Cloning and the Preservation of Family Integrity

David Orentlicher
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I. INTRODUCTION

Cloning turns on its head our view of reproduction. Instead of creating a new person by mixing the genetic material of two different parents, cloning permits the creation of a new person with the genetic material of just one parent.1 Because of this reconfiguration of reproduction, many scholars and other members of the public oppose the cloning of humans.

What I will argue is that this reconfiguration is in fact one of the most compelling reasons to permit cloning. Cloning not only turns on its head the way people can reproduce, it also turns on its head one of the chief objections to other artificial methods of reproduction. Specifically, cloning very directly addresses the concern that, when an infertile couple turns to artificial insemination, egg donation or surrogate motherhood, the couple must bring a third party into their procreative relationship. For some commentators, this is sufficient reason to condemn artificial methods of reproduction. They see serious harm to the marital relationship if its sanctity is violated by the inclusion of other persons.2 Even if one would not reject artificial methods of reproduction just because of their implications for marital and procreative relationships, the role of other persons raises important concerns. Sometimes, the other people want to stay involved in the lives of their genetic children, and the couple does not want the involvement.3 In all cases of artificial reproduction with another

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1. It turns out to be a little more complicated than that. There is genetic material not only in the nucleus of a cell, but also in the mitochondria (the “energy factories” of the cell), which reside outside the cell’s nucleus. Lori B. Andrews, Is There a Right to Clone? Constitutional Challenges to Bans on Human Cloning, 11 Harv. J.L. & Tech. 643, 647 (1998). Thus, a woman’s egg has genetic material in the nucleus and in the mitochondria outside the nucleus. If a woman clones herself and uses one of her own eggs, then all of her child’s genetic material will come from her. If a man clones himself, or a woman clones herself with the eggs of another woman, then the child will have genetic material from two “parents.” Stephen Jay Gould, Dolly’s Fashion and Louis’s Passion, 106(5) Natural History 18, 22 (1997). It is not known at this time the extent to which mitochondrial genetic material affects a person’s development.

2. Non-married couples might also choose cloning, and they could employ cloning to avoid a comparable violation of their relationship from using the sperm or egg of a third person.

3. This concern would also apply to artificial methods of reproduction employed by single men or women.

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person, the couple runs the risk that the other person's egg, sperm or placenta will transmit undesired infectious, genetic or toxic disease.\textsuperscript{4} By relying on cloning, infertile couples—and single persons—can have children without having to involve someone else in their procreative activities.

In the remainder of this article, I will briefly discuss the objections to cloning and explain why I find them unpersuasive (Part II). I will then discuss in more depth the important benefit from cloning, that it permits reproduction without involving other, undesired persons as genetic parents (Part III). Finally, I will tie this important benefit of cloning to constitutional doctrine (Part IV).

II. THE UNPERSUASIVENESS OF OBJECTIONS TO CLONING

When Ian Wilmut and colleagues announced their cloning of a sheep named Dolly in early 1997,\textsuperscript{5} they provoked a great deal of discussion, and especially a great deal of concern. Major newspapers published front page articles,\textsuperscript{6} major news magazines ran cover stories,\textsuperscript{7} and Dolly quite quickly became a topic of widespread public conversation. While there were proponents as well as opponents of cloning, the critics seemed to dominate. Commentators warned about the dangers to individual and societal well-being, and the President of the United States asked the National Bioethics Advisory Commission to study the ethics of cloning immediately and report back to him within ninety days.\textsuperscript{8} Several months later, Richard Seed provoked a second round of hand wringing when he announced his ill-fated intention to proceed with efforts to clone people.\textsuperscript{9}

For all of the \textit{sturm und drang} about cloning, we find on close examination that there is not that much to worry about in the end (assuming that cloning really can be performed in a way that yields normal, healthy infants). Although

\textsuperscript{4} Ronald Chester, \textit{To Be, Be, Be... Not Just to Be: Legal and Social Implications of Cloning for Human Reproduction}, 49 Fla. L. Rev. 303, 324-25 (1997). Placental transfer of infectious disease might occur in the case of reproduction by surrogacy. If the surrogate has an infectious disease, she could transmit it to the fetus. Similarly, she could also pass nicotine, alcohol, cocaine or other toxins to the fetus.

\textsuperscript{5} Ian Wilmut et al., \textit{Viable offspring derived from fetal and adult mammalian cells}, 385 Nature 810 (1997). In cloning, genes are taken from an adult cell and inserted into an egg whose genetic material has been removed. The egg then develops into an embryo and fetus.


\textsuperscript{8} \textit{Letter from the President}, reprinted in \textit{Cloning Human Beings: Report and Recommendations of the National Bioethics Advisory Commission}, at preface (June 1997).

cloning seems to raise important ethical concerns, there has been serious overreaction to those concerns. Because other writers have already responded to the leading objections to cloning, I will address the objections quickly and reference the more developed responses.

A. Physical Harms to Children of Cloning

An important objection to cloning exists with regard to its safety. We have little experience with cloning in animals and no experience with cloning in humans. Accordingly, it is too early to conclude that cloning can be performed without putting the children that result at undue risk of harm. There may be severe developmental abnormalities from currently unknown causes. For example, cloning of animals has resulted in offspring with an elevated risk of early death, as well as an increased risk of diabetes, enlarged heart size, and unusually large body size. A recent study reported that calves born from cloning have a high risk of premature death from abnormalities of their immune system, and Dolly was the one successful birth of a cloned sheep in 277 efforts. There may also be problems from known biological phenomena. As cells age, they lose their ability to undergo further cell divisions. Will children cloned from adult cells therefore age more quickly? As cells age, they also accumulate mutations in their genetic material. A mutation may not cause the person serious harm, since it is limited to that cell and its direct descendants. However, if the mutated cell is cloned, the mutation will show up in all of the child’s cells.

