

CLONING AND THE LGBTI FAMILY: CAUTIOUS OPTIMISM

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One might well wonder . . . what consequences of the human genome project raise these kinds of anxieties in contemporary cultural life, but it seems a displacement, if not a hallucination, to identify the source of this social threat, if it is a threat, with lesbians who excavate sperm from dry ice on a cold winter day in Iowa when one of them is ovulating.¹

1. Judith Butler, *Is Kinship Always Already Heterosexual?*, in *LEFT LEGALISM/LEFT*

I. INTRODUCTION

Despite innovations in assisted reproductive technologies in the latter half of the twentieth century, individuals and couples in the lesbian, gay, bisexual, transgender, and intersex (LGBTI)² community who wish to create families that include children face many hurdles in both law and informal practice.³ The cloning of Dolly the sheep from an adult somatic sheep cell in 1996 signaled the possibility of new opportunities for members of the LGBTI community to have genetically-related children with minimal reliance on third parties. Cloning is thus heralded as a solution to some of the obstacles the LGBTI community faces today.⁴

The suggestion that cloning might enable non-heterosexual couples to produce offspring has triggered debate both inside and outside the LGBTI community.⁵ Much of this discussion centers on the potential dangers and benefits of this new technology. Yet important legal and political questions

CRITIQUE 229, 251 (Wendy Brown & Janet Halley eds., 2002) [hereinafter *Is Kinship Always Already Heterosexual?*].

2. I use the term “LGBTI” to describe individuals who self-identify as lesbian, gay, bisexual, transgender, and/or intersex. I do not include individuals who self-identify as “queer” in this group because those who identify as queer often do so precisely to claim freedom from a stable sexual identity; appropriating them into a list of identity categories would therefore be at odds with this goal. I also do not include “questioning” in the acronym because I believe we should all question the existing categories and binary view of sexuality. When I intend to refer only to a specific segment of the community, I use a more specific word to do so; however, at times, I use the term “gay” (especially “gay rights”) interchangeably with LGBTI for the sake of clarity in writing. In doing so, I do not intend to erase or obscure other identities. I also frequently make reference to the LGBTI “community,” which is a theoretical construct much more than it is a reality. “Alternative” sexualities and gender identities are defined and grouped together by virtue of what they are not: straight or heteronormative. Thus, a monolithic “community” of LGBTI individuals does not exist in any meaningful way. At times, the multitude of interests within this “community” converge; at other times, they diverge significantly. Acknowledging this to be the case, I nevertheless refer to a “community” throughout this paper, and I attempt to be clear about those times when interests within the community are most likely to diverge, particularly vis-à-vis cloning. Finally, I have tried to adhere to the Gay and Lesbian Alliance Against Defamation’s recommendations on terminology as much as possible. See GAY & LESBIAN ALLIANCE AGAINST DEFAMATION, GLAAD MEDIA REFERENCE GUIDE 6–14 (2010), available at <http://www.glaad.org/document.doc?id=99> (describing recommended terminology).

3. I use the term “family” in this paper primarily to describe two-parent families that include children. I recognize that this usage is not unproblematic, and that many family arrangements do not look like this. However, because this paper is focused on cloning and other reproductive options, I have chosen to use the term in this way rather than consistently referring to “two-parent families with children.”

4. See, e.g., Judith F. Daar, *The Prospect of Human Cloning: Improving Nature or Dooming the Species*, 33 SETON HALL L. REV. 511, 528 (2003) (noting that a “possible benefit of cloning would be to assist single individuals and same-sex couples in their efforts to reproduce”).

5. See *infra* Part V.

about the funding and regulation of cloning research are bound up in these philosophical and moral debates. The U.S. government currently bans the use of federal funds for such research.⁶ While President Barack Obama overturned the former presidential administration's ban on embryonic stem cell research for cell-based regenerative therapies, he has made it clear that he will not support lifting the ban on research related to reproductive cloning.⁷

In this article, I argue that, because reproductive cloning may offer the LGBTI community the chance to have genetically-related children, bans on federally funded research that would help refine and ensure the safety and efficacy of these procedures unconstitutionally deny LGBTI people a right that is not denied to similarly situated opposite-sex couples, who enjoy generous support from the state in their efforts to conceive either "traditionally" or by using assisted reproductive technologies. I contend that these barriers to cloning research are in large part the result of fear-

6. See Robert A. Burt, *Constitutional Constraints on the Regulation of Cloning*, 9 YALE J. HEALTH POL'Y L. & ETHICS 495, 495 (2009) (stating that federal funding for experimentation with human embryos has been banned since 1995). In 2009, the National Institutes of Health issued guidelines for the use of stem cell research, effective as of July 7, 2009, and made it clear that funding for this research cannot be used for human reproductive cloning. Guidelines for Human Stem Cell Research, 74 Fed. Reg. 32,170, 32,175 (Nat'l Inst. of Health July 7, 2009) ("Research using hESCs derived from other sources, including somatic cell nuclear transfer, parthogenesis, and/or embryos created for research purposes, is not eligible for NIH funding."). For a more in-depth discussion of funding for research cloning, see generally Catherine D. Payne, *Stem Cell Research and Cloning for Human Reproduction: An Analysis of the Laws, The Direction in Which They May Be Heading in Light of Recent Developments, and Potential Constitutional Issues*, 61 MERCER L. REV. 943 (2010). Some states have also passed laws banning the use of state funds for cloning research. See, e.g., The Human Cloning Funding Prohibition Act, MICH. COMP. LAWS § 333.26403 (1998) ("A person shall not use state funds to engage in or attempt to engage in human cloning.").

7. President Barack Obama, Signing of Stem Cell Executive Order and Scientific Integrity Presidential Memorandum (Mar. 9, 2009) ("[W]e will ensure that our government never opens the door to the use of cloning for human reproduction. It is dangerous, profoundly wrong, and has no place in our society, or any society."), available at http://www.whitehouse.gov/the_press_office/Remarks-of-the-President-As-Prepared-for-Delivery-Signing-of-Stem-Cell-Executive-Order-and-Scientific-Integrity-Presidential-Memorandum.

Embryonic cells have the unique ability to develop into nearly any cell type, which makes them promising for use in the treatment of injuries and diseases such as Alzheimer's, Parkinson's, heart disease, and kidney failure. See NAT'L BIOETHICS ADVISORY COMM'N, ETHICAL ISSUES IN HUMAN STEM CELL RESEARCH 1 (1999), <http://bioethics.georgetown.edu/nbac/execsumm.pdf>. One of the central controversies surrounding stem cell research involves the source of embryonic stem cells. Embryonic stem cells can be derived from four different sources: (1) existing stem cell lines, (2) aborted or miscarried embryos, (3) unused in vitro fertilized embryos, and (4) embryos created through therapeutic cloning. Thus, while stem cell research and its applications do not necessarily involve therapeutic cloning, one way to create stem cells is via therapeutic cloning. See *Embryonic and Fetal Research Laws: Stem Cell Research*, NAT'L CONFERENCE OF STATE LEGISLATURES (Jan. 2008), <http://www.ncsl.org/default.aspx?tabid=14413>.

mongering, misinformation, and confusion. The promise of this new reproductive technology challenges the normative regulation of sex and reproduction in our society, threatening both “traditional” family structures and male dominance. Perhaps because of this, discussions about the potential harms of cloning have escalated to become, in some quarters, a masked rhetoric for homophobic assertions that cloning—particularly when used by the LGBTI community or by other “nontraditional” families—will undermine the traditional heterosexual family structure.⁸ In the midst of broader, arguably less politicized debates over the safety and ethics of cloning, homophobic and traditionalist arguments have gained legitimacy. Some opponents of cloning claim that the practice will adversely affect the welfare of society in general and cloned children in particular, especially if those children are born to gay parents.⁹ Others suggest that cloning will be detrimental to future generations by diminishing genetic diversity,¹⁰ and that cloning will allow the LGBTI community to deliberately produce gay offspring in order to “preserve their kind.”¹¹ In making these arguments, opponents present cloning as a practice that drastically departs from natural reproduction and is therefore inherently suspect.¹²

8. See *infra* Part V.

9. See, e.g., James Q. Wilson, *The Paradox of Cloning*, WKLY. STANDARD, May 26, 1997, at 23–24, 26 (“More troubling is the possibility that a lesbian couple will use cloning to produce a child. Do we wish to make it easy for a homosexual pair to have children? . . . Cloning humans, if it can occur at all, cannot be prevented, but cloning unmarried persons will expand the greatest cultural problem our country now faces.”).

10. See STEPHEN E. LEVICK, CLONE BEING: EXPLORING THE PSYCHOLOGICAL AND SOCIAL DIMENSIONS 229–30 (2004) (“The partial merger of the genomes of two individuals to constitute a new and unique one may well be the basic biological fact underpinning the rest. Cloning puts into conflict the ‘selfish’ genes of the individual with the need for the survival of community and society absolutely necessary for the survival of humans as a social species.”).

11. LEON R. KASS & JAMES Q. WILSON, THE ETHICS OF HUMAN CLONING 86 (1998) (suggesting that gay-rights organizations have argued that “should homosexuality be shown to have a genetic basis, homosexuals would have an obligation to reproduce through cloning, to preserve their kind”).

12. These opponents of cloning find themselves alongside unexpected bedfellows: some feminist scholars argue against cloning on the grounds that it may further exploit women by providing men with “the absolute power over reproduction” that they have always wanted. Andrea Dworkin, *Sasha*, in CLONES AND CLONES: FACTS AND FANTASIES ABOUT HUMAN CLONING 73, 76 (Martha C. Nussbaum & Cass R. Sunstein eds., 1998). Dworkin goes on to note, however, that cloning may also allow women to reproduce themselves, leading to an “all-female world, which would, probably, end at least rape, prostitution, incest, and forced pregnancy.” *Id.* See also Jack M. Balkin, *How New Genetic Technologies Will Transform Roe v. Wade*, 56 EMORY L. J. 843, 856 (2007) (“Cloning and other genetic technologies are not necessary to ameliorate women’s inequalities with men, and indeed . . . one can easily imagine how these technologies might someday be used to undermine women’s equality.”). While a discussion of feminist approaches to cloning technologies is beyond the scope of this paper, it bears noting that not all feminists have responded to cloning in the same way. Since Dolly was created, some have questioned

These arguments lack merit or empirical support and are grounded largely in homophobic assumptions. In the face of this fear-mongering, I present a more realistic and systematic assessment of the potential benefits cloning offers to LGBTI individuals. I argue that, while cloning does pose some potential risks that must be taken seriously, it can provide many benefits to society as a whole, and to the LGBTI community in particular, if properly regulated by law. The LGBTI community might be well-advised to consider lobbying for increased funding and regulation of cloning, in hopes that new technologies may make it possible to create alternative family options and new forms of kinship.

While I argue that cloning would offer great benefits to LGBTI individuals, it is important to emphasize that many LGBTI families are satisfied with the current ways available for creating families. Further, my argument is not intended to privilege or encourage genetic relations over other forms of kinship. Rather, I argue that the choice to be genetically related to one's children should be available equally to LGBTI and heterosexual people.

Indeed, there are still a number of troubling issues related to cloning that the LGBTI community and its allies should consider. For example, given the expense of the procedure,¹³ is cloning a viable option exclusively for those families with the resources to pay for a genetically-related child and therefore only marginally beneficial to the community as a whole? Will having the option to clone place further pressure on LGBTI couples to imitate the heterosexual family, leading to a sense of shame or failure if they refuse to do so? What implications might cloning have for LGBTI rights more broadly? Does lobbying to fund cloning research inappropriately privilege the notion of a genetically-related family over all other family arrangements? Might cloning adversely affect the adoption market, leaving prospective adoptees homeless? If two men wish to clone a

whether cloning might lead to a true feminist utopia—a world without men. Ann Northrop, a columnist for the New York gay newspaper LGNY, caused a stir when *USA Today* quoted her saying that because cloning gives women “complete control over reproduction,” it could, “[if] carried to its logical extreme, eliminate men altogether.” Anita Manning, *Pressing a “Right” to Clone Humans, Some Gays Foresee Reproduction Option*, USA TODAY, Mar. 6, 1997, at 01.D (quoting Northrop). Northrop later tempered her comments, explaining that “while some women might go so far as to refuse to replicate men at all, which would be an interesting concept, at the very least it would change the balance of power somewhat.” *Id.* The idea that women could use parthenogenesis in order to procreate without men is much older than Dolly. As early as 1915, in her famous book *Herland*, Charlotte Perkins Gilman described an island composed only of women who reproduced themselves asexually using parthenogenesis and lived a life free of war and domination. See generally CHARLOTTE PERKINS GILMAN, *HERLAND* (1915).

13. See, e.g., Matthew Herper, *Cloning's High Cost*, FORBES (Nov. 26, 2001, 10:19 AM), <http://www.forbes.com/2001/11/26/1126cloning.html> (stating it may cost \$1,000 per egg—and may require 100 eggs—to perform therapeutic cloning; however, some of these costs are associated with compensating the egg donor).

child together, they must rely on a surrogate egg donor; will cloning therefore only further perpetuate the exploitation of women to the benefit of gay and transgender women in need of eggs?

The structure of this article is as follows: Part II examines the difficulties that members of the LGBTI community face when trying to build families that include children and concludes that each currently available method of reproduction has some disadvantages, either because they require some involvement of third parties and/or because they do not allow for the creation of a child who is genetically related to both partners. Part III provides an overview of the science of reproductive cloning and summarizes the arguments in favor of cloning generally. In Part IV, I discuss the benefits that cloning offers to different groups within the LGBTI community and suggest that cloning provides new opportunities both for this community and more generally for all couples who seek to reproduce. Drawing on insights from queer theory, Part V examines and critiques the assumptions underlying key arguments against the use of reproductive cloning. In Part VI, I question the constitutionality of a ban on funding cloning research and suggest that a ban on human reproductive cloning may violate the guarantee of equal protection by discriminating against LGBTI individuals. The article concludes with a discussion of the role that cloning should play in LGBTI politics and legal strategy.

II.

CURRENT OPTIONS FOR CREATING LGBTI FAMILIES AND THE ASSOCIATED BARRIERS

According to recent research, more than half of all gay men and forty-one percent of lesbians in the United States want to have children.¹⁴ When deciding whether and how to become parents, the LGBTI community faces greater obstacles and must ask different questions than fertile, opposite-sex couples wishing to have a baby. Should they adopt or use an egg or sperm donor? If they decide to use a donor, should they choose someone they know or rely on an anonymous donor? If both partners are able, which should gestate the child? Should they choose surrogacy? The questions and available options differ depending on the sex, gender, and sexual orientation of the person (or people) involved. Although some options may offer more advantages than others, all can present significant legal and social hurdles to building the LGBTI family. Ian Wilmut, the creator of Dolly the sheep, argues that using methods as risky as reproductive cloning cannot be justified “given the range of alternatives on

14. GARY J. GATES, M.V. LEE BADGETT, JENNIFER EHRLE MACOMBER & KATE CHAMBERS, *THE WILLIAMS INST. & URBAN INST., ADOPTION AND FOSTER CARE BY GAY AND LESBIAN PARENTS IN THE UNITED STATES* 5 (2007), available at <http://www.law.ucla.edu/williamsinstitute/publications/FinalAdoptionReport.pdf>.

offer: adoption, surrogacy, and a huge range of infertility treatments.”¹⁵ For the LGBTI family, however, the currently available options are not without their own serious drawbacks and risks.

