A Critique of Human Cloning and Human Dignity: The Report of the President’s Council on Bioethics

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I. INTRODUCTION

When it began its deliberations on human cloning, the President’s Council on Bioethics (the “Council”) had two mandates. One was from the Executive Order creating the Council. The Council was to undertake a fundamental inquiry into bioethical issues and to provide a forum for national discussion and encourage better understanding of the issues. In doing so, the Council was to:

strive to develop a deep and comprehensive understanding of the issues that it considers. In pursuit of this goal, the Council shall be guided by the need to articulate fully the complex and often competing moral positions on any given issue, rather than by an overriding concern to find consensus. The Council may therefore choose to proceed by offering a variety of views on a particular issue, rather than attempt to reach a single consensus position.

The second mandate was from the President himself as he announced the formation of the Council:

And the other thing is that I have spoken clearly on cloning. I just don’t think it’s right. On the other hand, there is going to be a lot of nuance and subtlety to the issue, I presume. And I think this is very important for you all to help the nation understand what this means.

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2 Id.
3 Remarks Prior to a Meeting with the President’s Council on Bioethics, 38 WEEKLY COMP. PRES. DOC. 85, 86 (Jan. 17, 2002).
Many people believed that the result was a foregone conclusion; the Council would inevitably determine that cloning should be banned. Ultimately, a majority on the Council recommended that cloning to produce children should be banned, and that there should be a moratorium of four years before any cloning for biomedical research should be considered. But that conclusion obscures the fact that the Council was sharply divided and the path to its final recommendations was full of lively and sometimes tempestuous discussion. Thus, through the firm leadership of its Chair, Leon Kass, the Council met both of its mandates; cloning was to be banned or postponed, and a forum was provided for most of the arguments on both sides of the controversy.

It is easy to be cynical about the maneuvering that achieving that result required, but one should not be. Perhaps the greatest accomplishment of the Council was providing an open forum at a very high level for free discussion of these issues. Had the Council moved too far from the President’s mandate, it would likely not have been renewed and the highly worthwhile debate would have ended. Instead, the Council continues as a forum for additional debate. Nonetheless, the double mandate creates problems for the Council. It is not clear whether the Council sees itself as

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6 Ibid.

7 The Council has an excellent website at www.bioethics.gov that provides transcripts of the discussions and the background papers that were considered as the Report was debated.


a forum for moral debate or a forum to effect political action. Likely, Professor Kass would argue that it is both. But it does not seem possible for it to be both, and it is when it tries to be the latter that it runs into trouble.

The Council’s report, *Human Cloning and Human Dignity* (the “Report”), provides an excellent discussion of the Council’s debates and conclusions. The first four chapters provide an overview for the discussion that takes place in the latter four chapters: “The Ethics of Cloning-to-Produce-Children,” “The Ethics of Cloning-for-Biomedical-Research,” “Public Policy Options” and “Policy Recommendations.” This essay will focus on those latter chapters.

In the chapter on cloning to produce children, the Report makes the case against such cloning. Many of the arguments, particularly those surrounding safety, are compelling. But many of the arguments reveal more discomfort with reproductive technology than with cloning alone. It is easy to agree that such cloning should be banned on safety grounds. But the Report fails to convince us fully that such cloning could never be ethical.

The chapter on cloning for biomedical research reveals a sharp division on the Council that probably mirrors a sharp division in American culture. While set in a discussion about cloning, this chapter is really about the ethics of embryo research. It does an excellent job of setting out the moral positions on both sides of the divide, but it does little to show how that dialog could lead to compromise positions.

The chapters on policy are the most unsatisfying part of the Report. There, the Report attempts to find consensus where there really is none. The resulting recommendation, a moratorium on cloning for biomedical research, both obscures the ethical divide and postpones the debate on embryo research rather than continuing it. Enacting a moratorium would require almost the same amount of political capital and debate that enacting more definitive regulation would require. And at the end of the day, there would be little to show for the trouble. A recommendation for a moratorium practically meant that no recommendation would be implemented at all.

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11 It may be unfair to say that the Council is mostly to blame for the fact that its recommendations have not been implemented. This, as will be discussed, is mostly a reflection of the political climate. Moreover, presidential bioethics commissions in the last two decades have a remarkably poor track
II. CLONING TO PRODUCE CHILDREN

The Council is unanimous in its opinion that cloning to produce children is unethical and should be banned.\textsuperscript{12} This is consistent with previous commissions that have considered the issue,\textsuperscript{13} but where previous commissions have focused on the lack of safety associated with cloning to produce children, the Council extends its arguments beyond safety and recommends a ban even if the practice could be made safe for all those involved. This is an important departure because while the safety issues seem clearly to justify state action to ban cloning to produce children, it is not clear that the other ethical issues raised by the Council would be sufficient to justify a legal ban on such cloning.

At the time of this writing, it seems irrefutable that cloning to produce children would be unethical because of the potential physical risk for the participants, particularly the child sought through the process. Animal cloning data show that the vast majority of pregnancies involving cloned animals fail and even surviving animals often suffer major complications.\textsuperscript{14} There is also a certain appeal to the Council's conclusion that cloning to produce children ought to be banned even if the physical risks could be eliminated but those arguments are less persuasive and it is possible to imagine a scenario where such cloning could be ethical.\textsuperscript{15} The proposition

\textsuperscript{12} President's Council on Bioethics, supra note 5, at x, 114-15.


\textsuperscript{14} Many of the pregnancy failures occur during the first trimester but, unlike IVF alone, many also occur later in the pregnancy with consequent morbidities for the mother. There are also many issues surrounding placental development which causes "large calf syndrome" involving abnormally large offspring often accompanied by bone and tendon structure defects (although incidence of this syndrome seems to be species-specific.) There are also reports of cardiac, lung, and kidney issues. While it is not clear how many of these defects are related to the cloning and how many to other associated genetic engineering and assisted reproductive techniques, including IVF, certainly there are not enough data to separate out etiology conclusively. Comm. on Sci., Eng'g, and Pub. Pol'y, Board on Life Sciences, Scientific and Medical Aspects of Human Reproductive Cloning 39-60 (Nat'l Acads. Press ed., 2002) http://www.nap.edu/openbook/0309076374/html/39.html (2002). There is evidence that pregnancy rates and complication issues are improving but not enough to make consideration of human reproductive cloning even remotely acceptable. Id.

\textsuperscript{15} See, e.g., President's Council on Bioethics, supra note 5, at 115 n.*.
not adequately proven by the Council is that even if cloning to produce children could be made safe, it is still so undesirable that it surmounts the presumption in American law that one may do as one wishes unless doing so inflicts harm on third parties.

Some of the specific arguments raised by the Report against cloning to produce children do not seem to withstand scrutiny. For example, the Report argues that cloning to produce a child is different from other forms of procreation because with other forms a child is "not made but begotten." Or, in other words, "procreation is not making, but the outgrowth of doing." But doing is making. It is just the extent of how active we are in the specifics of the making that troubles us. And the Report fails to address satisfactorily why cloning is the line over which we should not cross.