While safety concerns are a persuasive objection currently, refinements in cloning technique, followed by laboratory, animal and limited human testing, may provide sufficient assurance of cloning’s safety to permit its widespread availability. In other words, issues about safety may represent only a temporary objection to cloning. Importantly, people will not be interested in using cloning to have children if it is not a safe way to do so.

14. Wilmut et al., supra note 5, at Table 1.
16. Cells in the body contribute to growth or repair by dividing to form new cells. Thus, a damaged skin cell will produce other damaged skin cells, but not damaged heart, lung or brain cells.
B. Compromise of Individuality

Another common objection to cloning is the concern that it will deprive the children of cloning of their individuality.19 Children typically are born with a unique genetic make-up from a non-duplicable combination of their parents' genetic material.20 Children of cloning will have exactly the same genetic material as their single genetic parent.

There are at least three important responses to this argument. First, while human individuality is a value that should be protected, it should be protected by demonstrating respect for the right of all persons to make their life-defining choices in terms of their own preferences. Individuality truly matters in terms of the ability to assert personal control over one's destiny, not whether one has a unique or shared genetic endowment.21 To be sure, if a person’s choices in life were determined genetically, then cloning might be rejected on that ground. But in fact, environmental factors greatly influence a person’s identity.22 People are shaped as much by their family, friends, teachers and daily activities as they are by their genes.23 Accordingly, while identical twins have much in common, they also are different in very important ways.24 A wife of an identical twin would not be willing to accept her husband's brother as a substitute for her husband.25 This is not too surprising when one remembers that small perturbations can have dramatic effects as they become multiplied over time. Recall, for example, the simple demonstration of how much the paths of two different cue balls diverge dramatically over time on a bumper pool table when they are hit with a very small initial difference in angle. Even though the two balls are exactly the same in size, shape and composition, even though they traverse the same table, and even though they are hit with the same cue stick moving at the same velocity, a slight difference in the angle at which the stick

20. The one exception of course is identical twins, triplets or other identical, multiple births.
24. One study reports a fifty percent correlation in personality traits of identical twins, with non-twin siblings exhibiting a correlation of eleven percent and strangers a correlation close to zero. Thomas J. Bouchard, Jr., Whenever the Twain Shall Meet, The Sciences, Sept./Oct. 1997, at 52, 54.
25. Moreover, a cloned person would have even less in common with the child than do identical twins, since the twins have much more similarity in their environments while growing up. Tooley, supra note 18, at 79.
strikes the balls results in two markedly different paths over time.26 Similarly, two children with the same genetic endowment will diverge in their personality development as small differences in their lives multiply over time. The personalities of children of cloning will diverge even more from the personalities of their parents given the substantial differences between the environments in which they will live and the childhood environments of their parents.

Second, the concern about harm from loss of individuality is quite speculative. It is not clear that children will be worse off for having been cloned, just as it does not seem that children are worse off for having been born as an identical twin.27 Indeed, it is not clear that being unique is altogether prized by people. Adolescents commonly tease each other for being different, and they generally consider it "cool" to look and be like their peers.28 In addition, sharing one's genes with another person may be psychologically beneficial. Identical twins often develop special bonds of friendship and intimacy that other people do not enjoy.29

Third, it cannot be harmful to the child to be born with diminished individuality when the alternative is not to be born at all.30 We cannot argue that it is in the child's interests to be born, but we also cannot argue that it is in the child's interests not to be born. Of course, some lives may be worse than death.31 It is also true, as Leon Kass argues, that it is wrong to bring children into existence in some ways, for example by intentionally neglecting to prevent an easily preventable congenital illness.32 However, it is hard to imagine that a child of cloning would prefer to have never been born, and it is not possible to bring the child into existence without imposing whatever harms there are from being a child of cloning.

Some commentators observe that, even if cloning does not really produce children just like their parents, parents will expect the children to be like them, and these expectations will diminish the child's sense of independence and

31. For example, consider the person who lives for only a very brief time after birth and suffers excruciating pain the entire time.
individuality.33 There may be some truth to this concern, but all parents try to raise their children according to their expectations. Parents frequently push their children to succeed as doctors, athletes, or entertainers. Even if children of cloning will be burdened more than other children by parental expectations, we come back to the previous argument that the alternative is not to be born at all.34

As to the loss of individuality of the person being cloned, we also need not worry about that. The loss is something the person is choosing. The individual has presumably concluded that the benefits of having a child by cloning outweigh the disadvantages. This response would not apply to cases in which parents clone a child. Accordingly, it would be important to treat the freedom of adults to clone themselves differently from the freedom of parents to clone their children, just as we currently treat the freedom of adults to make other kinds of medical decisions differently from the freedom of parents to make the same medical decisions for their children.35

C. Using Children as a Means Rather Than Seeing Them as Ends in Themselves

A third concern about cloning is that it might involve using the child as a means to an end rather than as an end in itself. For example, we can imagine a couple cloning a child who needs a bone marrow transplant to ensure a perfect tissue match between the existing child and the new child.36 This is problematic, although some people would see this as a compelling reason for the use of cloning.37 Nevertheless, even if we do not think this would be a justified use of cloning, the possibility of its use should not be a sufficient reason to ban cloning. Other developments in medicine will diminish the desire to use cloning to have children as a means rather than as ends in themselves. For example, with respect to bone marrow transplants, the possibility of transplants with umbilical cord blood may make the need for a perfect tissue match unnecessary.38 Moreover, it is not clear that we want to ban cloning entirely because it might be misused by some people. With other potentially dangerous practices that offer important benefits, we regulate the practice to protect against abuse or