A. Adoption

An estimated two million LGBTI individuals in the United States are interested in adopting.¹⁶ Adoption is an appealing option since it does not pose any health risks to the adoptive parent(s) and provides children in need with loving homes. Nevertheless, the adoption process can be challenging for LGBTI couples who wish to start a family. Some states prohibit gay couples from adopting.¹⁷ Even when adoption *is* available, it is often prohibitively expensive. In some instances, families may be limited to “open” adoptions, which can be frustrating to those who prefer not to maintain contact with the birth parents.¹⁸ Finally, the waiting period to adopt can be anywhere from a few months to several years.¹⁹ I discuss these obstacles further, as well as the other disadvantages of adoption,

15. IAN WILMUT & ROGER HIGHFIELD, *AFTER DOLLY: THE USES AND MISUSES OF HUMAN CLONING* 222 (2006).

16. GATES, BADGETT, MACOMBER & CHAMBERS, *supra* note 14, at 5. LGB parents are major players in the adoption field in the United States. An estimated 65,500 children are living with LGB parents, and these parents raise four percent of all children in the United States. *Id.* at 3.

17. *See infra* notes 26–27.

18. Today in the United States, open adoption or semi-open adoption is a standard practice, particularly in private adoptions. *See, e.g., Open Adoption*, MAMA’S HEALTH, <http://www.mamashealth.com/adopt/openadopt.asp> (last visited Feb. 19, 2011). In an open adoption, the adopted child has the opportunity to develop a relationship with her birth family. Anita L. Allen, *Open Adoption is Not for Everyone*, in *ADOPTION MATTERS* 47, 47–48 (Sally Haslanger & Charlotte Witt, eds., 2005) Prospective adoptive parents are often encouraged to agree to an open adoption in order to be more desirable to the birth parents. This arrangement usually requires the adoptive parents to meet—sometimes through long periods or even in perpetuity—with the biological parents. *Id.* at 49 (providing a fictional illustration of a couple that choose open adoption because they were “[f]earful of not being selected to adopt. . .”). This arrangement can be very emotionally, socially, and practically complex for everyone involved. Anita L. Allen suggests that open adoption rituals—such as face-to-face meetings between the adoptive and biological parents—make adoption less appealing to those who place a high value on intimacy and privacy in their families. *Id.* at 61. On this basis, some LGBTI individuals and couples might want to avoid the outside interference and potentially probing questions about their sexual orientation and partnership and therefore prefer to rely on other options for building a family. As with heterosexual couples, many LGBTI individuals would prefer to live their lives without the need to share their children and their family intimacy with their adopted child’s biological parents.

19. *See* Solangel Maldonado, *Discouraging Racial Preferences in Adoptions*, 39 U.C. DAVIS L. REV. 1415, 1432 (2006) (noting that, while “there are many applicants for every healthy, white infant in the United States, resulting in a wait as long as seven years,” African-American infants are readily available for adoption); *What is the Waiting Period to Adopt?*, ADOPTION SERVS., http://www.adoptionervices.org/adoption/adoption_waiting_period.htm (last visited Mar. 26, 2011) (“For a healthy US-born Black or bi-racial (Caucasian/African-American) infant the estimated wait is approximately 2 to 6 months.”).

below.

First and foremost, adoption does not provide LGBTI parents with the opportunity to have genetically-related children or to experience childbirth. Adoptive parents may face stigma or social shame because their families differ from traditional models.²⁰ Research suggests that many people place significant value on having a genetically-related child, at least in part because they see the child as the successor to their “dynasty,”²¹ holding a place in an ancestral line that reaches backward and forward in time.²² Additionally, those individuals who are able to do so may want to experience pregnancy.²³ Thus, for those who want a genetically-related child or who desire the experience of pregnancy and childbirth, adoption may not be the best option. Some couples might also be concerned that adopted children are likely to face greater emotional and social obstacles. Research suggests that adopted children may be more likely than their nonadoptive counterparts to suffer from emotional difficulties and learning problems.²⁴ Nontraditional couples—many of whom are already acutely aware of what it feels like to be stigmatized—might be even more

20. See VIVIAN B. SHAPIRO, JANET R. SHAPIRO & ISABEL H. PARET, *COMPLEX ADOPTION AND ASSISTED REPRODUCTIVE TECHNOLOGY* 17 (2001) (“When the family history differs from ‘mainstream’ family models, prejudice and family isolation often become part of the subjective experiences of children and parents.”).

21. See S. Camporesi & L. Bortolotti, *Reproductive Cloning in Humans and Therapeutic Cloning in Primates: Is the Ethical Debate Catching Up with the Recent Scientific Advances?*, 34 *J. MED. ETHICS* 1, 3 (2008) (“The assumption here is that, if potential parents want to reproduce by cloning, they do so in order to be able to pass on their genes to their prospective children”); Carson Strong, *Cloning and Infertility*, 7 *CAMBRIDGE Q. HEALTHCARE ETHICS* 279, 281–82 (1998) (arguing that an infertile couple may wish for a genetically-related child because this will “enable them to participate in the creation of a person,” serve as a representation of their mutual love, and provide them with a “link to future persons”). See also Charlotte Witt, *Adoption, Personal, Identity, and Genetic Essentialism*, in *ADOPTION MATTERS*, *supra* note 18, at 135, 135–36 (noting that the genetically-related family is a socially constructed ideal reinforced by feminist theorists and, ironically, the adoption community).

22. See, e.g., MARY L. SHANLEY, *MAKING BABIES, MAKING FAMILIES: WHAT MATTERS MOST IN AN AGE OF REPRODUCTIVE TECHNOLOGIES, SURROGACY, ADOPTION, AND SAME-SEX AND UNWED PARENTS’ RIGHTS* 90 (2001) (“Having a child genetically related to one member of the couple gave a sense of continuity both to the genetically related parent and to the spouse who would see his or her partner reflected in their child. The genetic tie linked the parents not only to their child, but also to the generations that preceded them and, through the possibility that their child would have children, to those following them.”).

23. See SUZANNE M. JOHNSON & ELIZABETH O’CONNOR, *THE GAY BABY BOOM: THE PSYCHOLOGY OF GAY PARENTHOOD* 91 (2002) (stating that “eighty-eight percent of the primary lesbian mother families [surveyed] conceived their own children” and that “[m]any mentioned their strong desire to give birth to their own children as the reason for choosing this option”); Strong, *supra* note 21, at 281 (noting that people may value having genetically related offspring because it “involves experiences of pregnancy and childbirth”).

24. See JOHNSON & O’CONNOR, *supra* note 23, at 28 (noting that “adopted children, as a group, show higher rates of emotional difficulties and learning problems than do nonadopted children,” and that poor prenatal care may trigger later problems).

sensitive to the social difficulties that adopted children face.²⁵

For those LGBTI couples or individuals who do wish to adopt, the process often presents serious legal challenges. Mississippi explicitly prohibits same-sex couples from adopting.²⁶ Other states have passed statutes stipulating that only married couples may adopt, a requirement intended to prevent gay and lesbian parents from adopting.²⁷ There may be some indication, however, that things are changing. In Florida, a thirty-three-year-old law prohibiting adoption by LGB individuals was recently struck down as unconstitutional.²⁸ In 2008, Arkansas voters approved a ballot initiative that prohibits adoption by cohabiting couples,²⁹ but it was held unconstitutional by the Arkansas Supreme Court in April 2011.³⁰

Even when LGBTI individuals are permitted to adopt under state law, they may face additional obstacles. Many adoption agencies refuse to work with gay couples.³¹ If a social worker is required to make a home visit, lesbian or gay partners may pretend to be roommates for fear that their sexual orientation will preclude them from adopting.³² In other instances,

25. Of course, this could cut both ways: LGBTI parents may be more sensitive to their children's experience of discrimination, but they may also be more concerned about compounding this discrimination with the added stigma of having nontraditional parents.

26. MISS. CODE ANN. § 93-17-3(5) (2007) ("Adoption by couples of the same gender is prohibited.").

27. For example, in Utah "a child may not be adopted by a person who is cohabiting in a relationship that is not a legally valid and binding marriage under the laws of this state." UTAH CODE ANN. § 78B-6-117(3) (West 2008). In many states, family court judges decide whether to permit LGB adoptions on a case-by-case basis with a focus on the "best interest of the child." See HUMAN RTS. CAMPAIGN, PARENTING LAWS 1 (2011), http://www.hrc.org/documents/parenting_laws_maps.pdf ("In many states the status of parenting law for LGBT people is unclear. The determination of parenting rights is always made on a case-by-case basis and it is ultimately the decision of the judge whether to grant the adoption petition."). For a comprehensive review of adoption laws by state, see THE LIBERTY COUNCIL, SAME-SEX ADOPTION LAWS BY STATE, http://www.lc.org/profamily/samesex_adoption_by_state.pdf (last visited Feb. 19, 2011).

28. In 2010, Florida's Third District Court of Appeals upheld the trial court's decision holding the ban unconstitutional under the state constitution's equal protection clause because it found there was no rational purpose to the ban. Fla. Dep't of Children & Families v. Adoption of X.X.G., 45 So. 3d 79, 91–92 (Fla. Dist. Ct. App. 2010). The Florida Department of Children and Families announced that it will not appeal the ruling. John Couwels, *Florida Won't Appeal Ruling Stopping Adoption Ban by Gay Men, Lesbians*, CNN (Oct. 12, 2010), http://articles.cnn.com/2010-10-12/us/florida.gay.adoptions_1_adoption-ban-frank-martin-gill-appeal?_s=PM:US.

29. ARK. CODE ANN. § 9-8-304 (Supp. 2009) ("A minor may not be adopted or placed in a foster home if the individual seeking to adopt or to serve as a foster parent is cohabiting with a sexual partner outside of a marriage which is valid under the constitution and laws of this state.").

30. Ark. Dep't of Health & Human Servs. v. Cole, No. 10-840 (Ark. Apr. 7, 2011) (finding that Initiated Act No. 1 violated LGBTI couples' fundamental right to privacy), [available at](http://www.aclu.org/files/assets/DHS_v_Cole_Opinion.pdf) http://www.aclu.org/files/assets/DHS_v_Cole_Opinion.pdf.

31. JOHNSON & O'CONNOR, *supra* note 23, at 90.

32. Gerald P. Mallon, *Assessing Lesbian and Gay Prospective Foster and Adoptive Families: A Focus on the Homestudy Process*, 86 CHILD WELFARE 67, 74–75 (2007).

one member of the couple may attempt to “pass,” presenting herself as a single person who wishes to adopt. In still other cases, an agency may be aware of the couple’s sexual orientation but turn a blind eye to it.³³ Birth parents may also refuse to place their child with gay parents.³⁴ Thus, gay parents may fare better when they are able to conceal their sexual identities from birth parents, a task made easier when the birth parents are not involved in the adoption process.³⁵ Gay parents may face problems in international adoptions as well, because some countries prohibit placement of children with LGB parents.³⁶ Those agencies that are willing to work with LGBT couples may still require these couples to meet higher standards than their heterosexual counterparts before being considered suitable adoptive parents.³⁷ Many agencies appear to prefer adoptive parents who comply with traditional gender roles, treating “feminine” lesbians and “masculine” gay men differently from prospective parents who present in non-gender-traditional ways.³⁸ In light of these hurdles, anecdotal evidence suggests that many LGBTI individuals feel they are considered undesirable candidates for adoption and are therefore reluctant to participate in a process that delves into their private lives and leaves them feeling judged.³⁹

33. John D. Matthews & Elizabeth P. Cramer, *Envisaging the Adoption Process to Strengthen Gay- and Lesbian-Headed Families: Recommendations for Adoption Professionals*, 85 CHILD WELFARE 317, 327–28 (2006) (noting that many adoption agencies operate under a “don’t ask, don’t tell” policy).

34. *See id.* at 323 (finding that about one quarter of responding agencies had worked with birth parents who objected to placing a child with gay parents).

35. *See* David M. Brodzinsky, Charlotte J. Patterson & Mahnoush Vaziri, *Adoption Agency Perspectives on Lesbian and Gay Prospective Parents: A National Study*, 5 ADOPTION QUARTERLY 5, 20–21 (2002). Brodzinsky, Patterson and Vaziri’s research suggests that international adoption agencies view adoption by LGB parents favorably. *Id.* This is surprising, as many foreign countries prohibit adoption by LGB parents. *Id.* at 20. The authors speculate that there are three possible ways for agencies to negotiate this contradiction. *Id.* at 21. First, the adoption agency may conceal the sexual orientation of the prospective family. Second, some agencies may adopt a “don’t ask, don’t tell” policy and not ask the prospective parents about their sexual orientation. *Id.* Third, agencies can disclose the parents’ sexual orientation, but this may impede the adoption of some children by appropriate LGB parents. *Id.*

36. *See, e.g.*, OFFICE OF CHILDREN’S ISSUES, DEP’T OF STATE, COUNTRY SPECIFIC INFORMATION FOR CHINA (Jan. 23, 2009), <http://adoption.state.gov/country/china.html> (“Chinese law permits adoption by married couples, defined as one man and one woman. They must adopt the child jointly.”).

37. Lori Ross, Rachel Epstein, Corrie Goldfinger, Leah Steele, Scott Anderson & Carol Strike, *Lesbian and Queer Mothers Navigating the Adoption System: The Impacts on Mental Health*, 17 HEALTH SOC. REV. 254, 255 (2008).

38. *See id.* at 256 (“In order to successfully negotiate the adoption process, it has been suggested that lesbians (and by extension, gay men) must present themselves as similar to, or indeed the same as, heterosexual applicants, that is, to be ‘the good lesbian.’”) (citing Stephen Hicks, *Good Lesbian, Bad Lesbian: Regulating Heterosexuality in Fostering and Adoption Assessments*, 5 CHILD & FAM. SOC. WORK 157, 162 (2000)).

39. JOHNSON & O’CONNOR, *supra* note 23, at 91–92. For a discussion of similar issues

Even if a couple surmounts these legal and emotional obstacles, other issues remain. Adoption costs vary depending on the agency the couple uses. Adoption may cost \$2,500 or less, if the couple adopts through a public agency, or as much as \$30,000 if the couple adopts through an independent domestic agency.⁴⁰ The price of international adoption depends on the country of origin, ranging from \$25,000 (including travel expenses) for a child from Ethiopia to more than \$50,000 for a Russian child.⁴¹ As there is some evidence to suggest that gay men earn less on average than their heterosexual counterparts,⁴² there is good reason to be concerned that adoption is economically prohibitive for at least a portion of the LGBTI community.

Finally, even if an LGBTI individual is able to adopt a child, legal barriers may prevent the parent's same-sex partner from being recognized as the child's parent. When one partner is a legal parent of a couple's child (often by virtue of biological relation) but the other is not, the couple may initiate a second-parent adoption, a legal process by which one partner can become an adoptive parent without terminating the rights of the other.⁴³ Second-parent adoption is an important option for LGBTI people because without it the partner of the biological parent will not have any parental rights.⁴⁴ In the absence of second-parent adoption, a child might be left

confronted by transgender individuals, see SHANNON MINTER & CHRISTOPHER DALEY, NAT'L CTR. FOR LESBIAN RTS. & TRANSGENDER LAW CTR., *TRANS REALITIES: A LEGAL NEEDS ASSESSMENT OF SAN FRANCISCO'S TRANSGENDER COMMUNITIES* 13 (2003) (“[T]ransgender people who are attempting to become adoptive or foster parents face discrimination from public and private adoption and foster care agencies.”).

40. *Cost of Adopting*, ADOPTION.COM, <http://statistics.adoption.com/information/statistics-on-cost-of-adopting.html> (last visited Oct. 5, 2010).

41. *Cost of Adoption Update: 2008-2009*, ADOPTIVE FAMILIES, <http://www.adoptivefamilies.com/articles.php?aid=2076>.

42. See M.V. Lee Badgett, *The Wage Effects of Sexual Orientation Discrimination*, 48 INDUS. & LABOR REL. REV. 726, 737 (1995) (finding that from 1989 to 1991, “behaviorally gay/bisexual men earn[ed] eleven to twenty-seven percent less than behaviorally heterosexual men”). See also Dan A. Black, Hoda R. Makar, Seth G. Sanders & Lowell J. Taylor, *The Earnings Effects of Sexual Orientation*, 56 INDUS. & LAB. REL. REV. 449, 463 (2003) (suggesting that unmarried gay men typically earn less than married straight men, but that lesbian women earn more on average than heterosexual women).