There is no question that In Vitro Fertilization (IVF) involves a certain amount of human engineering. More controversially, Preimplantation Genetic Diagnosis (PGD) involves even more human engineering. PGD, developed in the early 1990s, allows embryos to be screened for genetic disease. The process usually involves ovarian hyperstimulation and IVF; the eggs are harvested and fertilized and the resulting embryos are tested. The most common test involves testing one cell of an eight-cell embryo. (An embryo reaches this stage after forty-eight to seventy-two hours after fertilization.) The DNA of that cell is extracted and analyzed. PGD to avoid serious and early-onset illness in the child-to-be is widely accepted, although it is still very controversial. Since it involves selecting embryos without genetic flaws, it typically also involves discarding embryos that have genetic flaws, or even embryos that are

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16 The Report points out that at the time it was developed, IVF may have also been unethical; in essence it was a "lucky experiment." Id. at 93. That may be true and some of the science that took place at that time would be considered dangerous by today's standards. The IVF experience, however, is an argument not for a ban but for regulation. Indeed, it was Louise Brown's birth in 1978 in Britain that motivated the British to set up a committee of inquiry, the "Warnock Commission," that proposed the legislation that ultimately became the Human Fertilisation and Embryology Act of 1990 ("HFEA"). Ruth Lynn Deech, Clones, Ethics and Infertility or Sex, Sheep and Statutes, 2 QUINNIPAC HEALTH L. J. 117, 122 (1999). Although the United States does have rules governing IVF laboratory standards, see 42 U.S.C. §263a (2004), most IVF research is unregulated in this country because there is no federal funding.


18 Presumably those members of the Council who view the embryo "as a child" are equally against the use of PGD. However, PGD has never been singled out for the degree of moral scrutiny that has been applied to cloning.
simply not needed. On the other hand, proponents of PGD argue that use of the test reduces abortion.\footnote{Prior to the full development of PGD, a number of couples who had a child afflicted with FA attempted to conceive donors without the use of assisted reproductive techniques. A number were faced with aborting affected fetuses and two couples aborted healthy fetuses that were HLA-mismatched. Susan M. Wolf et al., \textit{Using Preimplantation Genetic Diagnosis to Create a Stem Cell Donor: Issues, Guidelines \& Limits}, 31 J.L.,MED. \& ETHICS 327, 328 (2003); Arleen D. Auerbach, \textit{Umbilical Cord Transplants for Genetic Disease: Diagnostic and Ethical Issues in Fetal Studies}, 20 BLOOD CELLS 303-09 (1994).}

While with IVF and PGD the parents and physicians are not dictating the entire eventual genetic make-up of the child-to-be, they are dictating what that child will not be, and perhaps even more, which embryos will not become a child. Only a short step beyond PGD to avoid serious and early-onset illness in the child is PGD to create a donor. This procedure was used successfully in the case of Molly Nash in 2000.\footnote{Molly Nash was a six-year-old child with Fanconi anemia (FA), a rare almost always fatal disorder that is associated with bone marrow failure, leukemia, and marked cancer predisposition. It is inherited in an autosomal recessive fashion. In August 2000, Molly’s parents succeeded in producing a child, a boy, who is an HLA matched donor (HLA identical to his sister) and FA free. Four previous attempts and PGD and IVF had failed. The Nashes were the first to produce an HLA matched donor through IVF and PGD. Three weeks after her brother’s birth, Molly was treated with high dose chemoradiotherapy followed by the infusion of blood collected from her brother’s placenta and umbilical cord after his birth. She showed bone marrow recovery at four weeks and three years later, her hematopoetic and immune systems are normal. Wolf, supra note 19, at 327, 328-29 (2003); Yuri Verlinsky et al., \textit{Preimplantation Diagnosis for Fanconi Anemia Combined with HLA Matching}, 285 JAMA 3130, 3131 (2001).} In Britain, the procedure has been permitted in one instance and prohibited in another instance.\footnote{\textit{See infra} note 42.} With PGD to create a donor, the child born is both a means and an end. While this may be true with cloning, where the intent is to produce a genetically identical child to produce a donor, it is the intent rather than the technology that makes the difference. Finally, it is not a great leap from PGD to Preimplantation Genetic Manipulation—where certain genes are replaced or inserted. It is that sort of genetic manipulation that really seems to cross the boundary into human engineering with all of the ethical problems it entails. It is not really cloning, but genetic engineering, that raises the specter of eugenics. After all, clones already exist in nature.

Similarly, the Report’s argument that a child born through cloning would somehow be less than its parents’ equal in dignity and humanity lacks foundation.\footnote{\textit{President’s Council on Bioethics}, supra note 5, at 105-06.} Here, the Report falls into the trap that it argues proponents of cloning fall into—that is, focusing on the parents’ actions or desires rather than on the child. It is not true that a child born of cloning
would lack human dignity. That dignity arises because of what is created, not the means of creation. A cloned child is nothing more or less than the genetic identical twin of a human that has existed before.\textsuperscript{23} Genetically it is certainly not a monster nor sub-human, and it seems impossible that the means of its creation could somehow make it sub-human.\textsuperscript{24}

The Report’s concerns about potential psychological and social risks to a child born of cloning, however, seem real.\textsuperscript{25} It points out that cloned children may have distinctive concerns about their individual identity, particularly if more than one clone were produced.\textsuperscript{26} Even if only one clone were produced, the child may experience life in the shadow of the cloned child’s “original.”\textsuperscript{27} Although faced with the reality that genetic predisposition does not entirely shape an individual’s life, the perception of the significance of the clone’s “original” may cramp and limit a sense of self and independence.\textsuperscript{28} The Report also contends that cloning to produce children could produce troubled family relations because of the unnatural relationship of the clone to a single biological parent.\textsuperscript{29} In addition, this relationship could draw the clone closer to the genetically identical parent than its other parent.\textsuperscript{30} The Report notes that already complicated relationships would become more complicated in the case of divorce.\textsuperscript{31} It is not clear, however, that the psychological and social risks listed in the Report are insurmountable. Most could probably be minimized and many would be eliminated if cloning were to become a more common practice.\textsuperscript{32}

\textsuperscript{23} Actually, a cloned child would likely be slightly less than identical since the mitochondrial DNA from the oocyte would be different. Maureen McBrien, \textit{Human Cloning: Beyond the Realm of the Constitutional Right to Procreative Liberty}, 21 BUFF. PUB. INT. L.J. 107, 111 (2003).

\textsuperscript{24} One difficulty here is that although the Report is actually called “Human Cloning and Human Dignity,” it never defines what “human dignity” means. The Report is not alone in this. Francis Fukuyama notes that “human dignity” is a term that everyone in politics likes to use, but no one can define or explain it. FRANCIS FUKUYAMA, OUR POSTHUMAN FUTURE 148 (2002). Here, however, where the concept is so central to the discussion, the lack of definition must be considered a flaw in the Report. See also James F. Childress, \textit{Human Cloning and Human Dignity: The Report of the President’s Council on Bioethics}, 33 HASTINGS CENTER REPORT 15, (2003).

\textsuperscript{25} PRESIDENT’S COUNCIL ON BIOETHICS, supra note 5, at 101-13.

\textsuperscript{26} Id. at 101-03.

\textsuperscript{27} Id. at 102-04.

\textsuperscript{28} Id. at 103.

