of rigid prohibitive legislation has the potential to do little more than formally legitimize inaccurate notions of genetic determinism.¹⁰⁶

I completely agree with two points that Caulfield makes — that justifications for bans need to be adequately articulated, and that the public needs to be engaged and informed. Yet I fail to see how these claims decidedly favour a non-prohibitive approach.

Eric Juengst criticizes George Annas's proposed treaty to ban "crimes against humanity" such as cloning and germ-line genetic alteration,¹⁰⁷ largely because the treaty ignores what Juengst describes as a more pressing concern — intolerance for genetic diversity.¹⁰⁸ This approximates Caulfield's concerns surrounding genetic determinism. As Juengst admits, however, the connection between banning a certain activity and fortifying a mistaken view is tenuous. For example, it is possible to suggest that laws prohibiting human or civil rights violations reinforce rather than undermine discriminatory attitudes. This is an empirical claim, to which there is no answer; codifying those prohibitions into law was arguably worth doing in any event.¹⁰⁹

Of course the issue of genetic determinism is open to debate. Whereas Caulfield predicts that by using prohibitions Bill C-13 will exacerbate these mistaken views,¹¹⁰ in direct contrast, Lori Andrews and Nanette Elster invoke genetic determinism as a primary justification for banning cloning.¹¹¹ "Banning cloning would be in keeping with philosopher Joel Feinberg's analysis that children have a right to an 'open future'... The risk here is of hubris, of abuse of power."¹¹² This type of philosophical engagement with the prohibited activities is currently absent in the context of Bill C-13, however.¹¹³ Thus, speculation one way or the other is not persuasive for the issue of inclusion or exclusion of criminal bans.

Greater articulation of the reasoning behind the prohibitions from Parliament, similar to more meaningful argument about NRTs and NGTs from commentators, is welcome.¹¹⁴ Other sections of the Bill, including the part setting out the "controlled activities", might benefit from further explanation as well. Intensifying public misperceptions is therefore not an argument against bans so much as a call for a commitment to enabling civic republicanism to counteract misperceptions. That commitment is what Annas's proposed treaty fails to pledge. In my view, legislation can combine statutory prohibitions with an aim to engage citizens. The final consequentialist argument considers whether criminal bans effectively foreclose that project.

Closing Off a Dialogue

LeRoy Walters claims that “a federal ban at this time would be premature: It would, in effect, announce a conclusion to a national and international ethical debate that is still ongoing.”¹¹⁵ Similarly, Susan Wolf comments that a ban “ends the important deliberation, embraces one absolutist moral perspective, and writes it into law.”¹¹⁶ In the Canadian context, Young and Wasunna argue that a “creatively designed regulatory framework ... would have the added benefit of being more accessible and democratic through open and continuing discourse with all stakeholders.”¹¹⁷ Similarly, Caulfield distinguishes: “The public message of a well-structured regulatory scheme should be that open, vibrant and continued dialogue is encouraged. The message of statutory bans is that public debate is closed.”¹¹⁸

This is an important objection, because if the impetus for the legislation is to secure the benefits of NRTs and NGTs for citizens, while safeguarding them from potential harms, Parliament cannot afford to alienate citizens in the process of discovering and deliberating about what those benefits and harms are.¹¹⁹ The effect of announcing a conclusion, as Walters puts it, is premised on either the idea that prohibitions are effectively carved in stone or that prohibitions impede consensus-seeking or deliberation altogether. The former premise, as shown above, is incorrect — finality is not inherent in a prohibition. With respect to the latter, two closely related claims bear examination: prohibitions limit debate, and a non-prohibitive legislative approach is more democratic.

Statutory Prohibitions Limit Dialogue

There are three counterarguments to this claim, each calling into question whether the existence of statutory prohibitions is in fact likely to inhibit discussion. First, entire pieces of legislation or changes to a law in force can be proposed at any time by way of private members’ Bills. (Many of the Bills proposing bans on cloning — some total and some prohibiting only reproductive cloning — in the United States Congress have been private members’ Bills.¹²⁰) This mechanism exists for members of the House of Commons to initiate debate in Parliament, and prohibitions provide fertile grounds for such action.

Second, irrespective of whether the private Bill mechanism is exercised, the federal government has promised to revisit the provisions of Bill C-13 and the administration of the statute as a whole within three years from the date it is proclaimed in force.¹²¹ This signals a commitment to ongoing debate and consultation.

Third, international experience reveals that bans have fuelled discussion as opposed to exerting a silencing effect. The German example is once more apposite. In the wake of the experiments detailing the tremendous therapeutic potential of embryonic stem cells, the gov-

ernmental research funding body released two separate opinions, and two separate committees were struck by Parliament to study and report on the ethical and legal issues, all of which energized debates in the German Parliament ultimately culminating in a Parliamentary vote. All this debate and discussion was made necessary by the *Embryo Protection Act*, which prohibits destructive embryo research. Perhaps discussion would not have occurred at all or to the same extent without that particular law in place. Certainly, the ban did not quell debate.

A Regulatory Approach Is More Democratic

Caulfield spins the argument about the speed of legislative amendment — “Parliament is fast enough” — to move to the issue of democratic accountability,¹²² and to help make the claim that a non-prohibitive approach is more democratic because it does not send the message that the debate is over. That is, no matter whether the debate is in fact closed, it will be perceived as being closed.

Assessing this objection necessitates an inquiry into the regulatory decision-making mechanisms contemplated by Bill C-13. Section 21 of the Bill establishes the Assisted Human Reproduction Agency of Canada (the “Agency”). Representation of laypersons on the Agency is not statutorily required, and there is no mandatory duty to consult the public.¹²³ Does this convey a strong message of support for open discourse? Moreover, the Bill requires that regulations made under the proposed Act be laid before the House of Commons, except in certain circumstances,¹²⁴ evidencing recognition of the special significance of democratic accountability in the NRT-NGT context. Only Parliamentary debate can claim legitimacy as representative of the views of Canadians. No such requirement of Parliamentary scrutiny exists in relation to research licences granted by the Agency.

The UK approach is instructive in this regard as well. Lee and Morgan explain:

In keeping with the generally flexible framework of the legislation, there are enabling provisions under s. 45 for the Secretary of State to make changes by way of regulations. *However, some provisions of the Act are so fundamental to the integrity of the scheme agreed on that they may not be changed without Parliamentary scrutiny ...* Section 45(4) provides that the Secretary of State may not make regulations which would permit the hitherto prohibited keeping or use of an embryo (under s. 3(3)(c)) without the opportunity for full Parliamentary consideration secured by the affirmative resolution procedure. A similar reservation is made in respect of any proposal to relax regulations prohibiting the storage or use of gametes (s. 4(2)) or any changes proposed under sch. 2, para. 1(1)(g) or (4). These last provisions concern, respectively, the practices which may be authorised in a treatment licence and a condition in a research licence which authorises the alteration of the genetic structure of an embryo cell. If any amendment is proposed to either of these provisions it must be the subject of affirmative Parliamentary scrutiny.¹²⁵

The HFE Act does allow for amendment of prohibitions by regulation, but only after debate by elected representatives. The legislation thus underscores the importance of democratic accountability when the “provisions ... are so fundamental to the integrity of the scheme”.¹²⁶ In other words, the means by which amendment is initiated, by Parliament itself or the regulatory body, is not all-important. However, the forum where such a key decision is made is. And the presence of statutory bans ensures that Parliament is the decision-making forum.