43. See, e.g., Courtney G. Joslin, *Protecting Children(?): Marriage, Gender and Assisted Reproductive Technology*, 83 SO. CAL. L REV. 1177, 1192, 1213–15 (discussing the process of second-parent adoption and its significance for nonmarital families).

44. Additionally, while in many states the law provides that the non-biological parent of a child born through artificial insemination is the child's legal parent, these statutes typically apply only to heterosexual married couples. Thus, when a same-sex couple uses assisted reproductive technologies (ARTs) to have a child together, the child will be legally connected to the biological mother only. See *id.* at 1179 (“[I]n 2010 only four states and the District of Columbia have statutory ART provisions that extend the consent [to artificial insemination] = legal parent rule to non-marital children. Moreover, three of these five jurisdictions have provisions that, by their literal terms, are limited to heterosexual couples.”). Some transgender individuals who try to establish their paternity through artificial insemination laws face the same problem, since many of the artificial insemination

without a legal guardian if her documented parent dies, or the undocumented parent can lose her parental rights if the couple separates and a custody battle ensues.⁴⁵ While many states allow second-parent adoption,⁴⁶ Kentucky,⁴⁷ Wisconsin,⁴⁸ Nebraska,⁴⁹ and Ohio⁵⁰ have held that second-parent adoption by same-sex partners is not allowed. Recently, the North Carolina Supreme Court ruled that second-parent adoption by nonmarried partners is illegal, potentially invalidating all previous such adoptions in the state.⁵¹

laws refer specifically and are limited to male and female parents. Thus, the Illinois Appellate Court held that the Parentage Act of 1984, under which a child born from artificial insemination to two married parents retained his right to parentage with both parents even if the marriage was subsequently held invalid, did not apply to transsexual males. *In re Marriage of Simmons*, 825 N.E.2d 303, 309–10 (Ill. App. Ct. 1st Dist. 2005) (“[The section of the Parentage Act] which confers a presumption on a ‘man’ to be the natural father of a child . . . is based on the premise that the parties who are involved are a man and a woman. As we have previously determined, petitioner is not a man within the meaning of the statute, and that, therefore, the statute does not apply.”).

45. State courts have taken different positions on the rights of non-adoptive parents in cases where a couple had children together but one of the parents did not adopt the child and the legal parent subsequently died or the couple separated. *Compare* *Janice M. v. Margaret K.*, 948 A.2d 73, 74 (Md. 2008) (holding that “de facto parenthood is not recognized in Maryland”), and *In the Matter of C.M. v. C.H.*, 789 N.Y.S.2d 393, 402 (N.Y. Sup. Ct. 2004) (holding that a woman lacked standing to seek any contact with the child born to her former same-sex partner), with *In re Clifford K.*, 619 S.E.2d 138, 157 (W. Va. 2005) (holding that the same-sex partner of a deceased woman had standing to intervene in custody proceeding under the “exceptional cases” provision, as the partner was the child’s psychological parent, unusual and extraordinary circumstances existed, and awarding the partner permanent custody served the best interests of the child).

46. *See, e.g.*, CAL. FAM. CODE §§ 9000–9007 (West 2004) (describing the process of second-parent adoption and its availability to domestic partners); N.Y. COMP. CODES R. & REGS. tit. 18, § 421.16(h)(2) (2008) (“Applicants [for second-parent adoption] shall not be rejected solely on the basis of homosexuality.”).

47. *S.J.L.S. v. T.L.S.*, 265 S.W.3d 804, 815–20 (Ky. Ct. App. 2008) (holding that the stepparent adoption of a child by the same-sex domestic partner of the child’s biological mother without the termination of the biological mother’s parental rights was prohibited by statutes; adoption statute only allowed a stepparent adoption without the termination of a biological parent’s rights if the stepparent was married to the biological parent, and same-sex marriages were prohibited by statute).

48. *See In re Angel Lace M.*, 516 N.W.2d 678, 684–85 (Wis. 1994) (holding that the same-sex partner of the child’s adoptive mother is not permitted to adopt the child, as this would terminate the adoptive mother’s parental rights).

49. *See In re Adoption of Luke*, 640 N.W.2d 374, 377 (Neb. 2002) (holding that a same-sex partner cannot adopt the partner’s child without terminating the other partner’s parental rights).

50. *See In re Adoption of Doe*, 719 N.E.2d 1071, 1072–73 (Ohio Ct. App. 1998) (holding that a parent’s parental rights are terminated upon adoption of the child by a non-spousal partner).

51. *Boseman v. Jarrell*, 704 S.E.2d 494, 505 (N.C. 2010). The case generated publicity in part because the non-biological mother petitioner in the case, Julia Boseman, was the first openly gay member of the North Carolina General Assembly.

B. Using Assisted Reproduction Technologies

Broadly defined, assisted reproductive technologies (ARTs) are “non-coital methods of conception that involve manipulation of both eggs and sperm” that allow individuals to reproduce without heterosexual intercourse.⁵² Common ART methods include artificial insemination, in-vitro fertilization (IVF),⁵³ and preimplantation genetic diagnosis (PGD).⁵⁴ ARTs came into common use in most developed countries in the mid- to late twentieth century.⁵⁵ The main advantage of ARTs over adoption for LGBTI couples is that one partner will be genetically related to the child—an advantage that is significant for some families.⁵⁶ For example, gay male couples may conceive a child who possesses genes from one parent by combining one partner’s sperm with a donated egg and relying on a surrogate mother to gestate the child. Lesbian couples may use ART to include both mothers in the biological components of childbirth: one may donate the egg while the other gestates the child.⁵⁷ Nevertheless, even with all of the ART options currently available, most LGBTI couples cannot currently conceive a child who is genetically related to both parents and must continue to rely on donated eggs or sperm to use ARTs.⁵⁸

LGBTI ART users must decide whether to use an anonymous or known donor to supply eggs and/or sperm. Finding an egg or sperm donor can be a fraught and complicated process. While the nature/nurture debate is still going strong, choosing half of the genes for one’s child can make a

52. Linda Beckman & S. Marie Harvey, *Current Reproductive Technologies: Increased Access and Choice?*, 61 J. SOC. ISSUES 1, 2 (2005). Federal law defines ART as “all treatments or procedures which include the handling of human oocytes or embryos, including in vitro fertilization, gamete intrafallopian transfer, [or] zygote intrafallopian transfer.” 42 U.S.C. § 263a-7 (2006).

53. CHARLES P. KINDREGAN, JR. & MAUREEN MCBRIEN, *ASSISTED REPRODUCTIVE TECHNOLOGY: A LAWYER’S GUIDE TO EMERGING LAW AND SCIENCE* 327 (2006) (describing IVF as “fertilization of an egg by sperm outside of the womb in a petri dish in order to produce an embryo that can be placed either in the potential birth mother’s reproductive organs or in cryopreservation for future use”).

54. *Id.* (describing PGD as “a biopsy on a cell taken from an embryo to determine its genetic characteristics and condition prior to implantation”). PGD is a technique that can identify genetic defects in pre-embryos.

55. *Id.* at xi, 8.

56. *See, e.g.*, David Orentlicher, *Beyond Cloning: Expanding Reproductive Options for Same-Sex Couples*, 66 BROOK. L. REV. 651, 653 (2000-2001) (“Gay couples have the same strong interest as heterosexual couples in raising children with whom they have biological ties.”).

57. Suzanne Pelka, *Sharing Motherhood: Maternal Jealousy Among Lesbian Co-Mothers*, 56 J. HOMOSEXUALITY 195, 196 (2009). This option is both complicated and expensive because it requires at least one cycle of IVF (which involves hormonal therapy and anesthesia) to transfer the egg from one woman to the other.

58. This may not be the case for some transgender and intersex individuals, or for any other LGBTI-identified couples whose biological configurations allow them to contribute both egg and sperm.

potential parent feel like she is gambling with the child's identity and health.⁵⁹ Some couples may thus prefer to use a known donor to avoid both the potentially complicated process of finding the right anonymous donor and at least some of the risks inherent in anonymous donation.⁶⁰ Although most sperm banks offer a great deal of information about donors,⁶¹ personal acquaintance with the donor can provide answers to questions about the donor's character, behavior, and appearance—factors that most parents wish to consider before selecting the genes they will pass along to their child. Furthermore, some parents may prefer to select a donor they can contact in case of an emergency or even contact down the road with questions about family history if unexpected health concerns arise. If the child were to need an organ transplant later in life, parents who chose a known donor would be able to contact her.⁶² Not only would she be more likely to be an appropriate donor for the child, but she may also be more inclined to assist because of her relationship with the family.⁶³

59. Some diseases may be transmitted through donated sperm without the donor's knowledge simply by passing on a deleterious gene. A donor who finds out years later that he is a genetic carrier of a particular disease is not obliged by current law to report this to the recipient parents. Vanessa L. Pi, *Regulating Sperm Donation: Why Requiring Exposed Donation Is Not the Answer*, 16 DUKE J. GENDER & L. POL. 379, 390 (2009) ("Should a donor later develop a serious medical condition that may have been genetically passed on to an ART-conceived child, he is not required to contact either the sperm bank, the recipient mother, or the child."). See also *Johnson v. Superior Court*, 124 Cal. Rptr. 2d 650 (Cal. Ct. App. 2002) (denying relief in parents' claim against a sperm bank that they allegedly negligently provided them with material from a donor with a history of kidney disease). Choosing an egg donor presents its own unique obstacles, as the business of egg donation is unregulated and consumers are faced with a variety of choices in their quest to find the perfect egg. Notably, one couple even offered to pay \$50,000 for an Ivy League egg donor with high SAT scores. David Tuller, *Payment Offers to Egg Donors Prompt Scrutiny*, N.Y. TIMES, May 10, 2010, at D5.

60. Some couples choose to use the sperm of the non-gestating partner's relative so as to allow for some genetic similarity with both parents. While such an arrangement has clear advantages, particularly when the parents need to immediately contact the donor in cases of medical emergency, many couples may feel uncomfortable with the ambiguity such decisions create, such as when the child's uncle is also her biological father.

61. Some of the information collected by sperm banks is required by Food and Drug Administration (FDA) regulations. See 21 C.F.R. § 1271.55 (2008) (requiring sperm banks to conduct a physical examination and to collect the medical history of the donor and to retain these records). The California Cryobank provides web-based information about potential donors' ethnic origins, education level, areas of study, and religion, as well as audio interviews and photos from their early childhood. See CALIFORNIA CRYOBANK, <http://www.cryobank.com> (last visited Mar. 26, 2011).

62. In some circumstances, children or their parents may also be able to identify and contact anonymous donors. See Ethics Comm. of Am. Soc'y for Reprod. Med., *Informing Offspring of their Conception by Gamete Donation*, 81 FERTILITY & STERILITY 527, 529 (2004) (explaining that, while most sperm banks maintain non-identifying records about the donors' characteristics and medical history, "[a] growing number of sperm banks and programs make gametes available from donors who agree to be identified now or in the future").

63. A further complication with unknown sperm donors is that some children may

Still, choosing a known donor is not without its disadvantages. Disputes over parental rights may arise between the couple and the donor, and the law in this area is not well settled.⁶⁴ Even when decisions about parental rights are made collaboratively in advance of childbirth, disagreements can arise down the road and litigation may ensue. Many potential LGBTI parents are thus understandably wary about entering into such agreements for fear that they will later face problems that could strain their relationship and adversely affect the child.

Couples who want children but cannot carry a child themselves may rely on a surrogate mother in addition to an egg donor, which can create additional complications. ART using surrogacy can be quite expensive: after payment to the surrogate carrier, to a separate egg donor, for the IVF cycles, for agency and attorney fees, and for medical insurance and medical care during the pregnancy, the total cost can reach or exceed \$120,000.⁶⁵ Additionally, the use of surrogate contracts may present a variety of legal hurdles. In some jurisdictions, for example, surrogate parenting agreements are not enforceable.⁶⁶ Thus, if a surrogate carrier changes her

eventually wish to find their biological donor fathers. Most sperm banks keep the identity of the donor anonymous. Gaia Bernstein, *Regulating Reproductive Technologies: Timing, Uncertainty, and Donor Anonymity*, 90 B.U. L. REV. 1189, 1191 (2010) (noting that donor anonymity is the prevailing norm). However, there is much debate over this issue, and it is possible that laws on sperm donation and anonymity may change in the future. *See id.* at 1205–18 (describing current legal debates regarding donor anonymity in the United States and abroad). In the United States, potential parents have the option to choose an open identity donor who voluntarily agrees to be contacted by offspring when they reach eighteen. *See* Joanna E. Scheib & Rachel A. Cushing, *Open-Identity Donor Insemination in the United States: Is It on the Rise?*, 88 FERTILITY & STERILITY 231, 231 (2007). In a relatively recent study on the topic, over eighty percent of participants conceived by an unknown donor indicated that they were at least moderately likely to request to meet their parents when they turned eighteen. J. Scheib, M. Riordan & S. Rubin, *Adolescents with Open-Identity Sperm Donors. Reports from 12-17 Year Olds*, 20 HUM. REPROD. 239, 239–52 (2004). Tracing one's origins is becoming easier as technology develops. In Britain, a fifteen-year-old boy succeeded in finding his original donor using a genealogy DNA test. He tracked the donor from his Y chromosome, which is passed from father to son virtually unchanged. Alison Motluk, *Anonymous Sperm Donor Traced on Internet*, NEW SCI., Nov. 5, 2005, at 6.

64. *Compare* C.O. v. W.S., 639 N.E.2d 523 (Ohio Ct. Com. Pl. 1994) (holding that a lesbian couple who solicited sperm from one member of a gay male couple could not extinguish the biological father's parental rights in part because they had not complied with Ohio's statutory requirements for establishing a legal relationship between donor and mother), *with* Lamaritata v. Lucas, 823 So. 2d 316 (Fla. Dist. Ct. App. 2002) (finding that sperm donor had no parental rights). The seemingly contradictory outcomes in these cases may be at least partially explained by the fact that in the former case, the parties decided that the sperm donor would be a "male role model" for the child, while in the latter, the parties agreed that the man would be simply a sperm donor, without any parental rights.

65. *See, e.g.*, DEBORAH SPAR, THE BABY BUSINESS 213 (2006) (estimating costs of various assisted reproduction techniques).

66. *See* ARIZ. REV. STAT. ANN. § 25–218 (2006) ("No person may enter into, include, arrange, procure or otherwise assist in the formation of a surrogate parentage contract."); D.C. CODE § 16–402 (2001) (banning surrogacy agreements).

mind and decides not to turn over the child to the contracting couple, the couple may not have any legal recourse. Some couples may also be concerned about what role, if any, the surrogate mother will play in their family.⁶⁷

Thus, while ARTs may provide LGBTI individuals with an appealing alternative to adoption, the many possible complications related to their use suggest that they are, at best, an imperfect solution for couples who wish to have a genetically-related child.

C. Co-Parenting

Some LGBTI individuals and couples choose to build their families through co-parenting arrangements. Co-parenting arrangements often begin when an individual or couple wishing to have a child seeks a co-parent through their own social networks, in online advertisements, or through centers that help match future parents.⁶⁸ For example, a man and a woman, at least one of whom identifies as LGBTI, may conceive a child together and then share parenting responsibilities.⁶⁹ There are a variety of ways to structure this kind of arrangement. In some cases, the man and the woman might live together or in close proximity to one another. The child might live in one parent's house while still being parented by the other(s), or might alternate between homes.

The health and safety risks and the prohibitive costs often associated with adoption and some ARTs are not present in co-parenting arrangements. Typically, the co-parents use artificial insemination to conceive (though other options are available) and the child is genetically related to both parents.⁷⁰ There are likely fewer surprises as well, as co-parenting involves no unknown donor and no hidden costs.