\textsuperscript{29} Id. at 110-12.

\textsuperscript{30} Id. at 111.

\textsuperscript{31} Id. at 111 n.*.

\textsuperscript{32} Many of the psychological and social risks cited by the Report were cited as risks for other assisted reproductive techniques when those techniques were nascent. See, e.g., SHERMAN ELIAS & GEORGE J. ANNAS, REPRODUCTIVE GENETICS AND THE LAW 223-4 (1987); Elizabeth Price Foley, \textit{The Constitutional Implications of Human Cloning}, 42 ARIZ. L. REV. 647, 697-700 (2000).
As the Report notes, five potential uses for reproductive cloning are frequently listed as benefits of cloning to produce children: to produce biologically related children, to avoid genetic disease, to obtain “rejection proof” transplants, to replicate a loved one, and to reproduce individuals of great genius. The Report does not spend much time examining any of these, but it is worthwhile doing so because ultimately the decision to ban cloning to produce children must rest on a risk-benefit analysis. As things now stand, to the extent that the uses of reproductive cloning are worthwhile endeavors, there are alternatives to cloning that do not carry the same risks. So long as those risks exist and better alternatives exist, then a ban on cloning to produce children is appropriate. But where the risks diminish, and if better alternatives do not exist, a ban might not be legally appropriate.

Of the five listed uses, the most frequently cited is the production of biologically related children. There is no question that a large portion of American society seeks to have genetically related children. And on that basis, a method of reproduction that provides that is of considerable benefit. But as the Report notes, that benefit does not have the standing of a right. However, the Report takes it too far. Here the Report and proponents of procreative liberty seem to be talking past one another. Proponents of procreative liberty argue that people have a right to genetic progeny and that since reproductive cloning may offer those people the only means of achieving that goal, they therefore have a liberty interest in reproductive cloning. But proponents of that view have attempted to extend Supreme Court doctrine supporting a right to procreate too far. The closest cases, *Skinner v. Oklahoma*, *Zablocki v. Redhail*, and *Eisenstadt*

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33 President’s Council on Bioethics, *supra* note 5, at 84.

34 Interestingly, it is possible that scientific advances in this area may moot this issue before cloning to produce children can be made physically safe. It is now possible to create mouse sperm cells out of ordinary embryonic cells, making creation of human sperm cells out of human somatic cells a prospect. This would allow the creation of sperm cells that could be fertilized in a type of IVF procedure. See, e.g., Rick Weiss, *Sperm Made from Stem Cells: Development in Mice Raises Issues for Human Reproduction*, WASH. POST, Sept. 16, 2003, at A12. While it is certainly far from a proven possibility, the scientific development of this technique seems as likely now as developing a cloning technique that would be safe for humans.

35 A “right” is not necessarily the same thing as a Constitutional right to do something. However, here the Council does appear to be replying to certain literature arguing a potential Constitutional right or “procreative liberty.” The legal notion of procreative liberty was conceived and championed by John Robertson. See, e.g., John A. Robertson, *Embryos, Families, And Procreative Liberty: The Legal Structure Of The New Reproduction*, 59 S. CAL. L. REV. 942 (1986); John A. Robertson, *Liberty, Identity, and Human Cloning*, 76 TEX. L. REV. 1371 (1998).

36 316 U.S. 535 (1942). In *Skinner*, the Oklahoma Attorney General sought to use a statute that called for sterilization of some but not all repeat criminal offenders to obtain the sterilization of Mr. Skinner, a robber and a chicken thief. Since the statute provided for sterilization of criminals convicted
of larceny but not embezzlement, the Court found that it violated the Equal Protection Clause of the Fourteenth Amendment. In making that determination, the Court stated that marriage and procreation are fundamental liberties. Id. at 541.


38 405 U.S. 438 (1972). In Eisenstadt, the Court found a Massachusetts statute which limited unmarried people's access to contraceptives deprived unmarried people equal protection of laws. It said, "[i]f the right of privacy means anything, it is the right of the individual, married or single, to be free from unwarranted governmental intrusion into matters so fundamentally affecting a person as the decision whether to bear or beget a child." Id. at 453. The Court avoided a substantive due process argument and therefore did not go into a discussion of the nature of the privacy right discussed. Although using "rational basis" language, the Court applied a mid-level scrutiny test. In a case involving cloning to produce children, it seems more likely that the Court would apply a straight rational basis test.

39 It would probably also extend the doctrine too far to say that the procreative interest requires the state to allow parents to choose the gender of children or even to say that parents have a liberty interest in having a healthy child.


41 Although less strong, that interest might still exist even if cloning could be made physically safe due to the psychological risks to the offspring.

42 Cloning to produce children does not raise the issues of equality and intrusion into a woman's body raised by contraception and abortion. Nor does an analogy of intrusion into the bedroom raised by the recent case Lawrence v. Texas, 539 U.S. 558 (2003), seem apt here. That case was about a right to privacy in sexual conduct and not a procreative interest. In fact, because there was no procreative aspect in that case, the competing interests that might have been protected by the state (e.g., a potential child) were considerably smaller.

43 See discussion of PGD supra at pp. 5-7.
provide far more direct solutions to the problem. In terms of producing a child through cloning to obtain "rejection proof" transplants, better and more direct solutions are also available. For cases where it is appropriate, PGD is already available.\textsuperscript{44} Although certainly controversial, therapy derived from cloning for biomedical purposes may also provide better solutions.\textsuperscript{45}

Another benefit discussed is the desire to replace a loved one.\textsuperscript{46} This is probably impossible since the child would not be the same individual due to chronological and environmental differences. It is also possible that that motivation would also expose the created child to even greater psychological risks.\textsuperscript{47} Nonetheless, to dismiss it out of hand is to deny parents' choices completely and possibly inappropriately. Those choices may not be so unfounded as they seem at first blush. Broad denial without closer examination seems a risky policy.

The final benefit discussed is to produce a person of great genius.\textsuperscript{48} Again, this is likely impossible since chronological and environmental differences would have an impact. As the Report notes, however, such a desire raises a specter of eugenics and hence seems dangerous and untenable.\textsuperscript{49} We should be wary, however, of making policy based on specters. Specters, almost by definition, produce an emotional response that may not be real on closer examination. We should not let our emotional response be the last word. It is at best a signal that danger lies

\textsuperscript{44} The British HFEA has reviewed two instances of PGD for donor screening. It approved PGD for HLA matching where the parents sought to produce a donor for their child with thalassemia since the PGD would also be used to screen for the disease in embryos. But, the HFEA did not allow PGD for HLA matching in a case where parents were seeking to produce a donor for an existing child with Diamond-Blackfan anemia because the PGD would not be used to screen for the disease (the disease appeared to be sporadic in the existing child; neither parent was a carrier). In the latter case, the PGD conferred no medical benefit on the potential child and would be used only for the benefit of the existing child. See Wolf, et. al., supra note 19, at 329-30. That case was well-publicized and after considerable public criticism, the HFEA changed its PGD policy to permit PGD for all such uses. See Arlene Klotzko, Science Matters, FIN. TIMES, June 25, 2004.