Debates among members of the Agency (the Canadian analogue of the HFEA) about which research projects to license and not to license, carry no guarantee of civic participation nor even public knowledge of those debates. If all the activities that are presently prohibited were instead listed as controlled activities, citizens might interpret a wholly different message than support of open dialogue, one that does not comport with the pith and substance of Bill C-13:

When a scientific activity has the potential to devalue human life and undermine the principles of human equality and dignity, that activity deserves to be met with a powerful and meaningful response ... Legislation based on a regulatory framework would not provide such a response ... The baseline assumption would be that the activities in question are acceptable. A regulatory approach therefore fails to capture and communicate the importance that should be attached to the values of human life and dignity.¹²⁷

In short, the basis for the claim that legislation, wholly regulatory in character, is somehow more amenable to continued discourse or is more consistent with democracy, is very thin. Moreover, such an approach may dilute the significance of the issues (moral, health, safety) relating to NRTs and NGTs. The interpretation of the message conveyed by a non-prohibitive statute crosses over into criminal law theory, which comprises the third and final category of argument against Bill C-13's inclusion of bans.

Theoretical Arguments

The arguments in this section trade on the nature of the criminal law, its proper ambit and its limitations. From enforcement to efficacy, two obviously linked concerns, and then to the claim invoking moral ambiguity, these arguments increasingly depend on theoretical cogency.

Enforcement

The Bill devotes an entire part to “Inspection and Enforcement”, detailing who can be appointed as inspectors, their tenure, powers, and functions.¹²⁸ The Bill provides that inspectors should possess expertise specific to the NRT-NGT context.¹²⁹ Young and Wasunna nevertheless take the view that the activities banned are distinguishable (in terms of enforcement) from “more typical violations of the criminal law, such as assault, robbery or break and enter.”¹³⁰ The intent of scientists will be diffi-

cult to monitor, therefore, enforcement will be a problem.¹³¹ Furthermore, they claim it is not plain what the appropriate burden of proof is for these novel crimes.¹³²

As to the burden of proof, this issue is by no means unique to these prohibitions. Sexual assault, ostensibly one of the “typical” crimes cited by Young and Wasunna, is a prime example.¹³³ To the extent that prohibited research activities do go underground, they become more akin to typical crime. The issue of deciphering intent arises because the prohibitions might be fraught with ambiguity.¹³⁴ However, that goes to the precision of the prohibition as drafted, not to the use of the prohibition in principle.

The primary difficulty with this line of argument, though, is that it offers no support for the corollary claim favouring a non-prohibitive approach. Young and Wasunna argue that the “subsequent enforcement of law depends on a certain level of commitment to the goals” of the legislation.¹³⁵ Commitment is necessary to enforce prohibitions; equally, commitment is needed to enforce a regulatory scheme. Even conceding that NRTs and NGTs are qualitatively different than all other crimes, it does not follow that enforcement of conditions of a research licence will be any easier.¹³⁶ A non-prohibitive jurisdiction does not escape enforcement issues.¹³⁷ In terms of infrastructure, the UK's HFEA employs part-time inspectors and “there is clear evidence that inspections have been inconsistent from the inception of the HFEA” because many of the inspectors have significant ties to the field.¹³⁸ Thus legislation that is exclusively regulatory runs the risk of instilling a false sense of public confidence in the system,¹³⁹ giving an inaccurate perception that the scheme, as a whole, works.

Efficacy

The efficacy argument is that the prohibitive model of regulating NRTs and NGTs will not work. This claim may arise in two distinct guises: the first recycles the flawed “legislation cannot keep pace with the science” argument, and the second characterises the criminal law as a model of coercion, of “command and control”.¹⁴⁰

Scientific Change Undermines the Efficacy of the Legislation

The political will counterargument still applies, but it is useful to recount in greater detail an example described above that is directly on point. The example reinforces the view that when the science surpasses a law's plain wording, the scheme is not rendered defunct.

The HFE Act prohibits granting research licences that authorize “replacing a nucleus of a cell of an *embryo* with a nucleus taken from a cell of any person, embryo or subsequent development of an embryo”.¹⁴¹ However, the so-called “Dolly technique” made it possible, in theory, to make a human clone without breaching the statute. In fact, such an experiment is possibly not even within the jurisdiction of the HFEA.¹⁴² The Dolly

procedure for cloning appears to fall outside the relevant prohibition because it requires the nucleus to be introduced into an enucleated ovum, not an embryo. Thus the procedure was not, literally speaking, within the ambit of the statute. Lee and Morgan describe the perceived impact of this scientific development:

The “Dolly technique” not only stormed the popular imagination and gave the *Boys from Brazil* their greatest exercise in the last 15 years, it again appeared to shake the foundations on which the 1990 Act had been built; the scientific rocks on which the legislative house had laid its foundations were being battered by the waves of scientific endeavour and coming increasingly to resemble the shifting of sands on which public policy’s slippery slopes have their first outing: law was surfing again the turbulent seas of chaos theory.¹⁴³

The Pro-Life Alliance subsequently brought a challenge to the UK High Court, contending that the HFE Act does not catch the entity created by the Dolly procedure.¹⁴⁴ The Court agreed, but the decision was later overturned.¹⁴⁵ The UK Parliament intervened in the interim, however, enacting legislation to extend the scope of the prohibition.¹⁴⁶ The integrity of the scheme was not surrendered by a dated prohibition.¹⁴⁷

Coercive Legislation is Counterproductive

A second version of the efficacy argument identifies the criminal law as a model of “command and control”, and as such liable to “being co-opted by dominant social forces in ways that can often undermine the very initiatives which led to its creation”.¹⁴⁸ For example, Bill C-13’s prohibition of germ-line genetic alteration¹⁴⁹ is possibly intended to respond to fears that such interventions could cultivate a demand for “designer babies”, which one day could give rise to a state of affairs where parents who possess the requisite means actively seek to enhance their genetic endowment, creating two classes, the “GenRich” and “the naturals”.¹⁵⁰ Nevertheless, the same evil targeted — genetic determinism — may be encouraged, it is thought, by criminalizing those classes of interventions.¹⁵¹ The same objection might be levied against human rights codes, however, which have so far failed to eradicate prejudicial and misinformed attitudes. But prohibiting discrimination is still laudable. Provided at least that legislators and, in turn, regulators endeavour to consult and involve the citizenry, the risk posed by dominant social force with respect to NRTs and NGTs should be continuously guarded against.

A second tack against this command-control claim is to ask, “What is the appropriate measure of efficacy?” It is generally unclear whether the host of behaviours addressed by the *Criminal Code* are effectively suppressed or simply managed by the fact of criminalization. Thus the claim that a command-control approach is ineffective in preventing certain activities is not restricted to the activities listed in the Bill, nor a function of some quality that the NRTs and NGTs share. Similarly, it is difficult to decipher whether a regulatory body is succeeding in the execution of its oversight responsibilities.¹⁵² Not fitting a command-control description does not make efficacy any less important, however.