Nevertheless, co-parenting is yet another imperfect solution for LGBTI couples who want children. Even if the parties know one another beforehand, raising a child together can lead to disputes and cause serious rifts in the relationship,⁷¹ just as it can in more "traditional" parenting

67. JOHNSON & O'CONNOR, *supra* note 23, at 101.

68. See Susan Hogben & Justine Coupland, *Egg Seeks Sperm. End of Story . . . ? Articulating Gay Parenting in Small Ads for Reproductive Partners*, 11 DISCOURSE & SOC'Y 457, 478 (2000) (defining co-parenting and describing ads seeking co-parenting arrangements). See also GAY FAMILY OPTIONS, <http://www.gayfamilyoptions.com> (last visited Feb. 19, 2011) (offering assistance in finding co-parents and other partners for the purpose of creating a family).

69. See Hogben & Coupland, *supra* note 68, at 478.

70. See, e.g., Deborah Dempsey, *Conceiving and Negotiating Reproductive Relationships: Lesbians and Gay Men Forming Families with Children*, 44 SOCIOLOGY 1145, 1152-54 (2010) (describing co-parenting arrangements in Australia).

71. See, e.g., Denise Balkissoon, *One Big Gay Family*, TORONTO LIFE, Feb. 2009, <http://www.torontolife.com/features/one-big-gay-family/?pageno=1> ("Parenting power struggles—disagreements over the child's diet, clothes, activity schedule and so on—can

situations. Moreover, co-parenting involves its own legal risks. Once the child is born, one parent may seek more or less involvement than initially agreed upon. Disputes may arise over money, education, living arrangements, or any number of other parenting issues.⁷² If a previously single parent enters into a relationship, that partner may seek to acquire guardianship, further complicating the contractual arrangement.

D. Conclusion

While many of the difficulties noted throughout this section are also faced by infertile opposite-sex couples who want to have children, the LGBTI community encounters additional problems unknown to most opposite-sex partners, as these heterosexual couples are much more likely to find their efforts at building families supported by social and legal (if not biological) norms. But another option may be on the technological horizon. Cloning may provide solutions to some of the more common problems associated with LGBTI adoption, co-parenting, and ARTs. As I discuss in the following section, cloning is not without its drawbacks. Nevertheless, it remains a real possibility that this emerging technology, if properly researched and regulated, could solve many of the most common problems faced by same-sex and other “nontraditional” couples when deciding whether and how to become parents.

III.

CLONING OFFERS NEW OPPORTUNITIES TO CREATE GENETICALLY-RELATED CHILDREN

The creation of Dolly the sheep in 1996 sparked heated political, philosophical, legal, cultural, and moral debate.⁷³ Dolly was the first mammal to be cloned from an adult somatic cell. She was created after 277 attempts⁷⁴ at using somatic cell nuclear transfer technology (SCNT), a form of cloning.⁷⁵ The vast majority of Americans are against the use of

lead moms to demote ‘daddy’ to ‘donor.’ One gay Toronto father, H, has fought a series of legal disputes with a pair of lesbian co-mothers over their six-year-old daughter.”).

72. See *Co-Parenting*, THE LESBIAN AND GAY FOUND., <http://www.lgf.org.uk/co-parenting> (last visited Feb. 19, 2011) (“Once you have found a suitable partner, contacting a legal representative is advisable. It would be a good idea to draw up a ‘parenting agreement’ covering the important aspects of childcare such as money, living arrangements, schooling etc.”).

73. See generally BRENT WATERS & RONALD COLE-TURNER, GOD AND THE EMBRYO, RELIGIOUS VOICES ON STEM CELLS AND CLONING (2003) (surveying religious perspectives on cloning); ARLENE JUDITH KLOTZKO, THE CLONING SOURCEBOOK (2001) (discussing ethical and policy issues related to cloning and medical research). See also SILJA VÖNEKY & RÜDIGER WOLFRUM, HUMAN DIGNITY AND HUMAN CLONING (2004) (discussing interdisciplinary approaches to the ethics of cloning).

74. WILMUT & HIGHFIELD, *supra* note 15, at 6.

75. COMM. ON SCI., ENG’G, & PUB. POL’Y, NAT’L RESEARCH CTR., SCIENTIFIC AND

reproductive cloning.⁷⁶ The scientific community is more divided on this issue, and distinguished scholars from a variety of disciplines support its use. In the following sections, I define cloning and discuss the potential benefits of reproductive cloning for the population at large, drawing on a variety of perspectives. After suggesting that cloning holds great promise for people who experience reproductive difficulties, I turn to examine the benefits to the LGBTI community in particular.

A. What Is Cloning?

In its most basic form, cloning is reproduction without sex, or asexual reproduction. In “traditional” sexual reproduction, the merging of egg and sperm in the uterus results in the birth of a new organism. Through cloning, an organism is created from a single cell.⁷⁷ In the process of SCNT, genetic material from recipient eggs is removed and replaced with the nucleus of a donor cell.⁷⁸ SCNT can be used for both reproductive cloning and therapeutic cloning.⁷⁹ Therapeutic cloning is a form of nuclear transplantation used to produce stem cells in a lab.⁸⁰ The product of this process is then used to make a stem cell line for further study, without the

MEDICAL ASPECTS OF HUMAN REPRODUCTIVE CLONING 28 (2002). There are two methods of reproductive cloning: somatic cell nuclear transfer (SCNT), as discussed in this article, and embryo splitting. See Jacques Cohen & Giles Tomkin, *The Science, Fiction, and the Reality of Embryo Cloning*, in ETHICAL ISSUES IN HUMAN CLONING 11, 14–16 (Michael C. Brannigan ed. 2001). SCNT requires two cells: a donor and an egg cell. The egg cell is enucleated and the DNA from the donor is transplanted. Yet some m-DNA from the egg remains; this m-DNA is responsible for energy metabolism of the cell. Therefore, in SCNT, the new individual is not an exact copy of either the donor or the recipient because m-DNA from the egg remains. The use of embryo splitting, however, does produce an exact genotypic duplicate of the original fertilized ovum. See JOHN CHARLES KUNICH, *THE NAKED CLONE: HOW CLONING BANS THREATEN OUR PERSONAL RIGHTS* 6 (2003). Other methods of cloning technology, which are beyond the scope of this paper, are not currently being used for reproductive cloning. See, e.g., Anne Lawton, *The Frankenstein Controversy: The Constitutionality of a Federal Ban on Cloning*, 87 KY. L.J. 227, 284–89 (1999) (discussing various types of cloning).

76. In 2001, ninety percent of Americans thought that human cloning was a “bad idea.” Jeffrey M. Jones & Joseph Carroll, *Americans Oppose Idea of Human Cloning*, GALLUP.COM (Dec. 6, 2001), <http://www.gallup.com/poll/5098/americans-oppose-idea-human-cloning.aspx>. A survey conducted the following year by the Genetics and Public Policy Center found that seventy-six percent of Americans oppose scientists working on ways to clone humans. K. Hudson, J. Scott & A. Kalfoglou, *Public Awareness and Attitudes about Reproductive Genetic Technology*, GENETICS & PUB. POL’Y CENTER, http://www.dnapolicy.org/pub.reports.php?action=detail&report_id=9%20 (last visited Mar. 31, 2011).

77. AARON D. LEVINE, *CLONING: A BEGINNERS GUIDE* 2 (2007).

78. KINDREGAN & MCBRIEN, *supra* note 53, at 247.

79. COMM. ON SCI., ENG’G, & PUB. POL’Y, *supra* note 75, at 28.

80. Some scientists prefer the term “research cloning” rather than “therapeutic cloning” because they believe it more accurately describes the present state of research and reflects the fact that embryos are being cloned not for use in current therapies in humans but for research on potential future therapeutic uses. See, e.g., LEVINE, *supra* note 77, at 92.

intent to transfer the cloned cells and resulting embryo to the uterus for purposes of procreation.⁸¹ In the future, these lines could also potentially be used for clinical applications, such as repairing damaged or defective tissues.⁸² Reproductive cloning, on the other hand, is the deliberate production of genetically-identical individuals.⁸³ Reproductive cloning involves implanting a blastocyst (an early-stage human embryo) formed by a nuclear transplantation procedure in a uterus, where it initiates the process of forming a fetus.⁸⁴ Through SCNT for human reproductive cloning, researchers could use a cell from one individual to create another genetically-identical person. While therapeutic cloning is fairly well accepted, particularly within the scientific community, reproductive cloning is extremely controversial.⁸⁵ This Article focuses on reproductive cloning and, unless otherwise noted, I use “cloning” to refer solely to human reproductive cloning.⁸⁶

In practice, reproductive cloning looks quite different from its

81. John A. Robertson, *Two Models of Human Cloning*, 27 Hofstra L. Rev. 609, 611 (1999) [hereinafter *Two Models of Human Cloning*] (“[T]herapeutic cloning clones a person’s cells to the blastocyst stage with no intent to transfer the cloned cells and resulting embryo to the uterus, as would occur with reproductive cloning. Embryonic stem . . . cells would then be removed from the embryo in order to obtain cells or tissue for research and eventually transplantation.”).

82. *Id.* Stem cells produced by therapeutic cloning could be used to treat disorders ranging from leukemia to Parkinson’s to Alzheimer’s. KINDREGAN & MCBRIEN, *supra* note 53, at 248. Therapeutic cloning could also be used to create embryonic stem cells. An embryo might be cloned for the purpose of obtaining transplantable organs. This would allow for the creation of stem cells to repair organs without fear that the person’s immune system will reject the organ. *See, e.g.*, Arthur Caplan, *Monkey Cloning a Reason to Pause, Not Panic*, MSNBC.COM (Nov. 13, 2007 5:51:22 PM), <http://www.msnbc.msn.com/id/21755931/>. Put differently, people might one day use their own stem cells to repair themselves.

83. COMM. ON SCI., ENG’G, & PUB. POL’Y, *supra* note 75, at 24 (noting that, with SCNT, the clone will carry almost the same DNA as the cell donor, with the exception of the m-DNA).

84. KINDREGAN & MCBRIEN, *supra* note 53, at 247–48. *But see* Christine Hauskeller, *Science in Touch: Functions of Biomedical Terminology*, 20 BIOLOGY & PHILOSOPHY 815, 826 (2005) (explaining that the only difference between therapeutic and reproductive cloning is whether the clone is implanted in the uterus, yet this difference is used to create a binary distinction between good (therapeutic) cloning and bad (reproductive) cloning).

85. Hauskeller, *supra* note 84, at 826.

86. Reproductive cloning has potential beyond its use for human reproduction. As the scientists who cloned Dolly explained, “When we created Dolly, we were not thinking about rooms full of clones . . . We were not thinking about helping lesbians to reproduce without the help of a sperm bank or about multiplying movie stars. We were certainly not thinking of duplicating dictators.” WILMUT & HIGHFIELD, *supra* note 15, at 3. Instead, reproductive cloning may be useful in other, less obvious areas, such as food production and medicine. The cells of an animal that produces human proteins that can cure stomach ailments, for example, could be mass-produced, providing widely available treatments for stomach pain. LEVINE, *supra* note 77, at 84–89. Species facing extinction might even one day be saved by cloning. *Id.* at 78–82.

portrayal in films and in the public imagination.⁸⁷ A cloned human being is not a photocopy of another.⁸⁸ Despite their shared genetic identity, clones will not be identical in physical or behavioral characteristics, because DNA is not the sole determinant of appearance or personality.⁸⁹ Like all human embryos, a cloned embryo must be implanted into the womb of another human being and gestated for roughly nine months.⁹⁰ Beginning in utero, the experience of the cloned person and the donor will diverge.⁹¹ While the recipient's nuclear DNA will be the same as the donor's, part of the egg still remains. A small portion of about sixty genes from the egg will not be removed; this is mitochondrial DNA (m-DNA), which is responsible for energy metabolism.⁹² Dolly, for example, comprised nuclear DNA from a Finn Dorest sheep and m-DNA from a Scottish Blackface.⁹³ The cloned individual inherits the DNA in the egg's mitochondria, which creates differences in the physiology and functioning of systems that have high energy demands including the muscles, the heart, and the brain.⁹⁴ As a result, scientists predict that a cloned person and her source counterpart will typically be less similar to one another than identical twins.⁹⁵

It is worth mentioning that cloning might be combined with a gene splicing technique, allowing the couple to use cells from both partners, reduce the number of chromosomes in each cell's nucleus by one half, and fuse the two adult cells with an enucleated egg.⁹⁶ Then, in the regular process of SCNT, the enucleated egg would be implanted in uterus, resulting in a cloned child who shares a mix of genes from both parents. I discuss the possibility of this method further in Part IV(B).

Developments in cloning technology are occurring far more quickly than changes in the laws regulating cloning research. Important

87. See GREGORY E. PENCE, WHO'S AFRAID OF HUMAN CLONING? 39, 39–43 (1998) (surveying cloning in science fiction); HWA A. LIM, MULTIPLICITY YOURS: CLONING, STEM CELL RESEARCH, AND REGENERATIVE MEDICINE 129–30 (2006) (“[T]here have been no shortages of novels and movies on cloning.”).

88. LIM, *supra* note 87, at 121 (“There is a critical difference, however, between photocopying graphic materials and cloning (genetic copying) organisms [T]he development of a clone involves not only nature (the genetic makeup), but also nurture (the effects of environmental factors). Thus an exact duplicate of the original is almost impossible.”).

89. COMM. ON SCI., ENG'G, & PUB. POL'Y, *supra* note 75, at 26.

90. Yuriko M. Shikai, *Don't Be Swept Away By Mass Hysteria: The Benefits Of Human Reproductive Cloning and Its Future*, 33 SW. U. L. REV. 259, 273 (2004) (“[A]ny embryos resulting from cloning must be implanted in a woman's uterus and carried to term one at a time.”).

91. COMM. ON SCI., ENG'G, & PUB. POL'Y, *supra* note 75, at 26.

92. LIM, *supra* note 87, at 191.

93. WILMUT & HIGHFIELD, *supra* note 15, at 242.

94. COMM. ON SCI., ENG'G, & PUB. POL'Y, *supra* note 75, at 26.

95. *Id.*; LEVINE, *supra* note 77, at 3.

96. Orentlicher, *supra* note 56, at 654–56.

breakthroughs in research have been made in the years following Dolly's creation. Following on the heels of Dolly, a bull, piglets, a merino sheep, a cow, dog, cat, and other mammals were successfully cloned.⁹⁷ Scientists suggest that cloning a human being will be easier than cloning other mammals, since humans do not possess the genes that appear to cause the growth of dangerously large embryos in the wombs of other cloned mammals.⁹⁸ In 2006, a group of researchers attempted to implant a cloned embryo in a human uterus.⁹⁹ While unsuccessful, it was the first reliable report of an attempt at human reproductive cloning, and scientists have noted that "the possibility of human cloning . . . is now much closer to becoming a reality."¹⁰⁰

Despite these advances in the science of cloning, safe and usable reproductive cloning techniques are not yet available, and the science of reproductive cloning is still in its infancy. Although healthy embryos are occasionally created, the cloned embryos of mammals are commonly lost during early stages of development for reasons that remain unknown.¹⁰¹ At present, we have no way of knowing when cloning will be safe and efficient enough to be of practical utility.

B. Arguments in Favor of Reproductive Cloning

Reproductive cloning may allow infertile couples to have a genetically-related child with minimal aid from a gamete donor. Infertility is a major problem in the United States today, and the number of couples who turn to ART is steadily increasing;¹⁰² cloning would be an alternative to ART for these couples. Single individuals who wish to have children could also

97. LIM, *supra* note 87, at 175–76; James Kanter, *Scientists Produce First Cloned Fighting Bull*, N.Y. TIMES, July 29, 2010, available at http://www.nytimes.com/2010/07/30/business/global/30got.html?_r=1&ref=cloning.