34. See supra text accompanying notes 30-32.
35. For example, although an adult can refuse a blood transfusion on religious grounds, adults cannot refuse blood transfusions for their children on religious grounds. William J. Curran et al., Health Care Law and Ethics 643 (5th ed. 1998).
36. Of course, for some diseases, the new child’s bone marrow would carry the same defect as the dying child’s bone marrow.
37. Cloning Human Beings, supra note 8, at 80.
other harms. Similarly, we can permit the ethically appropriate kinds of cloning and ban the inappropriate kinds of cloning. And, there is good reason to think that regulation will provide an adequate safeguard against abusive uses of cloning. If someone were to try to misuse cloning, the effort generally would be readily apparent. For example, if a person is being cloned because of illness and the need for a bone marrow transplant, that will be readily apparent to the physician, who can then decline to participate. 39

D. Involuntary Cloning

There is a real risk that people could be cloned involuntarily. Since one needs the DNA from only one cell to make a clone, and people routinely shed hair, saliva and other material containing their cells, it probably would not be that difficult to clone people without their consent or even knowledge. 40 Accordingly, one might argue, we should protect against involuntary cloning by banning all cloning. The problem with this argument is its assumption that physicians would act unethically in assisting patients in their efforts to clone other people. We can generally rely on physicians who perform cloning to refuse requests to clone people who are not themselves asking to reproduce in that way. 41 Moreover, the argument about involuntary cloning assumes that people would rather have a genetically unrelated child than a child carrying their own genes. Some people might prefer to raise a clone of Michael Jordan 42 rather than their own genetic offspring, but most people will probably want to propagate themselves. 43 Finally, the involuntary cloning argument assumes that people wrongly believe that a person’s future is determined by the person’s genes alone rather than by the interaction of genetic and environmental factors, and that one can raise a second Michael Jordan simply by raising a child with the same genes as Michael Jordan. People will find out quickly enough that they cannot guarantee what kind of a child they will have by cloning a particular person. In any event, the possibility of involuntary cloning is probably only a temporary risk. With the Human Genome Project, 44 we will likely gain the ability to alter

41. As suggested above in text accompanying notes 36-37, there may be some circumstances in which it would be permissible for parents to clone their children.
42. Michael Jordan is the retired Chicago Bull who many consider the greatest player in the history of basketball.
44. The Human Genome Project is a major, government-funded effort to map in detail each of the human cell’s estimated 140,000 genes. Leslie Roberts, Plan for Genome Centers Sparks a Controversy, 246 Science 204, 204 (1989); Nicholas Wade, Count of Human Genes is Put at 140,000, a Significant Increase, N.Y. Times, Sept. 23, 1999, at A19. Once the entire genome is mapped, it will be much easier to identify genetic causes of disease and personality.
people's genes, and genetic manipulation would be a much better way to achieve a desired genetic outcome than cloning someone involuntarily.

E. Efforts to Clone a "Super Race"

We might call this the "Boys from Brazil" concern.\textsuperscript{45} People suggest scenarios in which evildoers would clone an army of supposedly superior persons—or an army of docile drones.\textsuperscript{46} This possibility seems very implausible. It too relies on a faulty view of the extent to which genes determine a person's destiny. Also, such a scenario would take a long time—close to twenty years—to execute, and it would require many women to participate as surrogate mothers.\textsuperscript{47} This concern would make sense only if it were possible to perform Xerox\textsuperscript{\textregistered}-style cloning, cloning that would produce literal and immediate copies of people.

Nevertheless, this concern has probably played an important role in fueling objections to cloning, which suggests that some of the opposition may reflect a misunderstanding about what cloning can really accomplish.

F. The "Yuck" Factor

Cloning commonly elicits a reaction of repugnance from people. To many observers, cloning intuitively feels very wrong.\textsuperscript{48} It simply is not the way to have children.

This basis for opposing cloning reflects, I believe, discomfort with the unfamiliar more than it reflects real ethical problems. Indeed, this is what we have seen time and again with new reproductive technologies.\textsuperscript{49} When in vitro fertilization (IVF) was first used in the 1970s, people reacted against the idea of so-called "test tube" babies. Since then, IVF has become routine and uncontroversial. Similarly, when surrogate motherhood became a front-page story with the Baby M case in the late 1980s,\textsuperscript{50} people were very much troubled by the idea of children born through surrogacy.\textsuperscript{51} While some states, including New Jersey, outlaw paid surrogacy, it has become a fairly common practice.\textsuperscript{52} Not

\textsuperscript{45} In his fictional book, Ira Levin describes an effort to use cloning to create dozens of copies of Adolf Hitler. Ira Levin, The Boys from Brazil (1976).
\textsuperscript{46} Aldous Huxley, Brave New World 14-17 (1932) (Modern Library 1946).
\textsuperscript{47} Tooley, supra note 18, at 93; Robertson, supra note 40, at 1387.
\textsuperscript{48} Kass, supra note 32, at 686-87.
\textsuperscript{50} In re Baby M, 537 A.2d 1227 (N.J. 1988).
\textsuperscript{52} To be sure, one can reasonably object to surrogacy because of concerns with the large payments involved. My focus pertains to opposition on the ground that women should not bear children for other women.
surprisingly, then, when the possibility of cloning seemed to become a reality
with the birth of Dolly last year, there was a strong negative reaction. With time
and further reflection, I think much of the discomfort will fade, just as it has
faded with other new methods of reproduction.

The reaction to cloning has been, I think, an example of the “yuck factor”
at work. One’s instinctual response to a development like cloning is to think:
this is yucky. When we have that kind of reaction, it may be a sign that
something really is deeply wrong, or it may be a sign of irrational discomfort
with the strange or the different. Accordingly, when we see the yuck factor at
work, we need to take it seriously and determine what underlies it. The yuck
factor, in other words, is an emotional red flag that calls for further scrutiny. In
the case of cloning, as I have indicated, further analysis leads us to the
conclusion that much of the concern appears to come from irrational discomfort
with the unfamiliar rather than ethically based problems.