\textsuperscript{45} There is no question that these alternatives to cloning to produce children would not pass muster with a number of members of the Council. Since many of those methods involve destruction of an embryo, or the potential for such destruction, members who are opposed to the destruction of embryos for any purpose would vehemently reject such methods. They also reject cloning to produce children, however, and although consistency might require them to favor cloning to produce children over those methods, it is difficult to predict which method they would dislike more. Likely, they would reject all and reject the concept that they should choose.

\textsuperscript{46} President's Council on Bioethics, supra note 5, at 79.

\textsuperscript{47} The Report does not address this "benefit" directly. Instead, it is subsumed in its more general critique concerning the identity difficulties that a cloned child might have. Essentially, the cloned child's life would be constantly overshadowed by the life of the "original." Id. at 103.

\textsuperscript{48} Id. at 80.

\textsuperscript{49} Id. at 107-110.
ahead. It is not the final word on what that danger may be. Before we fear slipping down the slippery slope into eugenics, we should be sure that the slope is actually there.

Still, weighing the various risks and benefits discussed, it appears that the Council is correct that we should seek an outright ban on cloning to produce children. At this time, there are not significant benefits that could outweigh the significant risks posed by such technology. There does not appear to be a right to reproductive cloning that could trump the government’s interest in avoiding those risks. But all of this could change. The most significant risks are physical and when those diminish, which they likely will eventually, the calculus may well be different and a ban would be inappropriate.

III. CLONING FOR BIOMEDICAL RESEARCH

There is a completely different tone to Chapter 6 of the Report, which deals with cloning for biomedical research. Here, the division within the Council is immediately apparent, and indeed, the Report makes little effort to disguise it.\(^5\) Where the Council was generally unanimous in concluding there were no reasons that could justify cloning to produce children, even those on the Council who stand vehemently against cloning for research recognize compelling justifications for such research. All of the members recognize that important medical knowledge could be gleaned from such research. Similarly, they all recognize that the potential for such research in curing and treating disease and thus alleviating great suffering is, in itself, a worthwhile goal. Whereas with respect to cloning to produce children there is a tone in the Report that proponents are at best indulging a not very fundamental desire—or at least one with better alternative ways of achieving it—on this issue the tone is that this is a compelling need and one that may not have better alternatives.

Ultimately, where the Council splits is whether the compelling need is sufficient to justify the creation and destruction of an embryo.\(^5\) While both sides recognize the potential to alleviate great suffering, those against cloning for research hold that that need is not as important as avoiding a fundamental moral imperative. Those who favor research and even those who were part of the group that first recommended a moratorium do not

\(^5\) Intriguingly, the division apparent in this inquiry is a different division from the one that arises within the Council when policy decisions are made. The Council was split much more evenly than the ultimate policy decision seems to imply.

\(^5\) \textit{President's Council on Bioethics, supra} note 5, at 128-70.
see the same moral imperative. The split is not complete for there are those for whom the creation and destruction of an embryo raise different ethical issues. Also even those who support cloning for research have considerably different views on the level of respect due an early stage human embryo. However, the real break is between those who cannot accept destruction of an embryo on any terms and those who find that destruction acceptable under certain circumstances and situations. To deal with this rift, there are two parts to this chapter of the Report. The first half is devoted to the moral case for cloning for research and the second devoted to the moral arguments against it.

There are essentially three different views of an embryo provided by this chapter. The first, held by those members favoring such research but with reservations, considers the embryo as something different than a human being but entitled to “respect” as a potential human being (Pro-research-Position 1). The second, held by those members enthusiastically favoring such research, considers the embryo as little more than a clump of cells entitled to little more respect than a human organ for transplantation (Pro-research-Position 2). The third, held by those members morally against cloning for research, views the embryo as “one of us,” different only in degree of development (Anti-research).

The proponents of Pro-research-Position 1 accord the embryo with intermediate moral respect, providing it with a moral status in between a normal human cell and a full human person. While they recognize the importance of the embryo’s potential and that it is at least theoretically capable of becoming a full human person, they do not equate that potential with personhood. They do recognize significant moral risks but they believe that those risks can be minimized through regulation. They would limit permissible research to embryos up to fourteen days of development. At that stage, the embryo is 100 to 200 undifferentiated

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52 Id. at 133-147.
53 Id. at 147-149.
54 Id. at 150-169.
55 These arguments are set out on p.133-147 of the Report.
56 The fourteen day limit is adopted without much discussion. However, the fourteen day limit has been almost universally adopted by commissions that have recommended permitting embryo research. See, e.g., MARY WARNock, A QUESTION OF LIFE, THE WARNock REPORT ON HUMAN FERTILISATION AND EMBRYOLOGY (1984) (promulgated as the statutory limitation in the Human Fertilizations and Embryo Act of 1990); NATIONAL INSTITUTEs OF HEALTH, THE REPORT OF THE HUMAN EMBRYO RESEARCH PANEL (HERP) 67 (1994). The Warnock Commission, the first to set this limit, acknowledged that the choice of fourteen days, at the formation of the primitive streak, is fairly arbitrary but contended that it seemed to be the most logical point to stop research, before
cells. Twinning is still possible so it is not necessarily a potentially unique individual. At this stage, more than half of naturally created embryos do not survive to implant in the uterus. Thus pregnancy and implantation seem to be an essential step to personhood.

There is one fundamental difference between embryo research involving cloning and many other types of embryo research and that is that it requires the creation of an embryo with the intention of its destruction. This difference cannot be over-emphasized because it represents for many an important additional moral divide.\textsuperscript{57} Thus, for some, the moral question is not merely the status of the embryo but the motive in its creation. The proponents of Position 1 justify this step, however, and state that since an early stage embryo occupies an intermediate moral ground, worthy uses can be justified regardless of how and why the embryo is produced. They note that producing embryos for research and producing “extra” embryos for IVF are not so different. Finally they argue that the ultimate goal is something good; destruction is not a goal but an “effect.”\textsuperscript{58}

Proponents of Pro-research-Position 2 accord the early stage embryo with something less than an intermediate moral status\textsuperscript{59} and have few ethical qualms about using cloned embryos for biomedical research; indeed, they argue it should be embraced enthusiastically. They also adhere to the fourteen-day limit, although they do envision arguments could be made in the future to extend that limit. They point out that an early stage embryo lacks sentience and that most such embryos are naturally wasted. Most importantly, they argue that the concept of “potential” is overplayed. They point out that the potential to become something is not the same as being something. In addition, they contend

differentiation occurs. HERP did not completely foreclose research after the fourteen day limit but stated that it would require additional review.

\textsuperscript{57} It is generally believed that the recommendation to allow creating embryos for research scuttled the work of the Human Embryo Research Panel. See, e.g., \textsc{Stephen S. Hall}, \textit{Merchants of Immortality}, 114-120 (2003). NBAC recommended that federal funding for stem cell research be limited to embryos remaining after infertility treatments. \textsc{Nat’l Bioethics Advisory Comm’n}, supra note 13, at 5. While definitely a focus for deliberation, however, the requirement of producing embryos with the intention of destroying them does not appear to have been a significant moral divide among members of the Committee. Professor Dresser bases her decision to vote for a moratorium substantially on this point, \textit{see President’s Council on Bioethics, supra} note 5, at 249-52 but other committee members seem much less influenced by the issue. Instead, they divide over the moral issue of destruction of an embryo regardless of its creation.