98. J. Keith Killian, Catherine M. Nolan, Andrew A. Wylie, Tao Li, Thanh H. Vu, Andrew R. Hoffman & Randy L. Jirtle, *Divergent Evolution in M6P/IGF2R Imprinting From the Jurassic to the Quaternary*, 10 HUM. MOLECULAR GENETICS 1721, 1726 (2001).

99. Camporesi & Bortolotti, *supra* note 21, at 1–2. Prior to this attempt, only unreliable reports of cloning had been made. See, e.g., Brian Dakss, *Eve: First Human Clone?*, CBS NEWS (Dec. 27, 2002), <http://www.cbsnews.com/stories/2002/12/28/tech/main/534594.shtml>.

100. Camporesi & Bortolotti, *supra* note 21, at 1.

101. Susan M. Rhind, Jane E. Taylor, Paul A. DeSousa, Tim J. King, Michelle McGarry & Ian Wilmut, *Human Cloning: Can it be Made Safe?*, 4 NATURE REVIEWS 855, 855 (2003).

102. See Gulcin Gumus & Jungmin Lee, *The ART of Life: IVF or Child Adoption?* 2 (Feb. 2010) (Institute for the Study of Labor Discussion Paper No. 4761), <http://ideas.repec.org/p/iza/izadps/dp4761.html> (discussing the increase in ART use, and noting that "over the last several decades, age-related infertility has become increasingly prevalent as a relatively larger portion of women have deferred childbearing due to effective birth control methods, safe and legal abortions, better access to college education, and greater participation in the labor market").

benefit from reproductive cloning, as this procedure eliminates the potential hassle of finding a third-party donor or the anxiety that the child's genetic parent might later claim parental rights.¹⁰³ As discussed above, the options currently available for "nontraditional" couples to have a genetically-related child are far from perfect.¹⁰⁴ Nevertheless, because the complexity and expense of cloning, the availability of other options, and widespread opposition to cloning may discourage many from using the technology,¹⁰⁵ it is likely that cloning would be as a last resort option, used by couples only after attempting to conceive with other ARTs.¹⁰⁶

Cloning might also be used to avoid the transmission of harmful genetic traits to children.¹⁰⁷ Individuals who are aware that they may pass on harmful genes to their offspring might choose to clone their partner to ensure that their child will not possess the undesired gene, while still avoiding the use of a third-party donor.¹⁰⁸ Alternately, individuals may

103. See Robertson, *Two Models of Human Cloning*, *supra* note 81, at 636, n.124 (noting that cloning could offer "the convenience of not having to risk having a child with a genetic father who might later claim rearing rights").

104. See *supra* Part II.

105. But see Eric A. Posner & Richard A. Posner, *The Demand for Human Cloning*, in CLONES AND CLONES, *supra* note 12, at 233, 234 (noting that, while the perceived weirdness of cloning "might be thought to depress demand," the effect is "probably only transitional . . . [I]f it is a source of potential substantial net benefits, its use will spread, and when some critical mass is reached, the aversion will drop away and a more rapid diffusion will begin.").

106. Daar, *supra* note 4, at 527 ("Because of its complexity and likely expense, [cloning] would serve as a last resort for most couples who desire to parent a genetically related child . . ."). But see Posner & Posner, *supra* note 105, at 257 (arguing that it is impossible to determine the demand for human cloning because it depends on many variables that are not yet known). Robertson, however, argues that Eric and Richard Posner "reach their conclusion by making two assumptions that appear highly counterfactual." First, they assume that one could produce a child more quickly through cloning than through sexual reproduction. This is incorrect, since nine months of gestation is required in both sexual and asexual reproduction. Second,

they incorrectly assume that all infertility would lead to a demand for cloning rather than to a demand for the other treatments and alternatives for dealing with infertility . . . The Posners also err in thinking that persons with gametic or nongametic infertility that cannot be treated by conventional methods would always choose cloning over childlessness, adoption, or gamete donation. Because of the special meanings and complications raised by cloning, only a (small) subset of this group of infertile couples is likely to choose cloning as the solution to their reproductive problem.

Robertson, *Two Models of Human Cloning*, *supra* note 81, at 625–27.

107. Daar, *supra* note 4, at 527–28.

108. See THE PRESIDENT'S COUNCIL ON BIOETHICS, HUMAN CLONING AND HUMAN DIGNITY: AN ETHICAL INQUIRY 79 (2002) ("Human cloning could allow couples at risk of generating children with genetic disease to have healthy children . . . [I]f both parents carried one copy of a recessive gene for the same heritable disorder, cloning might allow them to ensure that their child does not inherit the known genetic disease (without having to resort to using donor gametes or practicing preimplantation or prenatal genetic diagnosis and elimination of afflicted embryos or fetuses).").

decide to clone an already existing child (who carries the mix of both genes) who they know does not carry the harmful gene.

C. Conclusion

The science of cloning is still in its infancy and requires continued, systematic research to reach its full potential. In the following Part, I argue that cloning offers hope for those who are unable to bring children into the world through sexual reproduction. The LGBTI community may be uniquely poised to benefit from advances in this technology.

IV.

CLONING CAN BENEFIT THE LGBTI COMMUNITY BY ALLOWING LGBTI PEOPLE TO CONCEIVE GENETICALLY-RELATED CHILDREN

Reproductive cloning offers unique benefits to members of the LGBTI community by providing additional—or, in some cases, the only—opportunities to conceive genetically-related children. Some gay rights activists recognized the potential benefits of reproductive cloning immediately after the birth of Dolly and were accordingly quick to support it.¹⁰⁹ One group of queer activists in New York, called the Clone Rights United Front, demonstrated against proposed state legislation that would ban nuclear transplantation research and human cloning on the grounds that reproductive cloning offers many opportunities to LGBTI individuals wishing to become parents.¹¹⁰ In 2003, Clonaid—a group that bills itself as “Pioneers in Human Cloning”—announced (inaccurately) that a Dutch lesbian couple had given a birth to a cloned child, and that they had received many other requests from gay couples looking to clone children.¹¹¹

Admittedly, not everyone advocates the use of cloning by the LGBTI community. Even within the community, people express concerns about the use and utility of cloning.¹¹² However, these perspectives are in the

109. See Jack Nichols, *First Cloning Rights Group Led by Gay Pioneer*, GAY TODAY, Feb. 27, 1997, <http://gaytoday.badpuppy.com/garchive/events/022897ev.htm>; Jack Nichols, “Support Cloning” Say Top-Name Lesbian & Gay Activists, GAY TODAY, Mar. 3, 1997, <http://gaytoday.badpuppy.com/garchive/events/030397ev.htm>.

110. See Christopher Rapp, *Gay Clones*, HETERODOXY MAG., April/May 1997, <http://www.clonerights.com/hetrodoxy.htm>.

111. Press Release, Clonaid, Clonaid Team Ready for Human Parthenogenesis (May 4, 2004), <http://www.clonaid.com/news.php?default.0.2> [hereinafter Clonaid Press Release]. The cloned child announced in 2003 was born by using one mother’s DNA and the other mother’s womb, rather than through gene splicing. See Gina Kolata, *Experts Are Suspicious of Group’s Claim of Cloned Human’s Birth*, N.Y. TIMES, Dec. 28, 2002, at A16 (reporting widespread scientific skepticism about Clonaid’s claim that they had succeeded in cloning the first human being). Clonaid’s stated mission, however, is to give birth to a child with the genes of both parents. Clonaid Press Release, *supra*.

112. See, e.g., CTR. FOR GENETICS & SOC., GENETIC TECHNOLOGIES AND THE

minority. Those who support cloning generally point out that LGBTI individuals have a special interest in reproductive cloning and, therefore, should have a right to use it.¹¹³ The primary debate among cloning advocates both inside and outside of the community is over whether cloning can, in fact, benefit the LGBTI community, and whether such benefits would be equitably distributed.¹¹⁴ In this Part, I argue that cloning can significantly benefit LGBTI couples and individuals, although the high cost of the procedure may make it inaccessible to some.

A. Lesbian Couples

Lesbian couples would likely derive significant benefits from advances in reproductive cloning. Even without gene splicing technology, cloning would obviate the need for these couples to rely on a sperm donor.¹¹⁵ Furthermore, cloning offers both mothers the opportunity to participate in the genetic creation of the child: one partner donates the egg, thus contributing m-DNA to the clone, while the other contributes the nuclear DNA.¹¹⁶ Either woman could then potentially gestate the fetus. Additionally, combining cloning with gene splicing would enable lesbian couples to have a child with equal portions of DNA from each parent.¹¹⁷

LGBTQI COMMUNITY: MYTHS AND FACTS, Apr. 17, 2004, <http://www.geneticsandsociety.org/article.php?id=1963> (“Our resources are far better spent advocating for equal access to existing means of family building, legal protections for GLBT parents and children, and full social acceptance of GLBT families.”). See also Jeremy Laurance, *Gay Groups Split Over ‘Engineered Babies’*, THE INDEPENDENT (U.K.), Sept 26, 2000, at 8, <http://www.independent.co.uk/life-style/health-and-wellbeing/health-news/gay-groups-split-over-engineered-babies-698589.html> (discussing reactions from gay rights groups in the United Kingdom).

113. See William N. Eskridge, Jr. & Edward Stein, *Queer Clones*, in CLONES AND CLONES, *supra* note 12, at 95, 109 (“Queer cloning can be viewed as the next logical step in queer people’s formation of families of choice.”); Orentlicher, *supra* note 56, at 653 (“Despite the value of gay reproduction, laws designed to prevent human cloning could have the inadvertent effect of preventing genetic reproduction by same-sex couples. Laws banning cloning or impeding cloning research define cloning in a way that would include genetic reproduction by same-sex couples, especially male-male couples.”). See also GREGORY E. PENCE, *CLONING AFTER DOLLY: WHO’S STILL AFRAID?* 114–15 (2004) (noting that cloning is “surprisingly easy to justify . . . because it would be just another tool in our reproductive tool kit for creating families and better humans”).

114. See, e.g., Eskridge & Stein, *supra* note 113, at 99 (“In the short term, therefore, queer cloning would only be available to the wealthiest women.”); Theresa Pinto Sherer, *Can Two Men Make a Baby?*, SALON (Jan. 31 2001), <http://www.salon.com/life/feature/2001/01/31/eggs> (reporting that the author asked a gay friend if he would use cloning if available and he answered, “Perhaps, if it weren’t prohibitively costly”).

115. See, e.g., Robertson, *Two Models of Human Cloning*, *supra* note 81, at 634 (“For lesbians, [reproductive cloning] offered the unique advantage of reproduction without the need of a male, which is an important goal for some lesbians. It also allowed a woman to reproduce alone, for she herself could provide the m-DNA and cytoplasm, nuclear DNA, and gestation needed to produce a child.”).

116. *Id.* at 635.

117. Eskridge & Stein, *supra* note 113, at 99 (“With cloning. . . if [a lesbian] wants to

B. Gay Male Couples

Scholars disagree over whether cloning technologies are (or are likely to be in the near future) advanced enough to be useful for gay male couples. The main controversy surrounds the availability of gene splicing techniques. With more research, gene splicing might be used to create a zygote that contains genetic materials from two men.¹¹⁸ While several studies suggest that this might soon be a possibility,¹¹⁹ others in the scientific community claim that viable gene-splicing technology is too far in the future to be a practical option.¹²⁰ Some scholars argue that, without gene splicing, cloning would provide little for gay men that is not already

mix her genes with those of her life partner or a close friend, gene-splicing could do the trick.”).

118. See, e.g., *id.* at 118 (“With the advent of gene-splicing, same-sex unions could not only produce children, but also produce children who are genetic hybrids of the parents, just like those produced in different-sex unions.”). In 2000, Calum MacKellar, a lecturer in bioethics and biochemistry at the University of Edinburgh, argued that the genetic techniques used in the creation of Dolly may one day make it possible for two men to conceive a child with shared genes. The process would still require a woman’s egg and a surrogate mother, but a child could be made by combining the DNA of both fathers. See Calum MacKellar, *Children with Two Genetic Fathers*, EUR. BIOETHICAL RES., http://web.archive.org/web/20080328082126/http://www.bioethics.org.uk/2_fathrs.htm (last visited Feb. 16, 2011).

119. In a 1999 experiment, scientists used chimeras reconstructed from asexual reproduction and bovine embryos fertilized in vitro. See generally A. Boediono, T. Suzuki, L.Y. Li & R.A. Godke, *Offspring Born from Chimeras Reconstructed From Parthenogenesis and in Vitro Fertilized Bovine Embryos*, 53 MOLECULAR REPROD. & DEV. 159 (1999). A “chimera” is defined as “[a]n organism, organ, or part consisting of two or more tissues of different genetic composition, produced as a result of organ transplant, grafting, or genetic engineering; a bizarre human-animal amalgam or hybrid.” KUNICH, *supra* note 75, at 163 (2003). In 2004, Japanese researchers created a mouse that had two mothers but no father. See Tomohiro Kono, Yayoi Obata, Quiong Wu, Katsutoshi Niwa, Yukiko Ono, Yuji Yamamoto, Eun Sung Park, Jeong-Sun Seo & Hidehiko Ogawa, *Birth of Parthenogenetic Mice That Can Develop to Adulthood*, 428 NATURE 860, 863 (2004). The investigators fused one mouse egg to another whose DNA was altered to change the activity of two imprinted genes. In essence, the gene activity in the modified egg resembled that of sperm. *Id.* The most relevant breakthrough, however, occurred in January 2008. In this experiment, human embryos containing DNA from two women and one man were created by British scientists. *Three-Parent Embryo Formed in Lab*, BBC NEWS (Feb. 5, 2008 11:13 AM), <http://news.bbc.co.uk/2/hi/7227861.stm>. Ten embryos were created from three DNA donors and started to develop normally, but they were destroyed within six days. *Id.* This research suggests that a technique that allows for genetic modification (gene splicing to create an embryo by mixing the DNA of two males) is likely to be possible around the same time that reproductive cloning becomes safe and efficient. See Martin H. Johnson, *Reproduction in the Noughties: Will the Scientists Have All the Fun?*, 198 J. ANATOMY 385, 390 (2001) (arguing that a technique to create a child from the mix of the DNA of two lesbians or gay males, even if not perfect, could become available and would be safe in the near future).

120. See Robertson, *Two Models of Human Cloning*, *supra* note 81, at 637, n.126 (“A chimera created with the genes of two different males would make each a genetic father of the child, but such a procedure is too distant in the future to be a practical option.”).

offered by other ARTs.¹²¹ Because gay men, unlike fertile lesbian couples, would still have to rely on a third party to gestate the child and donate an egg, cloning would be no different from other forms of IVF.¹²²

However, I suggest that, even without the benefits of gene-splicing technology, gay men may have a compelling interest in reproductive cloning.¹²³ Cloning would allow them to have a child with almost the same DNA as one father and little third-party DNA (only the m-DNA from the egg donor).¹²⁴ Therefore, the “gambling” factor associated with choosing the right egg would be avoided.¹²⁵

Importantly, even if gene-splicing technology were perfected, gay men would still need to rely on egg donation and gestation. Because cloning by gay men requires a surrogate mother to gestate the child, the procedure raises ethical questions. Some feminists argue that surrogacy arrangements exploit female bodies,¹²⁶ commercialize the birth process,¹²⁷ and reinforce

121. *Id.* at 636–37 (noting that gay men have a weaker argument in favor of the use of reproductive cloning because they will still need to enlist a foreign egg and gestating mother).

122. Assuming, that is, that incubation technology—an artificial womb that will replace a woman’s womb—will not be available in the near future. See Frida Simonstein, *Artificial Reproductive Technologies and the Advent of the Artificial Womb*, in REPROGEN-ETHICS AND THE FUTURE OF GENDER 177 (Frida Simonstein ed. 2009) (suggesting that, while an artificial womb seems a remote possibility, it may be only a matter of time until someone finds a way to develop one).