Thirdly, the sufficiency of this command-control characterization of the criminal law is subject to challenge. Certainly, criminal prohibitions aim to shape behaviour, penalizing breaches of the standards they set out. Yet the criminal law is not frozen either in terms of the subject matter to which it can be appropriately applied or in terms of the various forms by which it could be implemented.¹⁵³ In theory, there is potential scope for crafting prohibitions backed by criminal penalties to reflect specifics of the subject matter targeted by Bill C-13. The final argument in the paper questions whether an alleged characteristic of NRTs and NGTs — moral ambiguity — eliminates any such scope.

Moral Ambiguity

The claim here is: “The public tends to demand prohibition of conduct that is universally opposed, but expects issues of moral ambiguity to be regulated.”¹⁵⁴ Regardless of the authority of this proposition, it is critical because it requires exclusion of NRTs and NGTs from the proper ambit of the criminal law by definition; it does not purport to rely on non-existent evidence or misperceptions about the making of laws. Caulfield builds on this argument:

We do not make something a statutory criminal offence simply to ensure oversight by elected officials. There must be something about the specific act to warrant the application of the strongest of our regulatory tools . . . To date, these clear justifications have been absent. And given the shifting nature and moral ambiguity of the topic, I believe clear, generally accepted rationales for many of the suggested statutory bans will always remain elusive.¹⁵⁵

The Law Commission of Canada has in the past buttressed this view, stating that only “conduct which is culpable, seriously harmful, and generally conceived of as deserving of punishment” is within the proper reach of the criminal law.¹⁵⁶ NRTs and NGTs, it seems, lack these qualities. Indeed, the literature is replete with disagreement about the harmfulness of NRTs and NGTs,¹⁵⁷ and demonstrable in public opinion as well.¹⁵⁸ Consensus at the Parliamentary level (as a reflection of society) is therefore unachievable, so banning certain NRTs and NGTs is wrong.¹⁵⁹

There are two definitional claims worth pulling apart in this line of argument, namely, that the presence of moral ambiguity is a bar to the use of statutory prohibitions, and that the absence of consensus is a bar to use of statutory prohibitions.

Moral Ambiguity Precludes the Use of Criminal Bans

The counter to this claim is straightforward: prohibiting NRTs and NGTs is not problematic in view of the existence of other morally ambiguous offences in the *Criminal Code*. Euthanasia is a crime, yet approximately 70% of Canadians are in favour of legalizing physician-assisted suicide.¹⁶⁰ Criminal libel is another good example — the harmfulness of this offence has been challenged; however, the Supreme Court of Canada was unwilling to limit Parliament’s power to define public

wrongs.¹⁶¹ Similarly, the supposed immorality of the conduct typically ensnared by the obscenity provisions has attracted heavy critique.¹⁶² As Angela Campbell urges:

[U]nanimous public views on the wrongfulness of an act is not necessarily a requirement for such act [sic] to be validly prohibited by Parliament. There are many acts in our society that legislators have chosen to criminalize, even though Canadians as a whole do not agree on their moral blameworthiness.¹⁶³

What counts as culpable or morally blameworthy is not contingent on an *a priori* demonstration of serious harm. Courts are willing to infer harm and uphold criminal laws where the federal government is acting on reasonable grounds.¹⁶⁴ The moral ambiguity claim as an absolute bar to banning NRTs and NGTs is thus unpersuasive.

Bans are Inappropriate in the Absence of a Consensus View

In the opening of this paper, I suggested that dispute over the employ of criminal bans has thwarted legislative action. Society perhaps benefits from the delay:

[S]ociety has chosen, for a variety of reasons, to avoid attempts at reaching a moral consensus. In such a field, then, government *sometimes* acts wisely in refusing or failing to regulate (by law) in order to allow debate and discussion to proceed, and perhaps to encourage some moral consensus to emerge.¹⁶⁵ [emphasis added]

Alternatively, legislative inaction may inspire “detachment or disengagement by individuals from active participation in the political life of their community,”¹⁶⁶ which in turn “undermines any ability to forge a consensus on common public projects, endeavours, or goals”.¹⁶⁷ In other words, by not taking a definitive stand on the issues, disagreement persists, with little means for constructive dialogue. As argued in the foregoing, statutory prohibitions neither pre-empt discussion nor spurn all opportunity for dispute.

That there exists a causal relationship between the fact of moral ambiguity and an inability to forge a consensus is an assumption deserving of scepticism. Bartha Knoppers and Sonia Le Bris identified a number of points of general consensus in 1991,¹⁶⁸ constituting nine of the 10 activities prohibited by section 5 of Bill C-13, including cloning, parthenogenesis, research on embryos past 14 days of development, sex selection, extreme forms of genetic engineering, inter-species fertilisation, and the creation of chimeras.¹⁶⁹ The onset of stem cell research and the “Dolly technique” perhaps alters these points of agreement. However, aside from public opinion polls, has there been any recent effort to gauge by how much? Is consensus truly impossible, or is Parliament hesitant to test it?

More to the point, is the onus on Parliament to demonstrate consensus? Given that absence of moral ambiguity is non-essential to the definition of a crime, the burden surely rests with those opposed to bans on NRTs and NGTs to show that disagreement mandates a strictly regulatory approach. Presumably, such critics will

argue that in spite of this popular disagreement, the regulatory body would enable NRT-NGT research and related activities to proceed within reasonable limits.

In this respect it is important to distinguish between two possible forms of consensus seeking. The query is, which form is more optimal? Where consensus is achieved through Parliamentary debate, it is *normative* in the sense that it is a manifestation of the will of the citizenry. On the other hand, consensus achieved through debate in the Agency’s functioning is *pragmatic* in the sense that it directly applies only to a single issue or a single research proposal, and the decision is made by appointed (as opposed to elected) officials. Normative consensus is probably significantly harder to attain. It comes down to whether one is comfortable with the notion of a regulatory body deciding morally contentious matters while normative consensus fails to be pursued. Is the Agency the preferred “arbiter of fundamental ethical issues on which there is no widespread agreement”?¹⁷⁰

Thus, the moral ambiguity argument is vulnerable from both angles: Moral ambiguity itself is not a bar to the use of prohibitions. Moreover, the onus to demonstrate that lack of consensus is dire for the enactment of criminal bans properly lies with those who argue against bans on NRTs and NGTs.

It is nonetheless important to expressly confront this moral ambiguity issue within the framework of the Bill, signalling a commitment to initiate consensus seeking. The Royal Commission on New Reproductive Technologies and Health Canada chose instead to assert the existence of consensus. It is time to rethink this approach. Critics of criminal bans on NRTs and NGTs may then succumb to the “temptation to believe that legislative attempts to secure recognition of one particular view at the expense of others would be the enforcement of moral majoritarianism.”¹⁷¹

An Argument For More Argument

I indeed, a debate over the proper interaction of law and morals, Hart-Devlin revisited again, is not obviously blocked by my starting assumption that laws are needed in this sphere. Whereas in my view neither structural nor consequentialist arguments represent a threat to the inclusion of statutory bans in Bill C-13, theoretical claims remain viable, possibly invoking the issue of legal moralism. Up to this stage, however, these potentially more fruitful theoretical claims have mostly been impoverished.¹⁷² Thus, all the arguments advanced against criminal bans prove unpersuasive; equally, they fail to substantiate a non-prohibitive alternative for NRT-NGT regulation. Bill C-13 should therefore be proclaimed into law. Commentators might then meaningfully engage with criminal law theory. Arguments for and against the prohibited activities should continue to be made in order to realise the potential good of NRTs and NGTs

(both from those that the Bill allows as well as those that may not in future be subject to prohibition), and to preclude or minimise the measure of harm from those technologies. Deliberation should involve a wide constituency. Criminal bans can be enacted, scientists can challenge them, the Agency can challenge them, but

Notes:

¹ Bill C-13, *An Act respecting assisted human reproduction and related research*, 2nd Sess., 37th Parl., (Reprinted as amended by the Standing Committee on Health as a working copy for the use of the House of Commons at Report Stage and as reported to the House on 12 December 2002), online: http://www.parl.gc.ca/PDF/32/2/parlbus/chambus/house/bills/government/C-13_2.pdf (date accessed: 18 April 2003). In the event that the Bill is not passed when Parliament resumes, the arguments analysed in this paper are likely to be re-posed in relation to subsequent legislative proposals.