III. CLONING AS A WAY TO PRESERVE FAMILY INTEGRITY

A. Reproduction for Infertile Persons Without Third Party Involvement

The case for cloning does not depend simply on neutralizing the objections
to the practice. Rather, there are important affirmative justifications for cloning.
In the remainder of this article, I will focus on what I believe to be the most
compelling justification. With cloning, many infertile male-female couples can
have the opportunity to do what billions of other couples have done since time
immortal—to reproduce without having to involve someone else as a genetic
parent of their children. Similarly, female-female couples and single females can
have children without involving another person as a genetic parent of their
children. Male-male couples or single males could also use cloning to have
children without involving another person as a genetic parent, but they would
need to involve a woman as the gestational surrogate mother of their
child.

For example, suppose there are some male-female couples who are infertile
because of the men’s inability to produce viable sperm. Ordinarily, the couples
might turn to anonymous sperm donors to have children through artificial

53. Kass, supra note 32, at 687. For an important discussion of the “yuck factor,” see
and Fantasies about Human Cloning 221, 225-26 (Martha C. Nussbaum & Cass R. Sunstein eds.,
1998) (observing that opposition to new technologies based on feelings of repugnance can be as
serious a threat to society as the new technologies themselves).
54. The woman would be a gestational surrogate mother because she would carry the pregnancy
to term but not contribute to the child’s genetic material. Advances in science may soon make it
possible for men to carry a pregnancy. Steve Farrar and Karen Bayne, Science Ready to Let Men
55. Since “donors” are typically paid for their sperm, it is not accurate to refer to the process
as sperm donation. Similarly, egg donors are typically paid for their eggs. Nevertheless, donation
is the term of art for these methods of artificial reproduction. See, e.g., Anne Reichman Schiff,
insemination of the women. With cloning on the other hand, the couples could avoid the need to involve third parties as genetic parents of their children.\textsuperscript{56} Instead, each couple could clone either one (or both) of themselves. The same benefit can be realized by many other male-female couples who are infertile. Consider the case of infertility caused by the woman's inability to produce viable eggs, perhaps because she has already gone through menopause or because of ovarian cancer. Currently, couples in that situation might turn to egg donation from another woman to have children together. Or, they might engage another woman to serve as the surrogate mother of their child.\textsuperscript{57} These couples, too, could use cloning for reproduction to avoid the need to involve a third party as a genetic parent in their procreation.\textsuperscript{58} Note also that, by using cloning, infertile couples can have children genetically related to either one of them rather than to only one of them, as would be the case if they had children only by artificial insemination or only by egg donation or surrogacy. Indeed, the couple could ask a physician to clone both of them and randomly choose embryos for transfer to the woman's uterus. That way, they would be leaving it to chance whether their child was a clone of the female or male partner in the couple.

Just as infertile male-female couples can have children through cloning and exclude other parties from being genetic parents of their children, so can same-sex couples and single persons. Like a male-female couple in which the male cannot produce viable sperm, a female-female couple or a single female could clone themselves without turning to artificial insemination and having to involve a male in their procreative efforts.\textsuperscript{59} A single man could clone himself and secure the assistance of a woman to serve as a gestational surrogate mother. Although the man could not entirely avoid involving a third party in his parenting, he could at least ensure that the third party would not be a genetic parent.\textsuperscript{60}

There are very good reasons why the ability to exclude other persons from becoming parents of their children would lead people to prefer cloning over


\textsuperscript{57} The surrogate mother would supply the egg and would carry the fetus during pregnancy. A couple might prefer surrogacy to egg donation because surrogacy does not require any special medical techniques.

\textsuperscript{58} However, the couple would need enucleated eggs from another woman into which their genetic material could be inserted.


\textsuperscript{60} Of course, this statement must be qualified by the fact that the man's child would receive mitochondrial DNA from the woman whose egg was used for the cloning procedure. Gould, \textit{supra} note 1.
artificial insemination, egg donation or surrogacy. With artificial insemination, for example, couples or single women have two options for securing a sperm donor, neither of which is optimal. First, they can use the sperm of someone they know, a close friend, for example. By doing so, however, they risk the possibility that the man supplying the sperm will want to have a long-term relationship with the child, as sometimes happens. In *Jhordan C. v. Mary K.*, a female-female couple obtained sperm from a male acquaintance, who allegedly agreed to relinquish any paternal links to the child that the couple might have. Yet, once the child was born, the man did want to spend time with his genetic son, and the three parents ended up in court. Couples or single men who use eggs from another woman whom they know would also risk having the woman insist on a relationship with their child.

To avoid the risk that the sperm or egg donor will want a long-term relationship with their child, couples or single persons can go to an infertility clinic and ask for sperm or eggs from an anonymous donor. By doing so, however, they assume other, serious risks. Although the donors and their sperm or eggs are screened for infectious diseases, some viruses may go undetected. Similarly, although clinic personnel ask sperm and egg donors about genetic disease, the donors may fail to disclose their genetic status accurately, either because they are unaware of abnormalities in their DNA or because they are dishonest.

With known or anonymous third parties, there is also the risk of toxic exposure of the fetus to alcohol or other drugs. For example, if a surrogate mother smokes, drinks or uses illicit drugs, she may pass harmful substances to the fetus through the umbilical cord. Similarly, drugs taken by men can find their way into the men’s sperm.