\textsuperscript{58} This argument as it is posed is philosophically weak. It seems to be a version of the doctrine of “double effect,” although not entirely accurate. \textsc{See William Fitzpatrick}, \textit{Surplus Embryos, Nonreproductive Cloning and the Intend/Foresee Distinction}, 33 Hastings Center Report 29 (2003).

\textsuperscript{59} \textsc{President’s Council on Bioethics, supra} note 5, at 147-49.
that the concept of potentiality is almost meaningless since every human cell has the genetic potential to develop into a complete human being. They argue that an embryo only has true potential upon implantation.

There is very little common ground between those according embryos something less than full human status and those who argue that embryos are fully human (anti-research). The members of the Council who make the moral case against cloning for biomedical research maintain that an embryo at any stage is not an intermediate status being but fully “one of us.” They maintain that the appearance of the primitive streak at fourteen days is only the visible culmination of subtle prior development. They also reject the concept that the potential for twinning obviates the view of the embryo as an individual—instead they say that it just means that there may be two individuals instead of one.

Most importantly, they reject the concept that “respect” for an embryo short of recognition of it as a human being has any meaning. They point out that many cultures “respect” animals, but they still kill them and eat them. In reality, we treat animals as commodities and resources and they say using embryos for research would similarly commodify human life. This, they say, diminishes the concept of equality of all humans; how we respond to the weakest says much about our humanity.

Ultimately those morally opposed to cloning for biomedical research contend that allowing cloned embryos in laboratories means allowing, in principle, an ever-expanding genetic mastery of one generation over the next. They say that creating embryos solely for research treats the embryos solely as a means. Finally, such research could open the door to other moral hazards, the slippery slope to reproductive cloning, later stage embryo use and egg farming.

None of the discussion in this chapter is fundamentally new. Since it deals principally with the ethical use of embryos, much of the discussion mirrors and updates work that has been done before by the Human Embryo Research Panel (HERP) in 1994 and the National Bioethics Advisory Commission (NBAC) in 1999 and numerous other publications. What is most surprising about the Council’s deliberation on cloning for biomedical research is not the arguments of moral worth that were considered but

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60 Id. at 150-69.
61 For a discussion of this concept, see Fitzpatrick, supra note 58.
rather the way the Council divided. Ultimately, seven members favored a ban on cloning for biomedical research. For most of those seven, their policy view was governed by a single criterion view that an embryo is morally a person. Seven other members favored permitting cloning for biomedical research now. Three members favored a moratorium on cloning for biomedical research. It is probably fair to say that the ten members favoring a moratorium or regulated research accorded an embryo with respect but did not equate it with the moral value of a human being. It is also probably fair to say that there was a significant spectrum on the amount of moral worth accorded to an embryo by those ten members. The special difficulty is that that moral spectrum is not linear but multidimensional. Each of the members brings different definitions of humanness and potentiality to bear in answering that question.

A hypothetical suggested by those favoring cloning for biomedical research can illustrate many of the different reactions to the moral status of an embryo. You are in a lab that has caught fire. In it are a child and a refrigerator holding 100 human embryos. You can save the child or the embryos but you cannot save both. Which do you choose? Most people would surely save the child. An interesting twist is to replace the child in

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64 Actually it is not very easy to see which members of the Council divided where—although the Report describes the division (p. 201-02), members are not named—only later when the overall policy recommendations are made are the individual members associated with a given recommendation. PRESIDENT’S COUNCIL ON BIOETHICS, supra note 5, at 227.
65 PRESIDENT’S COUNCIL ON BIOETHICS, MEETING TRANSCRIPT, Session 2: Human Cloning II: Public Policy Options (2002), available at http://bioethicsprint.bioethics.gov/transcripts/jun02/june20session2.html. Some of those members would require regulation prior to allowing such research while other members would allow that regulation to develop along with the research.
66 PRESIDENT’S COUNCIL ON BIOETHICS, STAFF WORKING PAPER, Human Cloning: Policy Considerations (2002), available at http://bioethicsprint.bioethics.gov/background/workpaper4.html. The transcripts provide only some insight into the reasoning of those favoring a moratorium. For Professor Dresser, it seemed primarily motivated by a desire for more scientific evidence that such research would provide significantly more information than research using leftover embryos from IVF, for the others, it appears to have been a desire for more public debate as well as additional scientific information.
67 Childress, supra note 24 at 15-18. The Report does not distinguish between single criterion views and pluralistic views. That distinction is made in the REPORT OF THE HUMAN EMBRYO RESEARCH PANEL, supra note 62, at 35-39. Those who do not view the embryo as a person often hold significantly different views on its status. Some view the embryo as something akin to chattel. On the other end of the spectrum, others view the embryo as a "pre-person"—something due even greater respect than a "potential" person.
68 One could load this question further by asking "whom do you choose."
69 This hypothetical was reported by William F. May in a seminar at the University of Virginia on October 31, 2003. It is the type of hypothetical typically designed to test the moral rigidity of the single criterion view that an embryo is a person since complete rigidity on that point would require saving the 100 embryos (since they represent 100 "people.") It is not offered here for that purpose but
the burning lab with a dog; most people would save the dog rather than the embryos. And yet many people would not be opposed to using that same dog for medical research and indeed would be willing to induce some suffering in that dog if that suffering were necessary to valuable research. Many of those people, however, might feel morally queasy about using the embryos for medical research. One can confuse the issue even more by extending the hypothetical one step further. While many people favor using embryos to develop treatments to help people, few would favor using embryos to develop treatments to help dogs. It is difficult to articulate fully what is behind our reactions here. For some people, it may be simply that they do not intuit that embryos are human beings. For others, it may be more complex.

We cannot completely unpack everything that is going on in the various versions of these hypotheticals, but some aspects become immediately apparent. First, we tend to distinguish between potential life and actual sentient life even when it is not human. On the other hand, we tend to take a utilitarian view of animals while we are wary of any manipulation of our own species even in its "potential" form. That wariness does not necessarily extend to rejection; as the Report itself makes clear, there is a long spectrum to that wariness. For some it will lead to rejection of any embryo research, but for others it will lead to a considered decision to move forward despite the wariness. Even for those who decide to move forward, there are limits and intent may matter. Thus, it may be acceptable to use that research to alleviate real human suffering, but not for other purposes. Of course, that research may eventually help dogs. But it is not the intent of the research. Similarly, some of that research may have huge commercial benefits. But again, that cannot be the intent of the research.

On the other hand, the proponents of biomedical cloning fail to convince us why we should completely trust science. Rebecca Dresser’s

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70 Although certainly not all people would agree with using the dog for research. Peter Singer might argue that the reason that we save the dog is that it is morally superior to the embryos since sentience is a significant criterion of moral protectability. For the same reason, we should not use the dog for human biomedical research. See Peter Singer & Deane Wells, Making Babies (1985); Peter Singer, Animal Liberation 8,19-20 (1990).