² Contrast Bill C-47, *Human Reproductive and Genetic Technologies Act*, 2nd Sess., 35th Parl., 1996 (2nd reading 5 November 1996). The Bill died on the order paper in April 1997 when the federal government called an election. Bill C-47 would have simply set out 10 prohibited activities. Before it died, however, the government produced an opinion paper detailing a broader regulatory scheme: see Canada, Minister of Health, *New Reproductive and Genetic Technologies: Setting Boundaries, Enhancing Health* (Ottawa: Minister of Supply and Services Canada, June 1996).

³ In fact, the popular dispute is reducible to one prohibition in particular: the ban on human cloning. Compare, for example, Françoise Baylis & Jocelyn Downie, "Ban Cloning Do You Copy?" *The Globe & Mail* (3 July 2002) A13; Françoise Baylis & Jocelyn Downie, "Cloning for stem cell research is unnecessary and dangerous", *The Hill Times* (3 February 2003) 672; and Timothy Caulfield, "Don't let Raelians scare Canada into inappropriate cloning law" *The Globe & Mail* (4 January 2003) A17.

⁴ Bill C-13, *supra* note 1, s. 60.

⁵ *Ibid.*, s. 61.

⁶ Except to the extent that an argument depends on other provisions of the Bill. In which case, those provisions are clearly relevant to issues surrounding section 5.

⁷ One commentator raised this issue in relation to a past initiative: see Patrick Healy, "Statutory Prohibitions and the Regulation of New Reproductive Technologies under Federal Law in Canada" (1995) 40 McGill L.J. 905 at 924ff.

⁸ Some have made this argument though; see, for example, Judith F. Daar, "Regulating Reproductive Technologies: Panacea or Paper Tiger?" (1997) 34 Hous. L. Rev. 609 at 657. Contrast, Susan M. Wolf, "Ban Cloning? Why NBAC Is Wrong" (1997) 27:5 Hastings Center Report 12.

⁹ However, as I will eventually point out in part four of this paper, this question is still important on a theoretical level: legislating in this area brings into play fundamental questions about the role of the state as a liberal state as opposed to a communitarian state, or somewhere in the lacuna between the two.

¹⁰ See for example, *U.N.A. v. Alberta (Attorney General)* (1992), 13 C.R. (4th) 1 (S.C.C.). Whether this standard is met in reality is questionable; yet I do not agree that definitional problems are insoluble: see Jason S. Robert, "Regulating the Creation of Novel Beings" (2002) 11:1 Health L. Rev. 9; Matthew Herder, "Donate a Definition" (2002) 11:1 Health L. Rev. 40.

¹¹ *Constitution Act, 1867* (U.K.), 30 & 31 Vict., c. 3, reprinted in R.S.C. 1985, App. II, No. 5.

¹² *Canadian Charter of Rights and Freedoms*, Part I of the *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (U.K.), 1982, c. 11.

¹³ Timothy Caulfield, "Clones, Controversy, and Criminal Law: A Comment on the Proposal for Legislation Governing Assisted Human Reproduction" (2001) 39:2 Alta. L. Rev. 335 at 344.

¹⁴ *Human Fertilisation and Embryology Act* (U.K.), 1990, c. 37. The statute was amended by the *Human Fertilisation and Embryology (Research Purposes) Regulations 2001*, S.I. 2001/188.

¹⁵ In this vein, extensive use will be made of one text in particular: Robert G. Lee & Derek Morgan, *Human Fertilisation & Embryology: Regulating*

Canadians must take part in the discourse. Section 5 of Bill C-13 would then contain a novel sort of prohibitions (qualitatively less blunt than commentators to date envisage) fitting for NRTs and NGTs. This would be a much more appropriate result than an effective ban on bans.

the Reproductive Revolution (London, U.K.: Blackstone Press Limited, London: UK, 2001).

¹⁶ Like Bill C-13, the HFE Act prohibits research on embryos past 14 days of development, the placing of a human embryo in any nonhuman animal, and a procedure called "nucleus substitution": see ss. 3(3)(a)-(d), 3(4). The approach is perhaps more nuance than that taken by Bill C-13 insofar as section 3 sets activities, which the HFEA cannot license as opposed to an outright prohibition. Because the HFEA cannot alter these provisions without an act of Parliament, however, the effect is the same. *Infra*.

¹⁷ Dorothy C. Wertz, Marie-Hélène Régner & Bartha M. Knoppers, "Stem Cells in a Pluralistic Society: Consequences of Proposed Canadian Legislation" online: <http://www.humgen.umontreal.ca/en/GenEdit.cfm> (date accessed: 25 March 2003).

¹⁸ See LeRoy Walters, "Research Cloning, Ethics, and Public Policy" (2003) 299 Science 1661; Wolf, *supra* note 8; Paul Tully, "Dollywood is Not Just a Theme Park in Tennessee Anymore: Unwarranted Prohibitory Human Cloning Legislation and Policy Guidelines for a Regulatory Approach to Cloning" (1998) 31 J. Marshall L. Rev. 1385 at 1412; and, Brendan Gogarty & Dianne Nicol, "The UK's Cloning Laws: A View from the Antipodes" (2002) 9:2 Murdoch University Electronic J. of Law, online: <http://www.murdoch.edu.au/elaw/issues/v9n2/gogarty92nf.htm> (date accessed: 5 February 2003). Notwithstanding the views expressed in the last referenced article, the federal government of Australia, which has only minimal jurisdiction over the criminal law, passed legislation very similar to Bill C-13 in terms of the activities that are prohibited, albeit with certain limitations: see *Prohibition of Human Cloning Act 2002* (Cth.), No. 144, 2002, online: <http://scaleplus.law.gov.au.html/comact/browse/TOCN.htm> (date accessed: 15 March 2003).

¹⁹ *R. v. Big M Drug Mart Ltd.*, [1985] 1 S.C.R. 295.

²⁰ Lee and Morgan's description of the purpose of the HFE Act is to the same effect, *supra* note 15 at 12: "The challenge is to obtain all the benefits and advantages of these developments in reproductive technology, but to control these developments and guide them in the directions that we want."

²¹ Of course, it is arguable that the legislation is colourable; however, *RJR-MacDonald v. Canada*, [1995] 3 S.C.R. 199, casts substantial doubt on this. In that case, the Supreme Court held that criminalizing certain forms of advertising did not amount to a colourable use of the criminal law either because the advertising was ancillary to the evil (i.e., not evil itself) or that it was ineffective at addressing the public health issue at hand.