Patients of fertility clinics may also fall victim to fraud by the operators of the clinics. Recall, for example, the notorious case of Dr. Cecil B. Jacobson, a prominent infertility specialist, who was convicted after he used his own sperm

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62. The California appellate court ruled in favor of the male sperm donor, holding that women having children through artificial insemination need to observe the state’s statutory requirement of a physician’s involvement if they want to prevent the sperm donor from having rights of paternity. *Id.*
63. For example, while physicians have been able to test for most of the blood-borne viruses that cause hepatitis, a significant percentage of hepatitis cases are caused by a virus that has so far eluded detection. Recent medical research suggests that a test may soon be developed for that virus. Lawrence K. Altman, *Baffling Hepatitis Virus Is Isolated, Scientists Say*, N.Y. Times, July 20, 1999, at Fl.
64. Robertson, *supra* note 40, at 1379.
65. Surrogacy contracts therefore typically include provisions prohibiting the woman from smoking, drinking or using other drugs during her pregnancy. *See, e.g.*, the surrogacy contract in the *Baby M* case. *In re Baby M*, 537 A.2d 1227, 1268 (N.J. 1988).
to inseminate many of his patients. Prosecutors concluded that Dr. Jacobson fathered children with at least fifteen, and as many as seventy-five, different women who thought they were receiving sperm from anonymous donors.67

More importantly, even if sperm or egg donors and surrogate mothers show no interest in their children, and even if there is no transmission of infectious, genetic or toxic disease and no perpetration of fraud, having children is not the kind of thing people want to do with just any Jane or John Doe. For many people, procreation is an important expression of their love and commitment to their partner—by joint participation, they can create a new person out of the genes and/or nurturing of both members of the couple. Accordingly, many people want to have the children of their spouse or other companion but not the children of other persons. If they or their partners are infertile, then they can have children with only their partners by cloning their partners or themselves.

In short, cloning would allow many people to have children without involving the risks or other disadvantages of having a third party participate in their procreative efforts.68

Indeed, this advantage of cloning as a method of reproduction responds to one of the early and important concerns raised about artificial methods of reproduction. When couples involve other parties in their procreative efforts, it is argued, the couples undermine personal and social stability. Marriages individually and marriage as an institution are compromised when third parties are brought into a relationship that is fundamentally one between two people.69

It is also argued that relationships between parents and children are compromised by artificial methods of reproduction because genetic parenthood no longer coexists with social parenthood.70 The third party who supplies sperm or eggs is a genetic parent of the child, but the recipient of the sperm or eggs becomes the social parent of the child. Yet, Lisa Sowle Cahill has argued, whether genetic parents are to become social parents of their children is not simply a matter of choice but of moral duty. Because “the child’s own biological identity and ‘kinship’ community are part of her existence as a human being, and potentially part of her self-understanding,” genetic parents ordinarily must not relinquish their parental responsibilities to other persons.71

68. Barring further advances in medicine, see supra note 54, male-male couples and single men would not be able to reproduce even by cloning without the involvement of a woman. They would need a woman to serve as a gestational surrogate for their embryo, and, while gestational surrogates are probably less likely than traditional surrogates to insist on a long-term relationship with the child, some gestational surrogates do so. See, e.g., Johnson v. Calvert, 851 P.2d 776 (Cal. 1993) (finding that the genetic mother, rather than the gestational mother, should become the social mother of the child). Men would also need an enucleated egg into which their genetic material could be inserted.
70. By social parent, I mean a person who raises the child. Lauritzen, supra note 69, at 58.
For some commentators, the threats to the family from artificial methods of reproduction are a sufficient reason to condemn the methods entirely. According to Leon Kass, for example, artificial methods of reproduction are unwise because clarity about who our parents are, clarity in the lines of generation, clarity about who is whose, are the indispensable foundations of a sound family life, itself the sound foundation of a civilized community. Clarity about your origins is crucial for self-identity, itself important for self-respect. It would be, in my view, deplorable public policy to erode further such fundamental beliefs, values, institutions, and practices.\(^2\)

While I do not believe that the threats to family from artificial methods of reproduction are sufficient reason to discourage those practices, I do believe that the threats are a good reason to develop artificial methods of reproduction that avoid those threats. Cloning is an important way for infertile couples and single people to have and raise children without involving another person, someone with whom they do not share a marital or similarly intimate relationship.\(^7\)

### B. Reasons to Encourage Involvement of Third Parties

I have argued that people having children enjoy a strong interest in reproducing without sharing parenthood with other persons with whom they do not share an intimate, personal relationship. Accordingly, cloning is an important method of reproduction for infertile couples and single persons. There is, however, one possible qualification to this general point. Assume we have single people who want to become parents by cloning themselves. In such cases, a single person could become a child’s sole parent, without there being anyone else as either a genetic or social parent. Some people object to single parenting on the ground that children need two parents for their upbringing. I will consider another concern that might arise if single people use cloning to have children.

Ordinarily when individuals want to become a parent, they have to find another person with whom to share parenting. One cannot reproduce alone. Accordingly, people have to pass a “natural” screening of their suitability for parenting before they can become a parent. They have to persuade another person to have children with them.\(^7\) Single people who reproduce by cloning

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72. Leon Kass, Toward a More Natural Science: Biology and Human Affairs 113 (1985). To be sure, cloning also blurs the lines of generation. If a couple chooses to clone a child from the woman in the couple, we might identify the woman’s parents as the child’s genetic parents, just as they are the woman’s genetic parents. Nanette Elster, Who is the Parent in Cloning?, 27 Hofstra L. Rev. 533, 536 (1999). Still, even with this degree of blurring, the lines of generation are clearer than when a third party supplies the sperm or egg.

73. It is important to note that many cultures and ethnic groups rely on extended families rather than only the nuclear family for childbearing and that it can enhance childbearing if multiple people provide parental guidance. In such cases, though, the parents involve other persons voluntarily.

74. I recognize that there are unplanned pregnancies. Still, people engaging in sexual
would not have that hurdle to overcome. They would have to satisfy only themselves as to their suitability as a parent. Of course, most single people would be good parents. But, a small percentage would not be. Accordingly, we might conclude, cloning could result in too many people who are unfit for parenting becoming parents.75

While we may need to pay attention to the risk that cloning will allow unfit single people to become parents, I do not think it is a sufficient reason to prohibit cloning entirely. At most, it is a reason to deny cloning to single persons. But, even that would be unnecessarily strict. Single people have strong interests in reproducing, and they may not have found another person with whom they want to share their child rearing. Accordingly, the concern about unfit parenting might justify regulation of cloning by single persons, not prohibition of the practice. If there is a legitimate concern at stake here, society could meet it by requiring physicians who provide cloning or other persons to screen single people for fitness as parents, much as adoption agencies currently screen prospective parents.