71 This may explain why public support for cloning for biomedical purposes has been growing. When the science was in its infancy, its prime utility was viewed as a way to improve fertility treatment. More recently, however, biomedical cloning is seen as a way to develop treatments for diseases such as Parkinson’s and Alzheimers. Important as fertility treatment is, the public does not give it equal status with the treatment of serious and fatal disease.
concern that science has not yet proven the value of embryo research and that we should fully assess that value before we move into the next stage of creating embryos for research seems compelling.\textsuperscript{72} While there is research that is impossible without such embryos, some deliberate staging of the research process may be reasonable. It is not clear, however, that a moratorium does anything to assist with that staging. In fact, it stops research and any attempt to develop regulations for that research and thus prevents many of these questions from being answered.

With biomedical cloning there are at least several valid competing moral responses. Appropriately, the Council did not try to pick any of them as superior to the others. The Council might have done well by letting that be the last word.

IV. POLICY OPTIONS

The most controversial part of the Report is its Policy Recommendations. To some degree this controversy was inevitable since the moral division on the Council made consensus impossible.\textsuperscript{73} Yet a policy recommendation seems to have been a goal from the very beginning of the Council's deliberations.\textsuperscript{74} But for many, the attempt to achieve a policy consensus disappointed both sides of the moral debate.

Proponents of cloning for biomedical research were disappointed that the Council's final policy recommendations did not reflect the actual numbers on each side of the moral divide. Arguably, a majority of members could and would ultimately support cloning for biomedical research. The policy, however, puts the majority among those who would delay that decision. It grouped both those who wished for more time, i.e. a

\textsuperscript{72} Elizabeth Blackburn tries to provide some of those reasons in her statement at the end of the Report, and some of them are compelling. PRESIDENT'S COUNCIL ON BIOETHICS, supra note 5, at 246-48. However, there are more than 400,000 embryos in storage in the United States. Rick Weiss, 400,000 Human Embryos Frozen in U.S.; Number at Fertility Clinics Is Far Greater Than Previous Estimates, Survey Finds, WASH. POST, May 8, 2003, at A10, and this refutes the idea that there are not adequate embryos for some of the important research.

\textsuperscript{73} As Francis Fukuyama pointed during the policy discussions, it was extremely unlikely that anyone's mind was going to change vis-à-vis the moral issues. There was, however, considerable flux on how those moral issues affected the policy recommendations. See PRESIDENT'S COUNCIL ON BIOETHICS, MEETING TRANSCRIPT, Session 2: Cloning: Public Policy Options (2002), available at http://www.bioethics.gov/transcripts/jun02/jun02session2.html (June 20, 2002). Some Council members felt that that flux continued even after the policy discussions and felt somewhat blindsided by the recommendations that were finally made.

\textsuperscript{74} A working paper on policy options was produced and discussed on the second day of the Council's meetings. PRESIDENT'S COUNCIL ON BIOETHICS, STAFF WORKING PAPER, Human Cloning, Policy Considerations (2002), available at http://www.bioethics.gov/background/workpaper4.html.
moratorium, with those who are unlikely ever to agree to biomedical cloning. On the other hand, opponents of cloning for biomedical research were equally unhappy. Ben Mitchell of the Center for Bioethics and Human Dignity wrote “[w]e were looking to this Council for moral leadership, not a reflection of the confusion of our culture.”

Ultimately, the policy recommendations in the Report attempt to do both too little and too much. The major flaw of the policy recommendations was built in to the enterprise from the start. The Council was meeting to discuss cloning, so the policy recommendations were only about cloning. But as much of the previous discussion demonstrates, cloning is but a small part of the moral and political turmoil surrounding embryo research. To attempt to set policy for cloning without addressing embryo research both obscures the issues and also fails to address many of the major issues. In addition, although the Council considers cloning to produce children separately from cloning for biomedical research, the fact that the two are linked in the Report seems to obscure the fact that the policy measures that could be used to address each one do not need to be linked at all.

The Council considered seven policy options. Policy Option 1 provided for professional self-regulation with no legislative action (“self-regulation”). That policy reflects the status quo. Policy Option 2 provided for a ban on cloning to produce children, with neither an endorsement nor restriction of cloning for biomedical research (“ban plus silence”). Policy Option 3 provided for a ban on cloning to produce children with regulation of the use of cloned embryos for biomedical research (“ban plus regulation”). Policy Option 4 provided for governmental regulation, perhaps by a new federal agency, with no legislative prohibitions (“regulation of both”). Policy Option 5 provided for a ban on all human cloning, whether to produce children or for biomedical research (“ban on both”). Policy Option 6 provided for a ban on cloning to produce children, with a moratorium or temporary ban on cloning for biomedical research (“ban plus moratorium”). Policy Option 7 provided for a moratorium, or

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75 Childress, supra note 24, at 18.
76 Allowing time to consider related biotechnologies is actually one reason given justifying the moratorium, but this is somewhat disingenuous because that was probably a desire of only a minority of those voting for the moratorium—or at least that consideration was unlikely to change the majority’s view that a ban is necessary. Moreover, it fails to explain why that consideration could not take place while potential regulation is being considered. Unfortunately, a moratorium is often better at stopping dialog than stimulating it.
77 PRESIDENT’S COUNCIL ON BIOETHICS, supra note 5, at 185-97.
temporary ban, on all human cloning, whether to produce children or for biomedical research ("moratorium on both").

From the outset of the discussion, it was assumed that any policy recommendation would include a recommendation that cloning to produce children should be banned. Therefore, the options that did not include such a ban were never seriously discussed. Similarly, it became clear that a total ban on all forms of cloning was also unlikely to achieve any sort of consensus. The real discussion centered around what to do with cloning for biomedical research, particularly on options 3 ("ban plus regulation") and 6 ("ban plus moratorium"). This became the center of the controversy, whether to move forward with regulation for biomedical cloning or whether to set up a moratorium to allow time to reassess the situation before attempting any regulation. Ultimately, seven members favored moving on with regulation while ten voted for a moratorium.

There were diverse views on the Council as to what a moratorium would mean. Most of the members of the Council who favored banning cloning for biomedical research agreed to the moratorium as a compromise that also provided a way to gain time to develop public consensus to ban such research.\footnote{This is not completely the case. At least two members seemed genuinely hopeful that science could provide a method whereby the entity created through cloning would lack the capacity to develop into a human being. If such an entity could be created (an idea largely dismissed by the scientists on the Council), those members might have far fewer objections. See President's Council on Bioethics, Meeting Transcript, Session 4: Human Cloning 10: Ethics of Cloning for Biomedical Research (2002), available at http://www.bioethics.gov/transcripts/apr02/apr25session4.html.} For a few members, the moratorium was an attempt to gain time where the needs and methods of regulation were still very unclear. If genuine, that choice was probably politically naïve. During the discussion law professor Mary Ann Glendon pointed out that there was, in effect, very little difference between a ban and a moratorium, and she was correct. Moratoria and bans on federally funded fetal research have been in place almost continuously since 1974.\footnote{Congress imposed the first moratorium until the first federal bioethics commission (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research) could make recommendations to the Secretary of Health Education and Welfare. Research to benefit the fetus or involving only minimal risk was recommended to be allowed to continue, and research posing greater risks or involving in vitro fertilization was to be submitted to an Ethics Advisory Board (EAB) for approval. However, EAB recommendations were never approved and the Board ceased to exist in 1980, when the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research was established. Thus, research that posed more than minimal risk or involved in vitro fertilization was essentially banned. Congress reinstated a moratorium in 1985, by way of NIH reauthorization, which amounted to a ban until 1993. Encouraged by Clinton, Congress lifted the ban on fetal research in 1993, again by way of NIH reauthorization. NIH established an Embryo Research Panel to make recommendations on use of its renewed funding authority. However, a legislative ban was imposed again in fiscal years 1996 and 1997, through the appropriations process.} None of those has fostered real
legislative or regulatory action. In effect, they are bans – albeit only of federally funded research. This division on the subject of a moratorium created odd alliances. Those who would never support embryo research formed a majority with those who at least purportedly favored such research but needed more time. In reality, the latter group was morally more closely allied with the group that favored moving forward with embryo research with regulation.