123. Eskridge and Stein argue that cloning would also allow gay men to procreate without worry of transmitting HIV to their children. However, it is not clear that prevention of HIV transmission is a persuasive reason for gay men to use cloning to have children, given the other options available to reduce or eliminate the risk of HIV transmission in the process of reproduction such as sperm washing and IVF. Cf. Eskridge & Stein, *supra* note 113, at 96–97 (noting that all individuals, regardless of sexual orientation, would benefit from the ability to avoid transmitting AIDS to their offspring).

124. Daar, *supra* note 4, at 529 (arguing that cloning “may alleviate . . . [gay males’] worries [about potential claims of parental rights by egg donors and genetic surrogates] by eliminating gamete donors from the procreation equation”); Jessica Lin Lewis, *Predicting the Judicial Response to an Asserted Right to Reproductive Cloning*, 29 J. LEGAL MED. 523, 524 (2008) (“In the case of gay males, the use of somatic cell nuclear transfer would reduce the biological contribution of an ‘outsider’ to enucleated egg donation and surrogacy.”).

125. As explained above, the egg in the cloning process has minimal effect on the child’s genetic makeup. In SCNT, the DNA of the egg is removed (with the exception of the m-DNA) and a cell nucleus from the DNA donor is transferred into the egg. Therefore, the clone shares the DNA of the DNA donor and not that of the egg donor. See *supra* Part II.

126. See generally Rosalie Ber, *Ethical Issues in Gestational Surrogacy*, 21 THEORETICAL MED. & BIOETHICS 153 (2000) (arguing that gestational surrogacy is a form of slavery and prostitution).

127. See Christine L. Kerian, *Surrogacy: A Last Resort Alternative for Infertile Women or a Commodification of Women’s Bodies and Children?*, 12 WIS. WOMEN’S L.J. 113, 154 (1997) (“Allowing compensation to a surrogate constitutes the sale of children thereby making ‘surrogate babies’ commodities and items of manufacture. As a result, surrogacy violates human dignity by placing a market value on the leasing of a womb and

the image of women as “reproductive machines.”¹²⁸ As other feminists point out, however, when surrogacy arrangements are properly and sensitively handled, they can serve to support women’s autonomy and liberation by allowing them to exercise free choice.¹²⁹ The arguments for and against surrogacy are voluminous and exceed this Article’s scope, but it is important to note that surrogacy arrangements already exist and will likely continue with or without cloning.

C. *Transgender and Transsexual Individuals*

Transsexualism is defined by the American Heritage Medical Dictionary as “[t]he desire to change one’s anatomic sexual characteristics to conform physically with one’s perception of self as a member of the opposite sex.”¹³⁰ It is often used to describe someone who is “intending to undergo, is undergoing or has undergone gender reassignment treatment.”¹³¹ Transgender, on the other hand, is an umbrella term that includes a wide range of identities, all of which concern “people who live, or desire to live, a large part of their adult life in the role and dress of that gender group which would be considered to be in opposition to their sex as designated at birth.”¹³² Thus, gender reassignment treatment or the desire for it does not determine whether a person is transgender or not.¹³³ In this paper, I use the term “transgender” to refer to individuals who have undertaken “light” changes to alter their biological sex, such as taking hormones, while I use the term “transsexuals” to refer to individuals who have taken more serious medical steps toward changing their biological sex. Accounting for the particular needs of transgender and transsexual individuals is not easy. As with any group of people, individual needs vary widely. For the purposes of this section, however, I will discuss transgender

obtaining a child.”).

128. See Eskridge & Stein, *supra* note 113, at 102 (“Some gay men, including the authors of this essay, are feminists and would be ethically concerned about . . . surrogacy as . . . reinforcing gender stereotypes of women as ‘breeders.’”).

129. *Id.* (“On the other hand, many feminists powerfully defend surrogacy as freedom to deploy their bodies; some of the same prochoice arguments that support the right to abortion also support the right to surrogacy.”); see also Johnson v. Calvert, 851 P.2d 776, 785 (Cal. 1993) (“The argument that a woman cannot knowingly and intelligently agree to gestate and deliver a baby for intending parents carries overtones of the reasoning that for centuries prevented women from attaining equal economic rights and professional status under the law. To resurrect this view is both to foreclose a personal and economic choice on the part of the surrogate mother.”).

130. *Definition of Transsexualism*, FREE ONLINE MED. DICTIONARY, <http://medical-dictionary.thefreedictionary.com/transsexual> (last visited Feb. 11, 2011) (quoting AMERICAN HERITAGE MEDICAL DICTIONARY (2007)).

131. See STEPHEN WHITTLE, RESPECT AND EQUALITY, TRANSEXUAL AND TRANSGENDER RIGHTS xxiii (2002).

132. *Id.*

133. *Id.*

and transsexual individuals in two broad groups based on their gender or sex transition—female to male (FtM) and male to female (MtF)—and then briefly describe issues shared by most transgender people.

It is important to emphasize that the sexual orientation of transsexual and transgender people varies greatly, just as it does with non-transfolk; some identify as gay, some bisexual, some asexual, and some heterosexual.¹³⁴ Some may identify more generally as simply “queer.” For the purposes of discussing the transgender community in the context of cloning, I assume that everyone in the community is heterosexual; thus, when I describe how couples might use cloning, I hypothetically assume they have opposite-sex partners. This is a problematic but necessary assumption for the purposes of this section.

Transgender people are faced with a variety of personal, legal, medical, and social problems if they wish to have children.¹³⁵ Some transgender individuals believe that they will not be good parents due to the difficulties or trauma they have experienced in their own lives,¹³⁶ or feel that infertility is the “price” they pay for undergoing transition.¹³⁷ Anecdotal evidence suggests that some may be concerned that their transsexuality will be passed on to their offspring.¹³⁸ Many transgender people are uninsured¹³⁹ and do not have the money required to address

134. Nick Neave, HORMONES AND BEHAVIOR: A PSYCHOLOGICAL APPROACH 122 (2008).

135. See generally Sheelagh McGuinness & Amel Alghrani, *Gender and Parenthood: The Case for Realignment*, 16 MED. L. REV. 261 (2008) (discussing the medical and legal barriers that currently prevent transgender people from becoming parents).

136. P. De Sutter, K. Kira, A. Verschoor & A. Hotimsky, *The Desire to Have Children and the Preservation of Fertility in Transsexual Women: A Survey*, 6 INT’L J. TRANSGENDERISM (2002) [hereinafter De Sutter, *The Desire to Have Children*] (“Other individuals believe they would not be good parents and would therefore choose not to have children anyway. They believe the psychological trauma they had to go through because of their gender dysphoria would impair a normal parent-child relationship.”), available at http://www.iiv.nl/eazines/web/IJT/97-03/numbers/symposion/ijtvo06no03_02.htm.

137. Paul De Sutter, *Gender Reassignment and Assisted Reproduction: Present and Future Reproductive Options for Transsexual People*, 16 HUM. REPROD. 612, 612 (2001) [hereinafter De Sutter, *Gender Reassignment*].

138. De Sutter, Kira, Verschoor & Hotimsky, *The Desire to Have Children*, *supra* note 136 (“One woman had the opportunity to freeze sperm, but deliberately chose not to as she was afraid that her transsexualism might be a genetic condition. There were two other members of the family on her mother’s side who also were transsexual, and she did not want to risk passing on a genetic condition to her child, and to put a child through what she had endured in her life, as she put it. This is an interesting remark, because several respondents expressed this fear.”).

139. See MINTER & DALEY, *supra* note 39, at 16 (reporting that many transgender people in San Francisco do not have basic health insurance and that even those who have insurance encounter difficulties in finding a doctor who is familiar with health care for transgender people); JESSICA M. XAVIER, THE WASHINGTON TRANSGENDER NEEDS ASSESSMENT SURVEY 5 (2000) (reporting that forty-seven percent of transgender individuals in Washington, D.C. had no health insurance).

reproductive issues.¹⁴⁰ For this group, cloning—particularly if it could be made cost-effective or even government-subsidized—may hold significant potential.

Many FtM transsexual individuals (“trans men”) often have surgery not only to shape their bodies, but also to remove their internal female reproductive organs.¹⁴¹ Additionally, because of concerns about the increased risk of ovarian cancer in FtM transsexuals, some doctors recommend that trans men have their ovaries removed a few years after beginning hormone therapy.¹⁴² Surgeries chosen by trans men who want to remove their female reproductive organs may include hysterectomy (the removal of the uterus) and Bilateral Salpingo Oophorectomy (the removal of both ovaries and fallopian tubes).¹⁴³ FtM transsexuals are infertile after these sex reassignment surgeries (SRS) due to the resulting lack of reproductive organs.¹⁴⁴ If a trans man has a biologically female partner, the couple can elect to have her artificially inseminated by a sperm donor. In such a scenario, the trans man will not have any genetic connection to his offspring. Cloning, on the other hand, would allow the trans man to have a genetic child. The female partner could contribute the egg and gestate the child conceived from the DNA of the trans man.

Some FtM transsexuals may want to have children before they go through SRS. If they choose this route, they will need to postpone surgery or opt to have children at a younger age.¹⁴⁵ Cloning would obviate the need

140. See De Sutter, Kira, Verschoor & Hotimsky, *The Desire to Have Children*, *supra* note 136 (“One respondent said that she had inquired whether sperm freezing was an option at the time of her treatment, and that this had seemed to be very difficult and expensive, so she had regretfully dropped the whole idea.”). NAT’L CTR. FOR TRANSGENDER EQUITY & NAT’L GAY AND LESBIAN TASK FORCE, PRELIMINARY FINDINGS: NATIONAL TRANSGENDER DISCRIMINATION SURVEY 1 (2009), http://www.thetaskforce.org/downloads/reports/fact_sheets?transsurvey_prelim_findings.pdf (finding that fifteen percent of transgender respondents lived on \$10,000 or less per year and that transgender individuals experienced twice the rate of unemployment as the population as a whole).

141. Katherine Rachlin, *Factors Which Influence Individual’s Decisions When Considering Female-to-Male Genital Reconstructive Surgery*, 3 INT’L J. TRANSGENDERISM (Sept. 1999), <http://www.iiv.nl/eazines/web/IJT/97-03/numbers/symposium/ijt990302.htm> (“Many FTMs will choose to have to have their female reproductive organs removed (ovaries, uterus, and/or vagina) and may have more masculine genitals constructed.”).

142. R. NICK GORTON, JAMIE BUTH & DEAN SPADE, MEDICAL THERAPY AND HEALTH MAINTENANCE FOR TRANSGENDER MEN: A GUIDE FOR HEALTH CARE PROVIDERS 53 (2005), http://www.nickgorton.org/Medical%20Therapy%20and%20HM%20for%20Transgender%20Men_2005.pdf.

143. See generally Katherine A. O’Hanlan, Suzanne L. Dibble & Mindy Young-Spint, *Total Laparoscopic Hysterectomy for Female-to-Male Transsexuals*, 110 OBSTETRICS & GYNECOLOGY 1096 (2007) (comparing the results of various surgical procedures elected by trans men).

144. Cf. Guy Trebay, *He’s Pregnant. You’re Speechless*, N.Y. TIMES, June 22, 2008, at ST1 (discussing a pregnant trans man who elected not to have his ovaries removed).

145. There are many reasons that transsexuals may want to start reassignment early in

to make these choices. They could undergo SRS whenever it makes the most sense for them to do so, without worrying about losing the ability to produce eggs (though they may need to rely on a surrogate if they lose the ability to gestate themselves). A single trans man may choose to freeze his eggs before undergoing SRS—a common practice today¹⁴⁶—and would then have the option to clone children using those eggs (avoiding the need for sperm donation) or to take advantage of other ARTs. It is clear that FtM transsexuals would benefit from reproductive cloning and have good reason to support funding for cloning research and regulation.

FtM transgender individuals who undertake “light” changes to alter their biological sex could also benefit from cloning. If these individuals take hormones for a prolonged period of time, the hormones may permanently affect their ovaries, making it difficult or impossible to produce eggs or become pregnant.¹⁴⁷ If a FtM transgender individual has a female partner, the couple could create a child together through cloning. In such a scenario, the transgender partner would contribute nuclear DNA and the female partner would provide an egg (that includes the m-DNA) and gestate the child. Thus, cloning would allow such a couple to avoid sperm donation and to have a child who is (at least to some extent) genetically related to both partners. This method would mirror lesbian couples’ use of cloning.

For MtF transsexuals and transgender men who become female (trans women), the long-term use of estrogen is likely to result in infertility.¹⁴⁸ A trans woman may no longer produce sperm and, because she never acquires female reproductive organs, she is effectively infertile. Trans

their lives. Some wish to start treatments before their secondary sex characteristics begin to develop to avoid having to reverse them later, some may wish to continue their education in their preferred gender role, and some prefer to have more time to consider their reassignment without dealing with the unwanted effects of puberty. WHITTLE, *supra* note 131, at 173.

146. *Id.* at 169.

147. See Wylie C. Hembree, Peggy Cohen-Kettenis, Henriette A. Delemarre-van de Waal, Louis J. Gooren, Walter J. Meyer, III, Norman P. Spack, Vin Tangpricha & Victor M. Montori, *Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline*, 94 J. CLINICAL ENDOCRINOLOGY & METABOLISM 3132, 3144 (2009) (“Specific to the FTM [transgender] person, testosterone will result in . . . temporary or permanent decreased fertility . . .”)

148. Carl W. Bushong, Richard A. Martin & Kimberly L. Westwood, *Transgender Medical Feminizing Program: Typical Results of Male-to-Female Hormone Therapy*, TRANSGENDERCARE, http://www.transgendercare.com/medical/resources/tmf_program/tmf_program_6.asp (last visited Nov. 23, 2010); De Sutter, *Gender Reassignment*, *supra* note 137, at 613 (“It is well known that feminizing hormonal therapy will induce hypospermatogenesis in transsexual women, and ultimately will lead to azoospermia. This azoospermia may be considered irreversible after some time, and furthermore gender reassignment surgery with removal of the testes obviously leads to irreversible sterility. The only option, therefore, is to perform sperm preservation by freezing a number of semen samples, preferably prior to starting hormonal therapy.”)

women may therefore elect to have a sample of their sperm frozen and stored prior to beginning hormone therapy.¹⁴⁹ While this would be the most practical solution, trans women sometimes do not discuss their future fertility options with a physician.¹⁵⁰ Further, between twenty-nine and sixty-three percent of MtF transgender individuals in urban areas engage in unsupervised hormone therapy.¹⁵¹ Further complicating the problem is the fact that many transgender people lack access to medical care and are often discriminated against in medical settings.¹⁵²

Even if a trans woman freezes sperm before beginning hormone therapy, if she has a male partner, she will still need to rely on an egg donor and surrogate mother to reproduce. Thus, trans women in heterosexual relationships would derive similar benefits from cloning to those afforded to gay male couples. Since a trans woman loses her ability to produce sperm, if she has not frozen sperm prior to beginning hormone therapy, cloning would provide her with the only means for a genetic tie to her offspring. Trans women therefore have a particularly strong interest in reproductive cloning, as it may be their only opportunity to have a genetic child.

D. Intersex Individuals

Intersex is a broad term used to describe individuals who are “born with . . . reproductive or sexual anatomy that doesn’t seem to fit the typical definitions of female or male.”¹⁵³ It is beyond the scope of this paper to analyze each possible variation of sexual anatomy individually. Intersex people may be infertile for a variety of reasons,¹⁵⁴ and reproductive cloning

149. WHITTLE, *supra* note 131, at 169.

150. See De Sutter, Kira, Verschoor & Hotimsky, *The Desire to Have Children*, *supra* note 136 (“Although sperm freezing is quite readily available, many transsexual women are still uninformed about this possibility and are not counseled about the possibility of preserving their reproductive potential.”).