Note that one cannot argue that such screening is discriminatory simply by observing that couples do not have to be screened when they become parents (outside of adoption). The right to equal treatment requires that people who are alike be treated in the same way. At the same time, anti-discrimination principles recognize that, when there are relevant differences between people, they can be treated differently.76 Thus, for example, it is impermissible to deny admission to law school because an applicant is an African-American, since race is irrelevant to one's candidacy for law school.77 On the other hand, it is permissible to deny admission to law school because an applicant has not graduated from college. Even though the person with only a high school diploma is being treated differently from the college graduate, graduation from

75. This concern would apply to other artificial methods of reproduction when used by single people. For example, if a single man uses surrogacy to have a child, or a single woman uses artificial insemination to have a child, neither of the two people has to persuade another person to share the parenting of a child. The risk that the absence of a natural screen will result in more unfit parents is not purely speculative. A single man who became a father through surrogacy killed his child through physical abuse five weeks after the child's birth. Infant Beaten by Father Who Paid Surrogate Dies, Chicago Trib. Evening Update, Jan. 18, 1995, at C2.

76. Laurence H. Tribe, American Constitutional Law 1437-39 (2d ed. 1988). Indeed, one can argue that differently situated people need to be treated differently. The principle of reasonable accommodations in the Americans with Disabilities Act can be seen as an example of required differential treatment for differently situated persons. The principle of reasonable accommodations in the Disabilities Act requires employers (and other entities covered by the Act) to make reasonable adjustments in their workplace, program or service so that a person's disability does not interfere with the person's ability to qualify for the job, program or service. David Orentlicher, Destructuring Disability: Rationing of Health Care and Unfair Discrimination Against the Sick, 31 Harv. C.R.-C.L. L. Rev. 49, 63-65 (1996).

college is considered a relevant difference for purposes of law school admissions. Similarly, the absence of a "natural" screen for single people who want to have children arguably creates a relevant difference between them and other potential parents that would justify screening by physicians or other persons.

In the end, I do not think single persons ought to be screened for suitability as parents before they have children by cloning themselves (or by using other artificial methods of reproduction). And, I rest my conclusion on concerns about abuses of the screening process. If physicians or other people have authority to decide which single individuals can become parents by cloning, they may choose on the basis of stereotypes and prejudices rather than in terms of the single individual's suitability to become a parent.78

IV. CONSTITUTIONAL CONSIDERATIONS

Ostensibly, I have framed my argument in favor of cloning as one of public policy. That is, in responding to the arguments against cloning and discussing an important justification for cloning, it appears that I am making a policy argument rather than a constitutional argument against laws that would prohibit cloning (once it becomes possible to perform cloning safely). But, what if a legislature rejects my arguments, accepts those advanced by the critics of cloning and decides to prohibit cloning?79 Would a court uphold the constitutionality of such a prohibition on the ground that the legislature was entitled to choose between banning and allowing cloning?

My argument in favor of cloning has important constitutional significance in addition to its policy dimensions. For the same reason that cloning is a good idea for infertile couples and single persons, it is also a good justification for a constitutional right to cloning.

A. The Constitutional Analysis

If a legislature banned cloning, and the Supreme Court were to hear a case challenging the constitutionality of the law, the Court would undoubtedly pursue the same kind of analysis that it has undertaken in recent years with similar claimed rights, like a right to abortion, a right to refuse life-sustaining medical

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79. For a recent review of legislative bills regarding cloning, see Heidi Forster & Emily Ramsey, Legal Responses to the Potential Cloning of Human Beings, 32 Val. U. L. Rev. 433 (1998).
treatment, or a right to physician-assisted suicide. The Court would ask whether the Fourteenth Amendment's guarantee that no person shall be deprived of liberty "without due process of law" encompasses the freedom to reproduce by cloning. 80

Proponents of a constitutional right to cloning could cite very helpful language in a number of important Supreme Court decisions. They could point to the following statement in Planned Parenthood v. Casey:

At the heart of liberty is the right to define one's own concept of existence, of meaning, of the universe, and of the mystery of human life. Beliefs about these matters could not define the attributes of personhood were they formed under compulsion of the State. 81

The proponents of a constitutional right could also invoke the following statement from Skinner v. Oklahoma:

We are dealing here with legislation which involves one of the basic civil rights of man. Marriage and procreation are fundamental to the very existence and survival of the race. 82

Finally, support for a right to cloning can be found in Eisenstadt v. Baird, where the Court wrote:

If 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 affecting a person as the decision whether to bear or beget a child. 83

Arguably, Casey, Skinner, and Eisenstadt stand for the proposition that there is a fundamental constitutional right to procreate. Indeed, if there is a right to prevent life through contraception and a right to end life through abortion, a right

80. See, e.g., Washington v. Glucksberg, 521 U.S. 702, 720, 117 S. Ct. 2258, 2267 (1997) (in rejecting a right to physician-assisted suicide, the Court observed that "[i]n a long line of cases, we have held that, in addition to the specific freedoms protected by the Bill of Rights, the 'liberty' specially protected by the due process clause includes the right to marry, to have children, to direct the education and upbringing of one's children, to marital privacy, to use contraception, to bodily integrity, and to abortion."). It is possible that the Court would also analyze the case under the Privileges or Immunities Clause of the Fourteenth Amendment. Saenz v. Roe, 119 S. Ct. 1518 (1999).


82. 316 U.S. 535, 541, 62 S. Ct. 1110, 1113 (1942) (invalidating an Oklahoma statute that provided for the sterilization of some three-time felons). Moreover, as the Court has observed, it has held in its decisions that a person's liberty interests extend to activities like marriage, procreation, contraception, family relationships, child rearing, and education. Casey, 505 U.S. at 851, 112 S. Ct. at 2807.