Throughout the Report and the transcripts of the meetings, the focus is on the moral impetus for the policy recommendations. Indeed, when the discussion strays into an analysis of political realities, it is immediately brought back to the moral foundation. This is both understandable and laudable since that was the primary mission of the Council. However, once the decision was made to make a policy recommendation, a heavy focus on moral foundations was probably a mistake. As important as the moral foundations are, without a discussion of the political realities and the legal underpinnings of any prospective legislation or regulation, the policy recommendations are toothless. The politics and legal underpinnings are not mere impediments to a policy decision but instead need to be factored in as part of the policy decision itself.

The politics of cloning began long before the announcement of the birth of Dolly the sheep in February 1997. Its roots extend at least as far back as the abortion debate that began in the 1960s. Since most, albeit not all, of the moral issues surrounding cloning have their roots in the moral values ascribed to embryos and the moral use of embryos, it is inevitable that the issues are mired in the same political morass that surrounds embryo politics in general. It is perhaps not surprising that the Council sought to steer clear of embryo politics. Politics led to the disavowal of the Report of the Human Embryo Research Panel on the day that report was issued. NBAC also tried to steer clear of embryo politics in its recommendations on human cloning by keeping the focus on somatic cell nuclear transfer and avoided questions of embryo research. But any legislation or regulation, be it for a ban, moratorium or regulated research, at least at the


81 Hall, supra note 57, at 117-18.

82 Nat’l Bioethics Comm’n, supra note 13.
federal level, will be caught up in that maelstrom of embryo politics and consequently of abortion politics.

The Congressional battle lines were drawn before the Report was issued. The House of Representatives has twice overwhelmingly passed total bans on all human cloning, "The Human Cloning Prohibition Act". The Senate there were two competing bills both called "The Human Cloning Prohibition Act." The version proposed by Senator Brownback mirrors the legislation passed by the House. The other version, sponsored by Senators Specter, Hatch, Feinstein, and Kennedy among others, would ban human cloning but promote stem cell research, and thus promote some embryo research. But the legislation stalled in the Senate in the summer of 2002 and seems to be likely to remain stalled there for the foreseeable future, as neither side has shown any indication of giving ground. It would not be fair to say that the political wrangling has been completely unaffected by scientific and ethical debate, since Senator Hatch "crossed sides" after intense scientific lobbying. However, it would probably be fair to say that the for the most part, the legislative decisions have been made and continue to be made without much consideration for any continuing scientific and ethical information. This was a missed opportunity for the Council. Of course, that was not the Council’s fault. Leon Kass was among the few voices heard during the Hearings on H.R. 2505. In contrast, legislation proposed in Canada to deal with legal and ethical issues in assisted reproduction, including embryo research, has generated hundreds of pages of scientific and ethical testimony. That is not to say that quantity equals quality, but some quantity is necessary for

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85 S. 1758, 107th Cong. (2001). That bill was reintroduced in 2003 as "Human Cloning Ban and Stem Cell Protection Act of 2003." That Senate sponsorship roster reflects a departure from the lines usually drawn on abortion issues, since Senator Hatch is opposed to abortion but favors stem cell research.

86 It became apparent in June 2002 that there were not enough votes in the Senate to pass a bill banning all forms of cloning, effectively stalling all action on the cloning bills in the Senate.

87 See, e.g., Sheryl Gay Stolberg, Key Republican Backs Cloning in Research, N.Y. TIMES, May 1, 2002, at A20.

quality. The dearth of such testimony at this time demonstrates that the issue now before the legislature is almost purely political and inextricably bound up in the abortion debate.

The Council's discussions about the legislative process are often simplistic. For example, in connection with both policy proposals it is recommended that the legislation include "broad coverage and narrow drafting." This phrase appears frequently during the discussions as well, but there is not full consideration of its implications. For example, there is little discussion of what kind of relationship any legislation might have to any regulatory body. That might have an important impact on what is or should be "narrowly drafted." For example, would the legislation set out a number of normative propositions that would later be implemented through administrative regulation or would it be so specific as to leave little room for interpretation for a regulatory body? In legislation, especially legislation involving science, the latter seems an unwise proposition. It seems even more imprudent when it is already conceded that the full relation of this legislation to embryo research in general has yet to be considered.

The concept of "broad coverage" raises even bigger issues. By broad coverage the Council, on both sides of the divide, means that the legislation should cover everyone, regardless of funding. This would be a major departure from most medico-scientific regulation that predominantly regulates research receiving or affected by federal funding or research that falls under the purview of the Food and Drug Administration. Similarly, the Report, with only cursory justification, argues that any legislation or regulation on cloning should be made at the federal level rather than in the

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59 President’s Council on Bioethics, supra note 5, at 213.
60 This is further complicated by the fact that the FDA has claimed jurisdiction over cloning. Letter from Kathryn C. Zoon, to Sponsors/Researchers, Human Cells Used in Therapy Involving the Transfer of Genetic Material By Means Other Than the Union of Gamete Nuclei (July 6, 2001) (stating that FDA “has jurisdiction over human cells used in therapy involving the transfer of genetic material by means other than the union of gamete nuclei,” including ooplasm transfer, since it involves the transfer of mitochondrial DNA). The FDA has stated that reproductive cloning is subject to the Agency’s Investigational New Drug (IND) regulations. The FDA’s claim may be supported by the notion that cloning is a form of gene therapy. See, Gail H. Javitt and Kathy Hudson, Regulating (for the benefit of) Future Persons: A Different Perspective On The FDA’s Jurisdiction to Regulate Human Reproductive Cloning, 2003 Utah L. Rev. 1201 (2004). That authority is predicated on the notion that such experiments involve the administration of unapproved biological drugs subject to the Agency’s IND regulations. The FDA’s claimed authority for gene therapy is not based on any legislative grant of jurisdiction, but the FDA did submit to a public comment period when it claimed that authority in the early 1990s. No such public comment has occurred with cloning. Richard A. Merrill and Bryan J. Rose, FDA Regulation of Human Cloning: Usurpation or Statesmanship?, 15 Harv. J.L. & Tech. 85 (2001).
states. But there are important federalism issues that the Report ignores.

The Report argues that cloning regulation should take place at the federal level for several reasons. First, cloning is a national problem that will affect all of society. Second, the federal government has and will continue to play an extensive role in funding and regulating scientific research. Third, both types of cloning would tend to enter into interstate commerce. Fourth, federal legislation is necessary to support the states' actions as they regulate cloning. Finally, human cloning has become a part of international debate and since only the federal government can make treaties or conduct foreign policy for the whole nation, the federal government will be under pressure to legislate on this subject.