²² Canada, *Proceed with Care: Final Report of the Royal Commission on New Reproductive Technologies*, vol. 1 (Ottawa: Minister of Government Services of Canada, 1993) at 18.

²³ See Martha Jackman, "The Constitution and the Regulation of New Reproductive Technologies," in Royal Commission on New Reproductive Technologies, *Overview of Legal Issues in New Reproductive Technologies* (Ottawa: Supply and Services Canada, 1993) at 16.

²⁴ Existing jurisprudence tips the balance heavily in favour of provincial authority over health on the basis of subsection 92(16), matters of a "merely local or private nature", and subsection 92(13), property and civil rights: see per Dickson J. in *Schneider, v. The Queen*, [1982] 2 S.C.R. 112 at 136-7. Nevertheless, health is such "an amorphous topic [it] can be addressed by valid federal or provincial legislation, depending in the circumstances of each case on the nature or scope of the health problem in question": per Estey J. in *Schneider, ibid.*, at 142. For a summary see Jennifer J. Llewellyn, Jocelyn Downie & Robert Holmes, "Protecting Human Research Subjects: A Jurisdictional Analysis", forthcoming, Health L. J. [forthcoming].

²⁵ *Ibid.* I do not deal further with Jackman's argument because Llewellyn *et al.* are persuasive.

²⁶ See *RJR-MacDonald*, *supra* note 21.

- ²⁷ Whether NRTs (and NGTs) possess the requisite “singleness, distinctiveness and indivisibility”, for instance, is open to dispute: see Llewellyn *et al.*, *supra* note 24.
- ²⁸ Health Canada, “Assisted Human Reproduction: Frequently Asked Questions” (May 2001), online: Health Canada http://www.hc-sc.gc.ca/english/archives/releases/2001/2001_44ebk3.htm (date accessed: 15 January 2003) at question 2.
- ²⁹ *Reference re Validity of Section 5(a) of the Dairy Industry Act*, [1949] S.C.R. 1 at 50. An argument that Parliament cannot legitimately endorse one conception of morality, as embodied by the statutory prohibitions, seems destined to fail: see for example, *R. v. Butler*, [1992] 1 S.C.R. 452 at para. 80.
- ³⁰ Llewellyn *et al.*, *supra* note 24.
- ³¹ It is unnecessary to consider the other sources of federal jurisdiction; however, for a more detailed inquiry see Llewellyn *et al.*, *supra* note 24. The authors conclude that there is strong support for federal jurisdiction over research involving humans; however, their account is also persuasive in relation to NRTs and NGTs.
- ³² Jackman, *supra* note 23 at 11; Allison Harvison Young & Angela Wasunna, “Wrestling with the Limits of Law: Regulating New Reproductive Technologies” (1998) 6 Health L.J. 239 at para. 70.
- ³³ Especially as contrasted with Bill C-47, *supra* note 2.
- ³⁴ See *RJR-MacDonald*, *supra* note 21, and *Re Firearms Act*, [2000] 1 S.C.R. 783 summarised in Llewellyn *et al.*, *supra*, note 24.
- ³⁵ Assuming that is the source of the enacting government’s jurisdiction: see *Re Firearms Act*, *ibid.*, at para. 37; see also Llewellyn *et al.*, *supra* note 24.
- ³⁶ For a summary of potential remedies for violation of the Constitution, see *Schachter v. Canada*, [1992] 2 S.C.R. 679.
- ³⁷ Both forms are based on the same scientific procedure called somatic cell nuclear transfer, also referred to as cell nuclear replacement, or even the “Dolly technique”. This author’s focus is on so-called therapeutic cloning only, however, where the goal is to develop cloned cells and organs as opposed to full human beings (or so-called reproductive cloning).
- ³⁸ Barbara Billingsley, “A Constitutional Analysis of the Proposed Ban on Non-Reproductive Human Cloning: An Unjustified Violation of Freedom of Expression?” (2002) 11:1 Health L. Rev. 32. For present purposes, I will concentrate on the arguments she puts forth to support the view that paragraph 2(b) of the Charter would in fact be violated, and not saved under section 1 of the Charter, if the prohibition on therapeutic cloning were enacted, and subsequently challenged. Interestingly, a number of commentators in the United States have argued that the criminalization of therapeutic cloning by Congress would amount to a violation of the freedom of scientific inquiry under the First Amendment of the U.S. Constitution: see Wolf, *supra* note 8 at 13; and, Tully, *supra* note 18 at 1412; and, Walters, *supra* note 18. Apparently, “freedom of research is endorsed in the German constitution” as well: see Eve-Marie Engels, “Human embryonic stem cells — the German debate” (2002) 3 Nature Reviews Genetics 636 at 639.
- ³⁹ Billingsley, *ibid.*, at 38.
- ⁴⁰ *Irwin Toy v. Quebec (Attorney General)*, [1989] 1 S.C.R. 927.
- ⁴¹ Billingsley, *supra* note 38 at 33.
- ⁴² *Ibid.*
- ⁴³ *Ibid.*, at 34.
- ⁴⁴ *Ibid.*
- ⁴⁵ Young & Wasunna, *supra* note 32 at para. 51, appear to raise the security of the person argument in relation to the prohibition on commercial surrogacy; since that prohibition is not amongst those listed in section 5, I will not attempt to deal with it.