83. 405 U.S. 438, 453, 92 S. Ct. 1029, 1038 (1972) (invalidating a law that prohibited the dispensing of contraceptives to unmarried persons).
to create life through cloning should have even greater weight.\textsuperscript{84}\dagger\dagger If so, it would follow that couples or individuals who reproduce by cloning are exercising their constitutionally protected right to procreate.\textsuperscript{85} Moreover, just as the right to marry includes the right to decide whom to marry,\textsuperscript{86} and the right to abortion includes the right to decide which method of abortion to employ,\textsuperscript{87} the right to procreate would seemingly include the right to decide the manner in which one has children.\textsuperscript{88}

Not surprisingly, opponents of cloning could cite Supreme Court precedent for important counter-arguments. For example, in response to the passage from \textit{Casey} above characterizing the heart of liberty as the right to define one’s own concept of the mystery of human life, critics could observe that the Supreme Court expressly limited the reach of that passage in its opinion in \textit{Washington v. Glucksberg}.\textsuperscript{89} In \textit{Glucksberg}, the Court wrote:

That many of the rights and liberties protected by the Due Process Clause sound in personal autonomy does not warrant the sweeping conclusion that any and all important, intimate, and personal decisions are so protected, and \textit{Casey} did not suggest otherwise.\textsuperscript{90}

Moreover, the Court has expressly held that, even if there is a general right of autonomy, the general right does not encompass every specific manifestation of that right. For example, in \textit{Michael H. v. Gerald D.},\textsuperscript{91} the Court acknowl-


\textsuperscript{85} John A. Robertson, \textit{Children of Choice: Freedom and the New Reproductive Technologies} 22-42 (1994) (discussing the importance of procreative liberty). The Supreme Court did uphold a forced sterilization law in \textit{Buck v. Bell}, 274 U.S. 200, 47 S. Ct. 584 (1927), a decision that undermines the argument for a constitutional right to procreate. However, that argument has been severely criticized, and recent lower court decisions involving forced sterilization have rested their decision on the individual right to be sterilized rather than on the absence of a right to procreate. \textit{See, e.g., In re Valerie N.}, 707 P.2d 760 (Cal. 1985) (discussing the constitutional right of developmentally disabled persons not to bear children).

\textsuperscript{86} Loving v. Virginia, 388 U.S. 1, 87 S. Ct. 1817 (1967) (invalidating a law prohibiting marriages between whites and “colored persons”).

\textsuperscript{87} Thornburgh v. American College of Obstetricians and Gynecologists, 476 U.S. 747, 768-69, 106 S. Ct. 2169, 2182-83 (1986) (striking down a provision of a Pennsylvania statute that required physicians to use the abortion procedure most likely to result in a viable child).

\textsuperscript{88} Note too that a right to reproduce by cloning would entail a negative, rather than a positive, right. If the Court recognized a right to engage in cloning, it need only hold that states cannot prohibit voluntary cloning by patients and physicians. The Court need not require public funding for cloning, and it need not require physicians to provide cloning when patients request it. In other words, a right to cloning would be similar in form to a right to abortion.

\textsuperscript{89} 521 U.S. 702, 117 S. Ct. 2258 (1997) (rejecting a constitutional right to physician-assisted suicide).

\textsuperscript{90} \textit{Id.} at 727-28, 117 S. Ct. at 2271-72 (citations omitted).

\textsuperscript{91} 491 U.S. 110, 109 S. Ct. 2333 (1989).
edged the fundamental interest of parents in raising their children, but rejected a specific right of men to raise their children when they father the children with women who are married to other men. According to the Court, states may choose to recognize the husband of the mother, rather than the genetic father, as the legal father of the child.

The Court has been especially wary of due process jurisprudence that would be sweeping in its scope. Thus, even while there may be a general right to reproduce, it need not include a right to reproduce by cloning. Indeed, critics have said, cloning is not reproduction, it is replication, and there is no precedent for such a right.

In deciding whether a general right to procreate would encompass the specific right to reproduce by cloning, the Supreme Court would very likely focus its analysis on a consideration of tradition. According to the Court, "[T]he Due Process Clause specially protects those fundamental rights and liberties which are, objectively, 'deeply rooted in this Nation's history and tradition.' As a result, the Court almost certainly would "begin [its due process analysis], as [it does] in all due-process cases, by examining our Nation's history, legal traditions, and practices." To be sure, tradition is not the sole standard for identifying fundamental rights or liberty interests. The Court has also stated that the due process clause protects those interests which are "'implicit in the concept of ordered liberty,' such that 'neither liberty nor justice would exist if they were sacrificed.'"

Although this test for status as a fundamental right is rather circular—a claimed liberty qualifies for constitutional protection if liberty would not otherwise exist—it does allow the Court to recognize rights, like a right to contraception

92. Id. at 123-30, 109 S. Ct. at 2341-46.
93. Id.; see also Glucksberg, 521 U.S. at 720, 117 S. Ct. at 2268 (observing that "we ha[ve] always been reluctant to expand the concept of substantive due process . . . lest the liberty protected by the Due Process Clause be subtly transformed into the policy preferences of the Members of this Court.").
96. Glucksberg, 521 U.S. at 720-21, 117 S. Ct. at 2267-68.
97. Id. at 710, 117 S. Ct. at 2262.
98. Id. at 721, 117 S. Ct. at 2268.
or abortion, which do not seem to be deeply rooted in tradition. In any event, 
the test according to tradition is typically a more difficult standard to satisfy, and 
I will therefore demonstrate how cloning could satisfy that standard.