While many of these reasons may have some merit, it is the third one that may matter the most—whether cloning affects interstate commerce. The only clear Constitutional basis to regulate cloning at the federal level is through the commerce clause and it is by no means certain that all cloning has a sufficient nexus with interstate commerce. Indeed, it is the cloning to produce children, the type of cloning that the Council is unanimous in wanting to ban, that may have the least.

The Constitutional law on federalism has changed considerably in the last decade, and the commerce nexus that could be assumed ten years ago is not the same one today. In United States v. Lopez, the Supreme Court struck down a federal statute, the “Gun-Free School Zones Act of 1990” that forbade “any individual knowingly to possess a firearm . . . at a

91 President's Council on Bioethics, supra note 5, at 183-85.
92 The Report also does not address another constitutional argument that has recently garnered some press: the notion that regulation of cloning may interfere with a scientist's “right to research.” Proponents of that view ground such a right on a scientist's First Amendment rights to free speech. See, e.g., Brian Alexander, Free to Clone, N.Y. TIMES, Sept. 26, 2004, § 6 (Magazine), at 26; see also, Foley, supra, note 32, at 677-87.
93 See President's Council on Bioethics, supra note 5, at 183-85.
94 It is also not clear that most of the rationales raise sufficient bases to regulate cloning at the federal level. There are many issues that affect society as a whole but are not regulated at the federal level. For example, issues of family law and crime are traditionally regulated by the states. Similarly, individual states' death penalty statutes have raised serious issues with extradition treaties, but that has not been sufficient grounds for national death penalty legislation. The only justification that has unquestionable merit is the fact that government oversight of scientific research is largely done at the federal level. The type of regulatory apparatus that that oversight could involve, at least in terms of cloning for biomedical research, could well be out of reach for many states.
95 NBAC also recommended federal action, but the direction of jurisprudence concerning federalism was not so clear even in 1999. Federalism is an area where the Supreme Court has been especially active in the last decade. Two cases that set much of the landscape are United States v. Lopez, 514 U.S. 549 (1995), that is discussed here, and United States v. Morrison, 529 U.S. 598 (2000).
96 514 U.S. 549.
place that [he] knows...is a school zone." The Court held that the statute had nothing to do with commerce nor did it "substantially affect" interstate commerce. The Court also specifically rejected the government's argument that a sufficient nexus was established because possession of a firearm in a school zone may result in violent crime, that the costs of violent crime are substantial, and that violent crime affects national productivity. The Court noted that under that analysis, the federal government could freely regulate virtually anything, including areas where the states have been historically sovereign, such as family law, education and criminal law. The Kennedy-O'Connor concurrence is especially instructive: "the statute now before us forecloses the States from experimenting and exercising their own judgment in an area to which States lay claim by right of history and expertise."

It is possible to see how cloning, especially reproductive cloning, could fit into a similar calculus. Cloning could take place within the confines of the doctor-patient relationship in a lab unaffiliated with any organ of interstate commerce. The technique does not need to involve interstate commerce. Indeed, the only source of "commerce" might be the source of the oocytes, but presumably that too could be done without interstate commerce, or any commerce at all. Moreover, cloning, as a form of procreation, falls within the traditional sovereignty of the states.

It is even possible to see how cloning for biomedical research might fall outside of the interstate commerce requirements. While much of that research probably would involve interstate commerce since it would have developing treatments and pharmaceutical products as a goal, research whose motive is "pure science," unaffected by the desire to produce treatments or medical care, might well not have a sufficient nexus with interstate commerce. Moreover, since one of the central concerns about embryo research is "when does life begin" that might again fit best in the experimental laboratory of the states. Of course, to the extent the research is done through federal funding, a sufficient nexus would exist.

It is also not clear why the Council runs away from legislating in the states. Certainly, it is "messier" in that it involves fifty legislatures rather

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98 514 U.S. at 561.
99 Id. at 564.
100 Id. at 583.
101 As noted supra, note 90, the FDA has asserted that it has jurisdiction over human cloning as part of the Food Drug and Cosmetic Act's investigational new drug requirements. In what can only be described as "better the devil you know," that action has been enthusiastically supported by the biotech industry.
than one. But banning cloning to produce children is not a very controversial issue. It has widespread public support. To the extent that success of a commission is measured by implementation of its recommendations, one of the greatest successes of any commission on bioethics was the 1981 Uniform Determination of Death Act, proposed and largely conceptualized by The President’s Commission on Bioethics.\(^{102}\) That commission provided a definition of death that was quickly adopted by all of the states. Such widespread adoption at the state level can be expected for a generally non-controversial issue. It would not work where there is considerable disagreement such as with cloning for biomedical research.

Moreover, there are good reasons to have federal regulation of cloning for biomedical research. Any aspect of such research is more likely to involve interstate commerce directly. To the extent it might be permitted at all, it would be best considered as part of, indeed subsidiary to, a regulatory structure for embryo research as a whole.\(^{103}\) It is not clear that the states have the regulatory structure that could manage that and moreover state regulation might require inefficient duplication of effort.

V. CONCLUSION

Both the achievement and disappointment of the Council’s report on cloning is that it “is a reflection of the confusion of our culture.”\(^{104}\) It is an achievement because it did not shrink from that reality. It is a disappointment because it fails to provide or really even to consider, a bridge to compromise. There is much in the Report that should make us worried. The breadth of the cultural divide is enormous. All of the scientists on the Council voted as one block. All of the members committed to the single criterion principle that an embryo is “one of us” voted as a block. That left very few in the middle and very little indication of any willingness to compromise from either side.

Unfortunately, the status quo may be the worst of both worlds. The United States has among the most lax regulations for reproductive


\(^{103}\) Countries that have embryo research regulations have not run head long into cloning for biomedical research. For example, only just recently, the HFEA granted the first license for therapeutic cloning research. See HFEA Grants the First Therapeutic License for Research (Aug. 11, 2004) available at http://www.hfea.gov.uk.

\(^{104}\) See Childress, supra note 24, at 18.
technology in the developed world. Most of that is because most scientific
regulation in this country is tied to federal funding or FDA commerce and
federal funding for most research concerning assisted reproductive
technology has been effectively stymied for more than 19 years. But
experimentation in the reproductive arena is going on in the private sector
and biotechnology has boomed in the last decade. While most of this
research may be reputable science, some of it is not.\footnote{105} It is not clear that
regulation in this area is appropriate or achievable. In fact, it is not clear
that the public at large is actually unhappy with the status quo.\footnote{106} But that
should be a considered choice rather than a failure of compromise. That
considered choice should reflect the moral, political and legal realities and
avoid the allure of false consensus.

\footnote{105} The Raelians now claim to have produced five cloned children. While their claims have never
been substantiated, they do have the scientific know-how to attempt such experimentation. See \textit{e.g.},
2628799.stm. The attempts may well be worse than their success would be.

\footnote{106} The Council spends very little time discussing public opinion on cloning. See \textit{PRESIDENT'S
COUNCIL ON BIOETHICS}, supra note 5, at 19-35.