- ⁴⁶ George J. Annas, Lori B. Andrews & Rosario M. Isasi, “Protecting the Endangered Human: Toward an International Treaty Prohibiting Cloning and Inheritable Alterations” (2002) 28 Am. J. Law & Med 151 at 160.
- ⁴⁷ *Blencoe v. British Columbia (Human Rights Commission)*, [2000] 2 S.C.R. 307 at para. 49.
- ⁴⁸ *Ibid.*, at para. 54.
- ⁴⁹ Annas *et al.*, *supra* note 46 at 160.
- ⁵⁰ *Ibid.*, at 159.
- ⁵¹ See also *Cameron v. Nova Scotia (Attorney General)*, [1999] N.S.J. No. 297.
- ⁵² Billingsley, *supra* note 38 at 36, writes: “The extent to which these general objectives can be achieved by the Ban is unknown but the Ban’s denial of freedom of expression is total”.
- ⁵³ Canadian Bar Association, “Submission on Draft Legislation on Assisted Human Reproduction” (2002) 10:2 Health L. Rev. 25 at para. 8.
- ⁵⁴ Baylis & Downie, *supra* note 3.
- ⁵⁵ Bill C-13, *supra* note 1, has since been modified such that regulations may not be made “before the earliest of 30 sitting days after the proposed regulation is laid before Parliament” or “160 calendar days after the proposed regulation is laid before Parliament” or “the day after the appropriate committee of each House of Parliament has reported its findings with respect to the proposed regulation”: subsection 66(3). Regulations can be made in lesser time if “the changes made by the regulation to an existing regulation are so immaterial or insubstantial that section 66 should not apply in the circumstances”, or if “the regulation must be made immediately in order to protect the health or safety of any person”: paragraphs 67(1)(a), and (b), respectively.
- ⁵⁶ Tim Caulfield, “Bill C-13 The Assisted Human Reproduction Act: Examining the Arguments Against a Regulatory Approach” (2002) 11:1 Health L. Rev. 20 at 21. At least he does not go so far as to suggest that a ban would foreclose an avenue of research in perpetuity: see Shannon H. Smith, “Ignorance Is Not Bliss: Why a Ban on Human Cloning is Unacceptable” (1999) 9 Health Matrix 311 at 333-334.
- ⁵⁷ *An Act to Amend the Parliament of Canada Act, the members of Parliament Retiring Allowances Act and the Salaries Act*, Canada Legislative Index, 1st Sess., 37th Parliament, Bill C-28 S.C. 2001, c. 20.
- ⁵⁸ See Health Canada, “Towards a Renewed Regulatory Framework for the Safety of Blood and Blood Components intended for Transfusion” (2 November 2001), online: http://www.hc-sc.gc.ca/hpfb-dgpsa/bgt-dpbtg/03_reg_framework_blood_e.pdf (date accessed: 6 August 2003); and Health Canada, “Safety Standards for Blood and Blood Components” (2 November 2001), online: http://www.hc-sc.gc.ca/hpfb-dgpsa/bgt-dpbtg/04_blood_stds_e.pdf (date accessed: 6 August 2003). True, the remarkable speed with which the remuneration laws were revised is tempered by the relative simplicity of these amendments. However, the regulations in respect of NRTs and NGTs are more likely to approach the new blood safety regulations in terms of the complexity and technicality of the subject matter.
- ⁵⁹ *Quintavalle v. Secretary of State for Health*, [2001] 4 All E.R. 1013.
- ⁶⁰ *Human Reproductive Cloning Act 2001* (U.K.), 2001, c. 23. See the explanatory notes accompanying the statute, online: <http://www.uk-legislation.hms.gov.uk/acts/en/2001en23.htm> (date accessed: 2 December 2002).
- ⁶¹ The Court of Appeal decision was recently affirmed by the House of Lords: *Quintavalle v. Secretary of State for Health*, [2003] H.L.J. No. 13, aff’g [2002] E.W.C.A. Civ. 29.
- ⁶² Personal communication with Sarah Franklin, Professor of Anthropology of Science, Sociology Department, Lancaster University; this is confirmed on the HFEA Web site, online: <http://www.hfea.gov.uk/for Media/archived/13032003.htm> (date accessed: 18 April 2003).
- ⁶³ Cynthia B. Cohen, “Banning Human Cloning — Then What?” (2001) 11:2 Kennedy Institute of Ethics Journal 205 at 208.
- ⁶⁴ This figure is based on the projected number of sitting days for the House of Commons in 2003, which totals 135, using that figure as an average ($135/24 = 5.6 \times 10 = 56$). See the House of Commons Calendar, available online <http://www.parl.gc.ca/information/about process/house/calendar/PDF/2003-e.pdf> (date accessed: 18/04/03).
- ⁶⁵ *Supra* note 17 at 3.
- ⁶⁶ Wertz *et al.*’s comment also implies that such a decision, in light of the scientific developments, was misinformed or wrong, as opposed to a product of a different cultural context. This seems at odds with the authors’ supposed rhetorical commitment to “pluralistic society”: *supra* note 17 at 2.
- ⁶⁷ Engels, *supra* note 38 at 637.
- ⁶⁸ *Ibid.*, at 638.
- ⁶⁹ *Ibid.*, at 636.
- ⁷⁰ GNEC members voted for a three-year limited import of embryonic stem cells over a moratorium on the practice, by a 15–10 majority. In contrast, the majority of the Commission wanted to preclude importation, while the minority thought it desirable only under strict conditions, including a cut-off date for derivation: *ibid.*, at 640.