At first glance, cloning would seem to be a poor candidate for constitutional 
status if tradition is the guiding principle. Although people have imagined and 
written about cloning for a long time, it cannot be done even now for humans. 
Proponents of a constitutional right to cloning would seemingly be hard-pressed 
therefore to invoke tradition in support of their argument.99

In response to the absence of a tradition in favor of cloning, we can observe 
that there is also no tradition of state or federal laws prohibiting cloning. In 
contrast, when the Supreme Court has rejected a constitutional right for other 
expressions of personal autonomy, there has been an important tradition of 
common and/or statutory law rejecting the right. For example, when the 
Supreme Court found no constitutional right to physician-assisted suicide, it 
obsvsed that states have traditionally prohibited physician-assisted 
suicide."°

Similarly, when the Court rejected a constitutional right to engage in homosexual 
sodomy, it cited a tradition of state laws outlawing the practice.101

As this discussion indicates, there are real limitations of tradition as a basis 
for analyzing cloning. Since cloning has never been possible, it does not make 
sense to ask whether there is a tradition in favor of or against the 
practice.102

To make sense of tradition in the context of cloning, then, we need to look 
at something other than how our country has traditionally treated cloning itself. 
The question, then, is what is the relevant tradition?

B. The Constitutional Significance of Reproducing Without Third Parties

Here is where my previous argument in favor of cloning comes in. Recall 
that I justified cloning on the ground that it permits infertile couples or single 
persons to have children without involving other parties in their efforts to 
reproduce.103 Not only does this protect their children from the risks of 
infectious, genetic or toxic disease, it also allows people to have children without 
allowing an unwanted third party to infringe the sanctity of their marital (or 
other intimate) relationship or the sanctity of their parent-child relationship.

102. We might look to how the law has traditionally treated other artificial methods of 
reproduction for guidance. However, the evidence is mixed. States generally permit some methods, 
like artificial insemination, but typically prohibit other methods, like paid surrogacy. Curran et al., 
supra note 35, at 867-68, 894-96. In other words, legal precedent indicates that we must decide the 
acceptability of each artificial method of reproduction on its own terms.
103. Of course, physicians are involved as third parties in cloning, but physicians or midwives 
are routinely involved as third parties in all methods of reproduction.
Whatever one thinks of the sanctity of marital or parent-child relationships, there is a very strong tradition in this country in support of that sanctity. For example, the Supreme Court has protected the sanctity of the two-person marital relationship by upholding the constitutionality of laws banning polygamy. When governments ban polygamy, as all states and the federal government do, they not only permit couples to exclude third persons from their marital relationships, they require them to do so. Similarly, the law protects the parent-child relationship from invasion by third parties by recognizing a constitutional right of parents to direct the upbringing of their children and by not removing children from the custody of their parents unless the parents demonstrate manifest unfitness in their child-rearing practices.

Thus, in deciding whether the fundamental interest of individuals in reproducing extends to cloning, we can point to the fundamental interest of individuals in cultivating their relationships with spouses and children without the interference of third parties. This suggests that there would be a strong interest of infertile couples in having the ability to reproduce by cloning. That is, reproduction through cloning is the only way that infertile couples could exercise their fundamental interest in procreation without sacrificing the sanctity of their marital and parent-child relationships. The interest of single persons in cloning is weaker under this analysis, but their interest in the sanctity of the parent-child relationship should be sufficient.

104. Moore v. City of East Cleveland, 431 U.S. 494, 503, 97 S. Ct. 1932, 1938 (1977) ("Our decisions establish that the Constitution protects the sanctity of the family precisely because the institution of the family is deeply rooted in this Nation's history and tradition"); Massie, supra note 94, at 160-61 (discussing constitutional respect for the marital relationship).


107. Reno v. Flores, 507 U.S. 292, 304, 113 S. Ct. 1439, 1448 (1993) (observing that a child will not be removed from the custody of parents, even if another couple would provide a better upbringing, as long as the parents are providing an adequate upbringing) (citing Quilloin v. Walcott, 434 U.S. 246, 255, 98 S. Ct. 549, 554 (1978)).


109. One might cite the tradition of state laws prohibiting incestuous sexual relations and incestuous marriages to reject a constitutional right to cloning. This tradition arguably points to a tradition in favor of children being born to two unrelated persons. However, prohibitions against incest seem to be rooted in different concerns than whether a child has genes from two unrelated persons.

With incestuous relations, one has to worry whether both persons are participating voluntarily. (Consider, for example, a sexual relationship or marriage between a parent and child.) Incest bans also reflect concerns about psychological harm to minors and disruption of family harmony. As to the latter, incest might create unhealthy competition for sexual companionship among family members. There are also genetic concerns about incest. If people carry the trait for a genetic disease but are unaffected with the disease themselves, they are much more likely to have children with the
This does not end the constitutional analysis. Even a fundamental right can be overcome by a compelling state interest. For example, the constitutional right to abortion does not exist once the fetus has reached the stage of viability.10

In the case of cloning, I do not believe that there would be a strong enough state interest in prohibiting cloning to outweigh the interest of people in reproducing by cloning. This conclusion follows from the analysis in Part II. There, I examined the arguments against cloning and concluded that, once research demonstrates that cloning can be practiced safely, the remaining arguments against cloning do not stand up to scrutiny.

V. CONCLUSION

Currently, cloning of humans should not be performed because its safety has not been demonstrated. Children of cloning may turn out to have serious abnormalities in their development. However, there is good reason to believe that further advances in medical knowledge will enable physicians to provide cloning safely.111 At that point, other ethical concerns about cloning become more relevant.

As others have observed, much of the objection to cloning on these other ethical grounds rests on misunderstandings of personal development or on overly cautious responses to the potential psychological risks of cloning. Ironically, opponents of cloning have generally overlooked a key benefit of the practice—the ability of infertile couples and single persons to have genetically related children without involving other people in their reproductive efforts. Heretofore, artificial methods of reproduction have allowed otherwise infertile people to have children only if they are willing to assume the risks to their child, their marital or similar intimate relationship, and their parent-child relationship of having children with third parties. In other words, cloning allows infertile people to exercise their right to reproduce without having to sacrifice their right to

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111. Silver, supra note 43, at 103-05.
maintain the integrity of their family relationships. Because of this advantage of cloning over other artificial methods of reproduction, we can view cloning as an important way to have children, rather than as something that would be desired only by people with narcissistic or odd preferences.