151. Nelson F. Sanchez, John P. Sanchez & Ann Danoff, *Health Care Utilization, Barriers to Care, and Hormone Usage Among Male-to-Female Transgender Persons in New York City*, 99 AM. J. PUB. HEALTH 713, 713 (2009).

152. See Willy Wilkinson, *Public Health Gains of the Transgender Community in San Francisco: Grassroots Organizing and Community-Based Research*, in TRANSGENDER RIGHTS 192, 193–94 (Paisley Currah, Richard M. Juang & Shannon Price Minter eds., 2006).

153. *What is Intersex?*, INTERSEX SOCIETY OF NORTH AMERICA, http://www.isna.org/faq/what_is_intersex (last visited Nov. 22, 2010). See also Stephen F. Kemp, *The Role of Genes and Hormones in Sexual Differentiation*, in ETHICS AND INTERSEX 1, 5–6 (Sharon E. Sytsma ed., 2006) (surveying the various different types of intersexuality, including the lack of sex organs or hormones).

154. Of course, some people born intersex are infertile not because of their biology, but because of the surgeries performed on them at birth to “normalize” them. See, e.g., Nancy Ehrenreich, *Intersex Surgery, Female Genital Cutting, and the Selective Condemnation of “Cultural Practices,”* 40 HARV. C.R.-C.L. L. REV. 73, 109 n.218, 122 (2005).

would likely be very useful for many intersex individuals.¹⁵⁵ For example, women with Turner syndrome have XO chromosomal patterns, unlike most of the population who have either an XX or XY pattern.¹⁵⁶ These individuals can carry a baby because they have a uterus, but they still require egg donation because they lack ovaries to produce eggs.¹⁵⁷ Cloning could allow women with Turner syndrome to have a child who carries their DNA. Moreover, since they are capable of carrying the child themselves, they would not need to rely on a surrogate and could therefore reproduce without third-party involvement.

E. Does Cloning Contradict Queer Politics or Reproduce the Privileges of Genetics?

Before delving into the debates over cloning and its relation to LGBTI families in the next Part, I pause to address the question of whether the child—and specifically the genetically-related child—offers the best site from which to understand and promote LGBTI families. Two problems arise. First, by focusing on cloning technologies' unique benefits to the LGBTI community, the analysis I undertake necessarily privileges a genetically-related family over all other family arrangements. Second, to the degree that I conclude, however cautiously and critically, by suggesting that the LGBTI community should challenge bans on cloning and cloning funding, I inevitably advocate that queer politics should focus squarely on the (genetically-related) child. These two problems are not unrelated. Both risk buying into the very heteronormativity that I attempt to expose and challenge in this article—heteronormativity that drives anti-cloning rhetoric and, ultimately, forms the basis for contemporary homophobia.

The first problem is unavoidable. Only by writing a fundamentally different article could I avoid privileging the genetically-related family; an article about cloning is inherently about genetic relations. Whether we, as a society, place too much emphasis on these relations is a valid and important question that is unfortunately beyond the scope of this paper.

The second problem, while also largely unavoidable, merits elaboration here. Prominent queer theorist Lee Edelman has suggested

155. Although therapeutic cloning is not a part of this paper, it is worth noting the benefits this procedure offers for intersex people. Therapeutic cloning provides a source of otherwise unavailable transplantable cells. For example, it would greatly improve the efficacy of genitoplasty surgery by allowing surgeons to use genetically engineered tissues that closely resemble the tissues or structures a person might have had naturally. See Justine Schober, *Ethics and Futuristic Scientific Developments*, in *ETHICS AND INTERSEX*, *supra* note 153, at 311, 313 (noting that such structures and tissues would be less likely to be rejected by the host tissue).

156. Julia A. Greenberg, *The Roads Less Traveled: The Problem with Binary Sex Categories*, in *TRANSGENDER RIGHTS*, *supra* note 152, at 51, 58.

157. *Id.*

that the concept of kinship need not and perhaps should not be premised on children at all.¹⁵⁸ By locating queer politics in the all-pervasive figure of the child, which is first and foremost a heteronormative figure signifying hope and survival,¹⁵⁹ we risk doing nothing more than perpetuating existing social structures—a result that is decidedly not queer.¹⁶⁰ Furthermore, positioning children at the center of political debates enables all sides to mobilize rhetoric about the (harmed, saved, corrupted, protected) child to justify their arguments.¹⁶¹ The innocent child in need of protection, for example, can be called upon to represent the optimism of the future, juxtaposed against the specter of the queer—the embodiment of a relentlessly narcissistic, harmful, and future-negating drive.¹⁶² Similarly, in debates over gay marriage and gay adoption, this image of the innocent child can be called upon to uphold discrimination against any group defined in opposition to its innocence.

At the same time, however, it is worth asking which is more heteronormative: focusing on the figure of the child, or rejecting that focus out of hand on the basis of its hegemonic meaning. Rather than treating a queer politics centered on the child as merely reproducing—or literally cloning—the dominant culture, perhaps a focus on the child provides the LGBTI community with the opportunity to work within rather than against society, reshaping it to better accommodate queer desires and fighting attempts to restrict reproduction to a heterosexual model.

Cloning technologies may be uniquely positioned to offer a new kind of reproductive “future” for LGBTI people—one that is neither identical to nor wholly apart from the culture of the past. In the long term, cloning offers the potential to achieve greater political goals than simply enabling LGBTI individuals to look and behave more like heterosexuals. It has far-reaching implications that fundamentally challenge the binary system of sexuality. As the LGBTI community mobilizes cloning to undermine the

158. See LEE EDELMAN, *NO FUTURE: QUEER THEORY AND THE DEATH DRIVE* 11–19 (2004).

159. See *id.* See also LAUREN BERLANT, *THE QUEEN OF AMERICA GOES TO WASHINGTON CITY: ESSAYS ON SEX AND CITIZENSHIP* 1, 4–5 (1997) (arguing that the public sphere in America has become the “intimate public” sphere, populated with conservative and “traditionalist” patriotic ideas concerning “pornography, abortion, sexuality, and reproduction; marriage, personal morality, and family values” and questioning why “the most hopeful national pictures of ‘life’ circulating in the public sphere are not of adults in everyday life, in public, or in politics, but rather of the most vulnerable, minor or virtual citizens—fetuses, children, real and imaginary immigrants—persons that, paradoxically, cannot yet act as citizens.”).

160. EDELMAN, *supra* note 158, at 17 (“Queerness can never define an identity; it can only ever disturb one.”).

161. For example, anti-gay campaigns use the “Save Our Children” rhetoric, while same-sex marriage advocates emphasize the harm experienced by children when their parents are treated as second-class citizens. *Id.* at 18–22.

162. *Id.* at 27.

heterosexual monopoly on kinship, it will not necessarily be forced into the position of begging for seats at the heterosexual table. To the contrary, the use of cloning by the LGBTI community might dramatically loosen heterosexual control of reproduction. In this way, cloning might offer a more radical politics instead of one that simply reproduces the heterosexual matrix. Cloning could diminish the dominance of any particular culture, destabilizing the queer community by leaving it with nothing more to resist.

F. Conclusion

Since cloning is not yet regulated, it is unclear whether it would be more accessible to LGBTI people than adoption or ART are currently. Nevertheless, cloning appears to have significant advantages for LGBTI people over adoption, ART, and co-parenting arrangements. If cloning was legal and widely available, it would eliminate the potential hassle of having to prove parental eligibility to a social worker or biological parent who might discriminate against LGBTI couples.¹⁶³ It further offers LGBTI individuals the opportunity to create a family with minimal third-party involvement. It allows LGBTI individuals to have the highest level of autonomy in creating—and, in some cases, even raising—children, and forecloses the need to make agreements with co-parents or biological donor parents that may or may not withstand legal scrutiny. If gene splicing becomes an option, it would provide LGBTI individuals with a means of giving birth to children with a mixture of genes from both partners. The option to clone could thus reduce potential legal disputes with third parties, such as claims for parental rights of known donors and lawsuits from biological parents wishing to enforce open adoption provisions.

Unfortunately, cloning is unlikely to be much more financially attainable than other methods of reproduction currently available to LGBTI families. In fact, if cloning becomes available, it will likely be very expensive. Thus, even if the technology were widely available, it would be inaccessible to many families if it is not covered by insurance. At present, IVF is covered only by a very limited number of insurance policies;¹⁶⁴ it is likely that insurance policies will also fail to cover cloning as well. It is thus unlikely that cloning would mitigate the additional financial challenges

163. Of course, this assumption is realistic only if reproductive cloning is less aggressively regulated than adoption. It seems likely that it would be, given that ART is currently free of almost any limitations while adoption requires a lengthy and potentially exhausting process.

164. While several states require private insurance companies to include IVF treatments in their coverage, only about fourteen percent of large group plans cover IVF treatments. Peter J. Neumann, *Should Health Insurance Cover IVF? Issues and Options*, 22 J. HEALTH POL. POL'Y & L. 1215, 1217 (1997).

often associated with the creation of LGBTI families, though it certainly provides many other worthwhile benefits.

VI. CLONING AND QUEER THEORY

As described above, cloning could potentially benefit couples who cannot produce through sexual means, particularly LGBTI couples. It is, in part, precisely *because* of these benefits that many scholars have argued against cloning in general, and cloning in the LGBTI community specifically.

The possibility that cloning will expand family combinations beyond the traditional nuclear family has alarmed defenders of traditional family structure.¹⁶⁵ Cloning makes it increasingly possible to dissociate reproduction from physical intimacy, allowing for radical new ways of thinking about the reproductive process. By providing opportunities for reproduction without sex—and even without partners—cloning may appear to threaten the very fabric of our society. Without a sexual connection uniting them, families might one day look very different. Single women would be able to have children without men—even without sperm. Two platonic friends could have a child together without sexual contact. Cloning threatens to further destabilize the traditional concept of the nuclear family in which a married heterosexual couple “naturally” conceive and give birth to related children. Some scholars have thus used fears about non-normative family arrangements to argue against the use of cloning.¹⁶⁶

But is cloning likely to actually bring about such a sea change? The many ARTs already in common use allow opposite-sex couples to have genetically-related children without having sexual intercourse. They allow single individuals to have genetically-related children without ever having intercourse or choosing a partner. To the degree that cloning creates more discomfort than traditional ARTs, it must be about something other than reproduction without sexual contact.

I suggest, therefore, that the outcry in response to cloning stems from a fundamental commitment to traditional, heterosexual models of

165. KASS & WILSON, *supra* note 11, at 72 (“[T]he major threat cloning produces is a further weakening of the two-parent family.”); Charlene Kalebic, *The Constitutional Question of Cloning Humans: Duplication or Procreation? An Examination of the Human Right to Procreate*, 8 S. CAL. INTERDISC. L.J. 229, 266 (1998) (“Cloning undermines the traditional family, which is a reflection of biological relations, by the state constructing a ‘family’ of biologically unrelated individuals, connected only by contract.”).

166. See, e.g., Daniel R. Heimbach, *Cloning Humans: Dangerous, Unjustifiable, and Genuinely Immoral*, 32 VAL. U. L. REV. 633, 650–51 (1998) (arguing that “human cloning is inherently immoral because it violates the moral institution of parenthood” and “violates the moral institution of marriage”).

reproduction. While valid concerns about the safety and efficacy of cloning do exist, as I discuss at length below, they are insufficient to explain a response of the degree and kind that cloning has provoked. Reproductive cloning has been vociferously attacked based in large part on its associations with the LGBTI community.¹⁶⁷ While much of the outcry over cloning remains covertly heterosexist—latent homophobia lingering just beneath the surface of concerns about “the family”—some scholars publicly and explicitly promote heterosexist ideas, arguing that the benefits cloning could provide the LGBTI community should be grounds for outlawing the practice altogether.¹⁶⁸ In this Part, after considering the more traditional anti-cloning arguments, I examine those arguments that are based on the need to regulate “moral” or “ethical” behavior and rely on assumptions about what kinds of behavior are “natural” and beneficial to society as a whole. In these arguments, the concept of the “natural” is defined against and in relation to culturally-constructed frameworks and beliefs about identity, sexuality, gender expression, and family structure. By shifting the focus to the “artificial” (here, the clone), the concept of the “natural” remains untheorized and pure, with little or no attention paid to the fact that what we today think of as natural is itself culturally mediated. The equation of “natural” with biological is therefore problematic, and arguments that conflate these concepts must be critically analyzed.

Throughout this Part, I will analyze arguments against cloning by drawing from queer theory.¹⁶⁹ This framework has significant potential to

167. See, e.g., KASS & WILSON, *supra* note 11, at 68 (“More troubling is the possibility that a lesbian couple will use cloning to produce a child.”).

168. See, e.g., Leon R. Kass, *The Wisdom of Repugnance: Why We Should Ban the Cloning of Humans*, 32 VAL. U. L. REV. 679, 681–83 (1998) [hereinafter Kass, *The Wisdom of Repugnance*] (arguing that the gay rights movement, by treating “male and female [as] not normatively complementary and generatively significant,” has decreased the moral repugnance of cloning in the public discourse). Cf. Laurence Tribe, *On Not Banning Cloning for the Wrong Reasons*, in CLONES AND CLONES, *supra* note 12, at 221, 226–27 (asserting that behind Kass’s arguments lies his fear of undermining the traditional family, and that cloning for Kass is “the technological apotheosis of Murphy Brown and Ellen DeGeneres, the biomedical nemesis of Dan Quayle, Phyllis Schlafly, and Pat Robertson”).

169. Queer theory developed out of gay and lesbian studies, and the use of the term queer emphasizes the deconstruction of the essentialist identity categories of gay, lesbian, and bisexual. ANNAMARIE JAGOSE, *QUEER THEORY: AN INTRODUCTION* 72–77 (1996). The nominal shift from gay and lesbian studies to queer theory expresses a larger move within the field to consider more complex and fluid notions of identification and desire. Many queer theorists consider identity to be a “culturally restricted principle of order and hierarchy, a regulatory fiction.” JUDITH BUTLER, *GENDER TROUBLE* 33 (Routledge Classics ed., 2006) (discussing leading queer theorists’ views of identity). Over the past twenty years, a great deal of academic work has challenged fundamental assumptions about gender roles and the regulation of sex and sexual orientation. See generally FEMINIST AND QUEER LEGAL THEORY: INTIMATE ENCOUNTERS, UNCOMFORTABLE CONVERSATIONS (Martha Albertson Fineman, Jack E. Jackson & Adam P. Romero eds., 2009); DONALD E. HALL, *QUEER THEORIES* (2003); TAMSIN SPARGO, *FOUCAULT AND QUEER THEORY* (1999); *THE LESBIAN AND GAY STUDIES READER* (Henry Abelove, Michèle Aina Barale & David M.

shed new light on these debates. Queer theories offer a radical critique of gender and sexual essentialism and of heteronormativity in general.¹⁷⁰ While some of the critiques of cloning that I address in this paper apply beyond the community of LGBTI individuals and families, queer theory remains a useful approach because it challenges the very idea of a “natural” truth or ideal against which new social practices are evaluated.¹⁷¹ I start, therefore by presenting the key arguments against cloning, before I turn to examine the heterosexist arguments against cloning.

A. Traditional Arguments Against Reproductive Cloning

Critiques of cloning tend to coalesce around four main themes: cloning is unsafe and inefficient; cloning threatens the well-being of cloned

Halperin eds., 1993). David Halperin, co-founder of *GLQ: The Journal of Lesbian and Gay Studies*, explains that while gay identity is rooted in the choice to identify one’s sexuality in a particular way, “queer identity need not be grounded in any positive truth or in any stable reality . . . it acquires its meaning from its oppositional relation to the norm.” DAVID M. HALPERIN, SAINT FOUCAULT: TOWARDS A GAY HAGIOGRAPHY 62 (1995) (noting that the word “queer” does not name a natural or preexisting thing, but rather a relation to the norm). Donald E. Hall echoes this argument, noting that queer identity defines itself against the normal and is a broad concept encompassing multiple identities. HALL, *supra*, at 5, 14–16 (“[T]he concept ‘queer’ emphasizes the disruptive, the fractured, the tactical and contingent. . . . Simply put, there is no ‘queer theory’ in the singular, only many different voices and sometimes overlapping, sometimes divergent perspectives that can be loosely called ‘queer theories.’”).