- ⁷¹ *Ibid.*, at 641.
- ⁷² *Ibid.*
- ⁷³ It is worth reiterating the HFEA example here: the Roslin Institute has had an application to do therapeutic cloning research under consideration by the HFEA for over a year. This significantly undermines the view that the absence of criminal bans enables quicker regulatory action.
- ⁷⁴ Nati Somekh, "The European Total Ban on Human Cloning: An Analysis of the Council of Europe's Actions in Prohibiting Human Cloning" (1999) 17 B.U. Int'l L.J. 397 at 422.
- ⁷⁵ Wolf, *supra* note 8 at 13.
- ⁷⁶ Bill C-13, *supra* note 1, ss. 47, 50.
- ⁷⁷ *Ibid.*, s. 47(4).
- ⁷⁸ *Ibid.*, s. 47(1).
- ⁷⁹ *Ibid.*, s. 48.
- ⁸⁰ Pursuant to subsection 46(1) the regulatory body can set qualifications for inspectors in regulations. Moreover, it is unlikely that inspectors will be ordinary peace officers: subsection 48(3) explicitly requires such an officer to accompany an inspector if force is to be used. I deal with issues of enforcement in part three below.
- ⁸¹ Wolf, *supra* note 8 at 13, argues that vagueness compounds the chilling effect.
- ⁸² In fact, only very recently have Canadian scientists vowed to go forward with embryonic stem research in the absence of legislative guidance, notwithstanding the existence of funding guidelines, which are largely consistent with the proposed Bill C-13: see Norma Greenaway, "Scientists won't wait for stem cell law: Researchers prepare to use embryos while MPs dither" *The Ottawa Citizen* (16 June 2003) A1.
- ⁸³ J.G. Toma *et al.*, "Isolation of multipotent adult stem cells from the dermis of mammalian skin" (2001) 3 Nature Cell Biology 778; Y. Jiang *et al.*, "Pluripotency of mesenchymal stem cells derived from adult marrow" (2002) 418 Nature 41; also, stem cells derived from bone marrow have been shown to initiate tissue regeneration: D. Hess *et al.*, "Bone marrow-derived stem cells initiate pancreatic regeneration" (2003) 21 Nature Biotechnology 763.
- ⁸⁴ Robert Winston, "Embryonic Stem Cell Research — The Case For..." (2001) 7 Nature Medicine 396.
- ⁸⁵ Susan M. Rhind, *et al.*, "Cloned lambs — lessons from pathology" (2003) 21 Nature Biotechnology 744.
- ⁸⁶ Janet D. Rowley, *et al.*, "Harmful Moratorium on Stem Cell Research" (2002) 297 Science 1957.
- ⁸⁷ E.g., Wertz *et al.*, *supra* note 17.
- ⁸⁸ The scientist is Dr. Roger Pederson; see ABC News.com, "Left Behind?", online: http://abcnews.go.com/sections/wnt/DailyNews/wnt_stemcells010811.html (date accessed: 12 March 2003).
- ⁸⁹ Gretchen Vogel, "In the Mideast, Pushing Back The Stem Cell Frontier" (2002) 295 Science 1818; Dennis Normile, "Can Money Turn Singapore Into a Biotech Juggernaut?" (2002) 297 Science 1470.
- ⁹⁰ Jose Cibelli *et al.*, "Somatic Cell Nuclear Transfer in Humans: Pronuclear and Early Embryonic Development" (2001) 2 J. Regen. Med. 25.
- ⁹¹ Mich. Comp. L. § 333.26401–333.26406, § 333.16274–333.16275, § 333.20197, § 750.430a (1999).
- ⁹² "At a 7 January meeting in London organized by the U.K. Medical Research Council (MRC), heads of research agencies in eight countries — Australia, Canada, Finland, Israel, Singapore, Sweden, the United Kingdom, and the United States — hashed out ways to boost the pace of human ES cell research": see Gretchen Vogel & Constance Holden, "Key Questions Loom Over Effort to Energize Research" (2003) 299 Science 493. The same group met for a second time on 30 May 2003: Pat Hagan, "Stem cell collaboration: International stem cell researchers discuss ways to cooperate rather than compete" *The Scientist* (2 June 2003), available online: <http://www.biomedcentral.com/news/20030602/02/> (date accessed: 27 July 2003).
- ⁹³ Wertz *et al.*, *supra* note 17 at 2. The authors also comment "[p]rohibitive approaches tend to contribute to ... the exodus of researchers ... [causing] research to migrate to countries where there is little ethical oversight." I would state in response that if the researchers want to do research in such conditions, then let them go.
- ⁹⁴ Vogel & Holden, *supra* note 92 at 495.
- ⁹⁵ Ian Sample, "Scientists hit out at creator of 'she-males'" *The Guardian* (3 July 2003) 9; Emma Ross, "European fertility specialists denounce creation of human chimera research" *Canadian Press* (3 July 2003), available online: <http://www.canada.com/search/story.aspx?id=aea0ca20-8d29-47ac-9b71-17fd1b81641e> (date accessed: 13 July 2003).
- ⁹⁶ See Butler, *supra* note 29 at para. 112. In that case, the absence of strong social science evidence to show the harms of pornography was not at all persuasive.
- ⁹⁷ Bill C-13, *supra* note 1, ss. 6, 7.
- ⁹⁸ Young & Wasunna, *supra* note 32.
- ⁹⁹ Indeed, Wertz *et al.*, *supra* note 17 at 3, allude to this argument as well in tandem with the preceding forum shopping claim: "Bans would drive research to other countries, underground, or the private sector (including offshore)."
- ¹⁰⁰ Young & Wasunna, *Supra* note 32 at para. 45.
- ¹⁰¹ Bill C-13, *supra* note 1, paragraph 5(1)(b).
- ¹⁰² Françoise Baylis, "Human Embryonic Stem Cell Lines: The Ethics of Derivation" (2002) 24:2 J. Obstetrics Gynaecology Canada 159.
- ¹⁰³ Cohen, *supra* note 634 at 208. Tully, *supra* note 18 at 1388 posits that "a moratorium enacted on human cloning in the United States could lead to desperate people in want of a child resorting to underground, private cloning services."
- ¹⁰⁴ Bill C-13, *supra* note 1, paragraphs 5(1)(i), and 5(1)(a), respectively.
- ¹⁰⁵ See part four below.
- ¹⁰⁶ Tim Caulfield, "Cloning and genetic determinism — a call for consistency" (2001) 19 Nature Biotechnology 403. He undercuts some of arguments against reproductive cloning premised on individuality and autonomy in his article. It is somewhat curious that he does not highlight these points of moral ambiguity in the context of arguing against banning therapeutic cloning.
- ¹⁰⁷ These technologies are also banned in Bill C-13, *supra* note 1, paragraphs 5(1)(a) and (f).
- ¹⁰⁸ "Alter-ing' the Species: Misplaced Essentialism in International Science Policy", presented at a workshop, "Interspecific Chimaeras — Scientific Necessity, Moral Abomination, Neither, or Both?" April 10-12, 2003, Dalhousie University, Halifax, Nova Scotia.
- ¹⁰⁹ Personal communication with Eric Juengst, Associate Professor of Biomedical Ethics, Case Western Reserve University School of Medicine, Cleveland, Ohio.
- ¹¹⁰ *Supra* note 106.
- ¹¹¹ Lori B. Andrews & Nanette Elster, "Regulating Reproductive Technologies" (2000) 21 J Legal. Med. 35, at 61-63.
- ¹¹² *Ibid.*, at 63, citing Joel Feinberg, "The Child's Right to an Open Future", in William Aiken & Hugh LaFollete eds., *Whose Child? Children's Rights, Parental Authority, and State Power* (Totowa, N.J.: Rowman and Littlefield, 1980).
- ¹¹³ Under the heading "An Argument For More Argument", I put forward a call to action along these lines.
- ¹¹⁴ See generally, Angela Campbell, "Defining A Policy Rationale For the Criminal Regulation of Reproductive Technology" (2002) 11:1 Health L. Rev. 26. It seems Caulfield holds the view that no satisfactory rationale for the prohibitions can be articulated because bans, in his opinion, cannot be utilized where there is moral ambiguity. I deal with this line of argument below in part three of the paper.
- ¹¹⁵ *Supra* note 18.
- ¹¹⁶ *Supra* note 8 at 13.
- ¹¹⁷ *Supra* note 32 at para. 6.
- ¹¹⁸ *Supra* note 56 at 23.
- ¹¹⁹ For instance, there is a growing literature about whether reproductive cloning is actually beneficial or harmful. Yet no one in Canada is questioning this effect of the cloning prohibition.
- ¹²⁰ For a summary of many of those Bills, see George J. Annas, "Cloning and the U.S. Congress" (2002) 346:20 N. Engl. J. Med. 1599.
- ¹²¹ Bill C-13, *Supra* note 1, s. 70.
- ¹²² Caulfield, "Bill C-13", *supra* note 56 at 21.
- ¹²³ Bill C-13, *supra* note 1, section 26, paragraph 24(1)(f), respectively.
- ¹²⁴ *Ibid.*, ss. 66, 67.
- ¹²⁵ Lee & Morgan, *supra* note 15 at 109.

- ¹²⁶ If opponents of statutory bans contend that specific prohibited activities are not fundamental, then that argument should be explicit.
- ¹²⁷ Campbell, *supra* note 114 at 29. Campbell is identifying the “symbolic weight” of prohibitions as opposed to regulatory decisions. Caulfield responds by placing the onus on the government to justify that these “concerns are of such weight as to warrant this type of ‘signal’”: *supra* note 56 at 23. In my view, this is again an argument only for greater articulation, not against the use of bans in principle. Additionally, this underscores the need for articulation of the very problem of moral ambiguity in the sphere of NRTs and NGTs. Healy probably would not agree in that he goes further than Caulfield, arguing that “[i]t is undesirable to use the force of the criminal law to make strictly symbolic declarations of fundamental values”: *supra* note 7 at 941. In response I would simply ask, *why*?
- ¹²⁸ *Supra* note 1, ss. 45-59.
- ¹²⁹ Young & Wasunna, *supra* note 32 at para. 20-21, agree that this defeats expertise concerns. Healy, *supra* note 7 at 933, raised the problem of ordinary police officers being asked to enforce.
- ¹³⁰ Young & Wasunna, *Ibid*.
- ¹³¹ Wolf, *supra* note 8 at 13.
- ¹³² Healy, *supra* note 7 at 933.
- ¹³³ For a discussion of the controversy surrounding the *mens rea* for this offence, see Brian Rolfes, “The Golden Thread of Criminal Law — Moral Culpability and Sexual Assault” (1998) 61 Sask. L. Rev. 87.
- ¹³⁴ Wolf, *supra* note 8 at 13, identifies this concern.
- ¹³⁵ Young & Wasunna, *supra* note 32 at para. 20-21. On a related point, the authors at para. 33 also argue that “[t]he fact that the consensus underlying Bill C-47 is so thin is cause for concern because it relates directly to the enforceability of the legislation.” I deal more with the issue of consensus under “Moral Ambiguity”, *infra*; however, it is worth mentioning that inspectors can be screened for their apparent allegiance to enforcing the statute’s provisions. Presumably, only those fully committed to enforcing the statute would be selected.
- ¹³⁶ Of course, the penalties are less for breach of licence condition (maximum penalties are half that attached to prohibited activities). However, in view of sentencing principles described above, this discrepancy is likely to be attenuated.
- ¹³⁷ For example, after the UK’s HFEA refused to permit a married couple to have a child with the same immune system genetic makeup as the couple’s four year-old son who suffers from a rare genetic disorder, the couple travelled to the US to conceive the “designer baby” and then returned home, where the baby was born: see Shaoni Bhattacharya, “Banned ‘designer baby’ is born in UK” *New Scientist* (19 June 2003), available online: <http://www.newscientist.com/news/news.jsp?id=ns99993854> (date accessed: 21 June 2003).
- ¹³⁸ Lee & Morgan, *supra* note 15 at 14.
- ¹³⁹ Robert Winston makes several remarks to this effect, cited in Lee & Morgan, *supra* note 15 at 13-14.
- ¹⁴⁰ Young & Wasunna, *supra* note 32. It is also worth highlighting that the HFEA has been characterized as having the capacity to operate by way of command and control, though that has not been the practice. Rather, “[t]he picture that emerges is one of a continual dialogue between the regulator and the regulated”: Lee & Morgan, *supra* note 15, at 142. I might add that this should not be surprising given that many of the inspectors are also researchers in the field. Moreover, there is no reason why dialogue between researchers and regulators cannot occur when prohibitions are in force.
- ¹⁴¹ HFE Act, *supra* note 14, paragraph 3(3)(d), [emphasis added].
- ¹⁴² This argument, though ultimately unsuccessful, was made in *Quintavalle v. Secretary of State for Health*, *supra* notes 59 and 61.
- ¹⁴³ *Supra* note 15 at 91.
- ¹⁴⁴ *Supra* note 59 and accompanying text.
- ¹⁴⁵ *Supra* note 61 and accompanying text.
- ¹⁴⁶ *Human Reproductive Cloning Act 2001*, *supra* note 60.
- ¹⁴⁷ In Canada, it remains possible that research conducted prior to legislative amendment would escape penalty because of the rule against the retroactive operation of statutes, especially where the statute codifies criminal offences: see Pierre André Côté, *The Interpretation of Legislation in Canada*, 3rd ed. (Scarborough: Carswell, 2000) at 147. Arguably, the same rule against retroactivity would apply in the case of a regulatory offence; moreover, administrative agencies such as the Agency established by Bill C-13, “cannot enact retroactively unless the statute so provides, either implicitly or explicitly”: *ibid.*, at 146. Thus, the issue of retroactivity does not favour one approach (prohibitive or non-prohibitive) over the other.
- ¹⁴⁸ Young & Wasunna, *supra* note 32 at para. 34-35. The authors are using the argument in relation to the prohibition on commercial surrogacy.
- ¹⁴⁹ *Supra* note 1, paragraph 5(1)(f).
- ¹⁵⁰ Lee M. Silver, “*Remaking Eden: Cloning and Beyond in a Brave New World*” (New York: Avon Books, 1997) at 4.
- ¹⁵¹ Caulfield, *supra* note 106.
- ¹⁵² Lee & Morgan, *supra* note 15, at 142, concede that it “is hard to know in any case how one might judge the HFEA to be effective”.
- ¹⁵³ *RJR-MacDonald*, *supra* note 21; the Law Commission of Canada has recently issued a discussion paper, which is noteworthy: “What is a Crime?: Challenges and Alternatives”, online: http://www.lcc.gc.ca/en/themes/crime/discussion_paper/chap02.asp (date accessed: 21 April 2003).
- ¹⁵⁴ Gogarty & Nicol, *supra* note 18 at para. 32, citing from D. Stone, *Where the Law Ends. The Social Control of Corporate Behaviour* (Harper and Row: New York: Harper and Row, 1975) at 97. Caulfield has repeated this proposition on several occasions: *supra* note 3 at A17 and *supra* note 56 at 22.
- ¹⁵⁵ Caulfield, *supra* note 56 at 23.
- ¹⁵⁶ Canada, *The Criminal Law in Canadian Society* (Ottawa: Government of Canada, 1982).
- ¹⁵⁷ Most notably with respect to cloning, by which I mean reproductive as well as therapeutic cloning. For a short back and forth, see “At Issue: Human Cloning Should the United States legislate against it?”: George J. Annas, “Yes: Individual dignity demands nothing less” and John A. Robertson, “No: The potential for good is too compelling” 83 ABAJ. 80.
- ¹⁵⁸ Caulfield, *supra* note 56 at 21; however, little weight should be given to such polls because scientific studies provide support for the view that “an informed and rational citizen does not exist, at least not in the political realm”: Deetram A. Scheufele, “Deliberation or dispute? An explanatory study examining dimensions of public opinion expression” (1999) 11:1 International J Public Opinion Research 25.
- ¹⁵⁹ Additional support for this claim is found in Young & Wasunna, *supra* note 32 at para. 30, and Canadian Bar Association, *supra* note 53 at para. 8.
- ¹⁶⁰ “70% of Canadians favour doctor-assisted suicide” *The Vancouver Sun* (16 December 1997) A1, A2; see also CTV/National Angus Reid Poll, “Canadians’ Views on Euthanasia” (6 November 1997), available online, <http://www.ipsos-reid.com/search/pdf/media/pr971106.pdf> (date accessed: 28 July 2003).
- ¹⁶¹ *R. v. Lucas*, [1998] 1 S.C.R. 439 at para. 76.
- ¹⁶² *Butler*, *supra* note 29; see Jennifer Nedelsky, “Reconceiving Rights as Responsibility” (1993) 1 Rev. Constitutional Studies 1.
- ¹⁶³ *Supra* note 114 at 26.
- ¹⁶⁴ E.g., *Butler*, *supra* note 29; see also *R. v. Keegstra*, [1990] 3 S.C.R. 697.
- ¹⁶⁵ Lee & Morgan, *supra* note 15 at 267.
- ¹⁶⁶ Charles Taylor, *The Malaise of Modernity* (Toronto: Anansi, 1991), as explained in Michael Trebilcock, “Testing the Limits of Freedom of Contract: The Commercialization of Reproductive Materials and Services” (1994) 32 Osgoode Hall L.J. 613 at para. 60.
- ¹⁶⁷ Trebilcock, *ibid.*, at para. 61.
- ¹⁶⁸ Bartha M. Knoppers & Sona Le Bris, “Recent Advances in Medically Assisted Conception: Legal, Ethical and Social Issues” (1991) 17 Am. J. L. & Med. 329.
- ¹⁶⁹ These appear to correspond to paragraphs 5(1)(a), (c), (d), (e), (f), (j), (g), (h), and (i). Only the prohibition on the creation of embryos solely for research was not identified by the authors: paragraph 5(1)(b).
- ¹⁷⁰ Lee & Morgan, *supra* note 15 at 8-9.
- ¹⁷¹ Lee & Morgan, *supra* note 15 at 270.
- ¹⁷² For example, not once did I come across anyone citing Joel Feiberg’s seminal work: *The moral limits of the criminal law* (New York: Oxford University Press, 1984).