This commitment to disidentification and shapelessness makes it difficult to define what exactly queer theory *is*, and perhaps that is precisely the point. Some scholars suggest that “queer” is “a rather amorphous term and still emergent enough as to be vague and ill-defined.” Suzanna Danuta Walters, *From Here to Queer: Radical Feminism, Postmodernism, and the Lesbian Menace*, in QUEER THEORY 6, 6 (Iain Morland & Annabelle Willox eds., 2005). They suggest that, from queer theory, queer philosophy will emerge, along with the recognition that queerness is a universal experience of being. Randall Halle, *What is Queer Philosophy?*, in PHILOSOPHY IN MULTIPLE VOICES 81, 81–84 (George Yancy ed., 2007). In keeping with the spirit of indeterminacy, it is important to note that there is no single queer theory but rather multiple “queer theories,” sometimes resulting in overlapping and divergent views. HALL, *supra*, at 5. Traditional theory cannot be “queered” simply by challenging its dominant premises, as such an approach would allow queer theory to operate only within the predetermined boundaries already set by traditional theory. Instead, queer theory attempts to shift “the image of thought . . . to thought without an image,” a position not “of judgment or critique, but a virtual line of sense.” See Claire Colebrook, *How Queer Can You Go? Theory, Normality and Normativity*, in QUEERING THE NON/HUMAN 17, 22 (Noreen Giffney & Myra J. Hird eds., 2008). Queer theory offers a critique of substance and subjectivism, identifying its orientation as “essentially queer,” and challenging the supposed neutrality or undifferentiated nature of life. *Id.* at 23.

170. See, e.g., Halle, *supra* note 169, at 84 (discussing both queer theory and the term “queer” as an identity category). “Heteronormativity” is a term coined by Michael Warner. See MICHAEL WARNER, FEAR OF A QUEER PLANET: QUEER POLITICS AND SOCIAL THEORY xxi (1993) (explaining that heteronormative culture “thinks of itself as the elemental form of human association, the very model of intergender relations, as the indivisible basis of all community, and as the means of reproduction without which society wouldn’t exist”).

171. See *supra* note 169.

children; cloning commodifies children; and cloning will be inappropriately used to design and improve the human race. While concerns regarding safety and regulation are valid, claims about other possible threats from cloning are largely unfounded and have been thoroughly refuted by social and legal scholars. I discuss each of these claims, and the responses to them, in turn.

1. *Cloning Is Unsafe and Inefficient*

National reports from two major U.S. scientific bodies—The National Bioethics Advisory Commission¹⁷² and The National Academy of Science¹⁷³—raise questions about the safety of cloning techniques and the likelihood of physical harm to cloned children, egg donors, and women who gestate cloned embryos. On this basis, both reports conclude that attempts to clone human beings are unethical.¹⁷⁴ It is nearly impossible for the scientific community to improve the safety of cloning, however, since the United States bans the use of federal funding for reproductive cloning research. Without adequate funding, research needed to make the procedure safer is stalled.¹⁷⁵ So long as this ban remains in effect, it is unlikely that cloning *will* become safer—a fact that makes the ban on funding unlikely to be raised anytime soon.

But perhaps this catch-22 exists because safety concerns are merely a red herring. Kerry Lynn Macintosh notes that, while promising but dangerous medical procedures tend to be highly regulated, they are rarely banned outright.¹⁷⁶ Moreover, if safety were truly the primary concern, governmental committees would have no reason to examine other

172. NAT'L BIOETHICS ADVISORY COMM'N, CLONING HUMAN BEINGS, REPORT AND RECOMMENDATIONS OF THE NATIONAL BIOETHICS ADVISORY COMMISSION iii (1997), http://bioethics.georgetown.edu/pcbe/reports/past_commissions/nbac_cloning.pdf.

173. COMM. ON SCI., ENG'G, & PUB. POL'Y, *supra* note 75, at 93–94.

174. *Id.* at 4 (“Because medical and scientific findings indicate that cloning procedures are currently not safe for humans, cloning of a human through the use of nuclear transplantation technology is not now appropriate. The panel believes that no responsible scientists or physicians are likely to undertake to clone a human.”). The President’s Council on Bioethics has also concluded that reproductive cloning is not safe and recommended cloning be outlawed. *See* PRESIDENT’S COUNCIL ON BIOETHICS, *supra* note 108, at 99–105 (“[C]loning-to-produce-children is not now safe . . . concerns revolve around potential dangers to the cloned child, as well as to the egg donor and the woman who would carry the cloned child to birth.”). The Committee found that most attempts to clone animals were not successful, and that the few animals who were born suffered health problems. *Id.* at 92. The Committee emphasized that unlike the egg donor and the gestating mother, the clone did not consent to be born this way yet must endure these life conditions. *Id.* at 94–95. The Committee also expressed concern for the gestating mother based on the high probability that the pregnancy will end in abortion or face serious complications. *Id.* at 90 (citing animal studies).

175. *See generally* LIM, *supra* note 87, at 317–58.

176. KERRY LYNN MACINTOSH, ILLEGAL BEINGS: HUMAN CLONES AND THE LAW 44–45 (2005).

arguments against cloning in such depth,¹⁷⁷ lack of safety would close the discussion, and research would come to a halt.¹⁷⁸ It is likely, therefore, that the concerns unrelated to safety, discussed below, explain a great deal of the public's, and even the scientific community's, reluctance to rigorously pursue reproductive cloning research.

2. *Cloning Is Harmful to Children*

Fears that a cloned child will be bereft of individuality are rampant among opponents of cloning.¹⁷⁹ Religious critics claim that it is impossible for the cloning process to produce a person with a soul.¹⁸⁰ Other detractors fear that a cloned child will perceive herself as “manufactured” or even “handmade” and therefore less human.¹⁸¹ Lori B. Andrews argues that cloned children are likely to be exposed to limited experiences and opportunities, as well as to lack a sense of “independent self,” because they would be expected to follow the path of the individual from whom they have been cloned.¹⁸²

As Anita L. Allen points out, these sorts of fears are unfounded and even “silly,” as “[t]here is no reason to think that clones would be inherently soulless or inferior to other human beings.”¹⁸³ The cloned child will not be a photocopy of the cell donor, as she will not be completely

177. For example, after concluding that reproductive cloning is not safe and therefore not ethical, the President's Council on Bioethics notes that “for some people, the discussion of ethical objections to cloning-to-produce-children could end here. . . . But there is more to be said.” PRESIDENT'S COUNCIL ON BIOETHICS, *supra* note 108, at 96. The committee then goes to discuss many of the other ethical concerns that I address later in this article.

178. MACINTOSH, *supra* note 176, at 44–45.

179. See PRESIDENT'S COUNCIL ON BIOETHICS, *supra* note 108, at 101–15 (describing how cloning children will create “(1) problems of identity and individuality; (2) concerns regarding manufacture; (3) the prospect of a new eugenics; (4) troubled family relations; and (5) [negative] effects on society”); George J. Annas, *Human Cloning: A Choice or an Echo?*, 23 U. DAYTON L. REV. 247, 273 (1998) (arguing that the cloned child will only be an echo of the parent, “cursed by its parent never to speak first, but only to be an echo of the parent's already-lived life”).

180. See, e.g., Shahar Ilan, *Does a Clone Have a Soul?*, HAARETZ, Aug. 4, 2005, <http://www.haaretz.com/hasen/pages/ShArt.jhtml?itemNo=608432&contrassID=19> (“[T]he Creator only gives man a soul at the moment when sperm meets ovum.” (quoting Rabbi Moshe Botschko)).

181. KASS & WILSON, *supra* note 11, at 38. See also Jeffrey Kluger, *Will We Follow the Sheep?*, TIME, Mar. 10, 1997, at 70 (“You're putting a human into a genetic straitjacket. For the first time, we've taken the principles of industrial design—quality control, predictability—and applied them to a human being.” (quoting Jeremy Rifkin)).

182. See Lori B. Andrews, *Mom, Dad, Clone: Implications for Reproductive Privacy*, 7 CAMBRIDGE Q. HEALTH CARE ETHICS 176, 181–83 (1998) (noting that parents may raise the child as if its genetic code were its destiny and that thus “cloning could undermine human dignity by threatening the replicant's sense of self and sense of autonomy”).

183. ANITA L. ALLEN, THE NEW ETHICS: A TOUR OF THE 21ST CENTURY MORAL LANDSCAPE 160 (2004).

genetically identical to the donor, much less have identical life experiences.¹⁸⁴ Indeed, a cloned child will likely be *less* identical to her donor than monozygotic (MZ) twins who share the same DNA are to each other: while clones and their donors might have different m-DNA, twins always share the same m-DNA, making them far closer “copies” than Dolly and her mother.¹⁸⁵ Additionally, unlike a cloned child and her donor parent, most twins share the same environment—the same womb, the same home, at the same time and place. Even conjoined twins, who share nearly everything, develop very different personalities.¹⁸⁶ A cloned child will be born in a different place and time than her donor. These influences would, in turn, create a different human being with a different personality, set of coping mechanisms, and responses to the world. In addition, in the future it may be possible to safely use genetic modification techniques in conjunction with cloning to create individuals with unique nuclear DNA.¹⁸⁷ If this were an option, most of the concerns regarding the similarity of the cloned child and parent would be irrelevant, since, as in sexual reproduction, the cloned child would be born with the mixed genes of both parents.

In addition to the actual differences that will distinguish a cloned child from her parent, it is also unlikely that there will be social forces that will negatively shape the cloned child’s perception of herself. In social practice, no one treats twins as unnatural. Because there is also no reason to believe that cloned individuals would be easily identifiable—they would look like any other human being—there is no reason to believe that they would be treated differently than other children.

184. The word “photocopy,” which is often used by detractors of cloning to pejoratively describe the procedure, conjures up images of a machine process whereby an *exact* copy of an original is made. See, e.g., COMM. ON SCI., ENG’G, & PUB. POL’Y, *supra* note 75, at 26. But a photocopy is a two-dimensional reproduction transferred from one flat piece of paper to another. By contrast, a mammal created from a clone cell is a highly complex, three-dimensional organic being that is continually shaped by its environment, life experiences, and myriad other factors.

185. Ian Wilmut, the leader of the group that cloned Dolly, states that “[s]trictly speaking, Dolly was not a clone because of this difference in mitochondrial DNA. . . .” WILMUT & HIGHFIELD, *supra* note 15, at 242. See also Stephen Jay Gould, *Individuality, Cloning and the Discomfiting Cases of Siamese Twins*, in CLONING: RESPONSIBLE SCIENCE OR TECHNOMADNESS? 98, 101 (Michael Ruse & Aryne Sheppard eds., 2001). See also LIM, *supra* note 87, at 326.

186. That was the case, for example, with Eng and Chang, a famous set of conjoined twins born in Siam (giving rise to the term “Siamese Twins”), who displayed completely different personalities. Gould, *supra* note 185, at 102. Gregory E. Pence similarly argues that research on the behaviors and lives of twins shows that they are certainly not interchangeable—for instance, the girlfriend of one twin will not necessarily be attracted to the other twin. See PENCE, CLONING AFTER DOLLY, *supra* note 113, at 48.

187. Carson M. Strong, *Reproductive Cloning Combined with Genetic Modification*, 31 J. MED. ETHICS 654, 654 (2005).

3. *Cloning Is Commodification*

Opponents of reproductive cloning further argue that the high costs of this technique will turn children into commodities. Since the process of cloning comes with such a high price tag, critics worry that cloned children may become products to be traded in the market.¹⁸⁸ However, the similarly high cost of other ARTs has not caused parents or society to treat children produced through such procedures as manufactured products.¹⁸⁹ In light of the legal prohibitions and strong cultural taboos against selling humans or organs, a market for cloned children seems unlikely.

Others argue that cloning is a form of *replication* rather than *reproduction* and that cloned children will thus be treated inhumanely as merely “product[s] of technological manufacture.”¹⁹⁰ However, this is unlikely to be the case. It is true that society used to judge children by the conditions under which they were conceived or born—marginalizing, for example, the children of unmarried mothers.¹⁹¹ Today, however, people in the United States are evaluated on the basis of their personal characteristics and accomplishments (or, unfortunately, by their race, class, gender, and other group characteristics) rather than on how they entered the world.¹⁹²

4. *Cloning Is Eugenics*

Finally, opponents point out that cloning could facilitate eugenics programs designed to improve the human species.¹⁹³ But at least one scholar argues that cloning will not offer any opportunities for engineering

188. See PRESIDENT’S COUNCIL ON BIOETHICS, *supra* note 108, at 106–07 (2002) (arguing that cloned children “would be products of a designed manufacturing process, products over whom we might think it proper to exercise ‘quality control’” and that “[o]ne possible result would be the industrialization and commercialization of human reproduction”).

189. MACINTOSH, *supra* note 176, at 18–19.

190. Jorge L.A. Garcia, *Human Cloning Never and Why Not*, in HUMAN CLONING 85, 94–95 (Barbara MacKinnon ed., 2000).

191. See PENCE, WHO’S AFRAID OF HUMAN CLONING?, *supra* note 87, at 46 (“For millennia, the cultures of Western civilization would not accept children of unmarried women as beings with normal rights: they could not enter synagogues, marry, inherit property, and sometimes, vote. To say that bastards were socially stigmatized is to use a euphemism.”).

192. See *id.* at 47 (“Today, we realize that children who were not born to two, married, heterosexual parents had no control over their origins. Once they arrive into the world, such children must be accepted as persons with all the normal rights.”).

193. See George J. Annas, Lori B. Andrews & Rosario M. Isasi, *Protecting the Endangered Human: Toward an International Treaty Prohibiting Cloning and Inheritable Alterations*, 28 AM. J.L. & MED. 151, 153 (2002) (arguing that “cloning and inheritable genetic alterations . . . are techniques that can alter the essence of humanity itself . . . by taking human evolution into our own hands . . .”).

and improving embryos that are not already available.¹⁹⁴ Currently, some parents use PGD to screen embryos for genetic traits and select their preferred embryo based on its sex or other genetic traits.¹⁹⁵ Moreover, existing opportunities for “collaborative reproduction” allow parents to choose which of their genes will combine to produce their child.¹⁹⁶ Indeed, in the current reproductive market of IVF and sperm and egg donors, many would-be parents are prepared to pay astronomical amounts of money for the “perfect” combination of genetic traits.¹⁹⁷ These attempts to craft genetically ideal children are misguided and ultimately futile, just as concerns about cloning and eugenics are both misplaced and unfounded. Macintosh points out that safe and effective means of genetically modifying an early embryo (as distinguished from collaborative reproduction via ART) do not yet exist, and that the discussion of how genetic engineering will change the nature of humankind is “speculative at best.”¹⁹⁸ Moreover, such efforts ignore the profound influence of childhood environment on individual development, which will inevitably alter the expression of the child’s genetic traits.

5. Conclusion

As explained in this section, the primary arguments offered by opponents of cloning are fundamentally flawed. In the next section, I discuss the arguments against cloning that either refer specifically to the LGBTI community or are driven by a simplistic, binary approach to the nature/nurture debate.

B. Heterosexist Arguments Against Cloning

1. Arguments That the Heterosexual Family Is the Only “Real” Form of Kinship

Opponents of reproductive cloning often argue that cloning allows for the expansion of nontraditional families, and that these families are bad for children and damage the fabric of society.¹⁹⁹ James Q. Wilson, a former

194. Daar, *supra* note 4, at 534.

195. *Id.*

196. *Id.*

197. Tuller, *supra* note 59. In some other countries, the law does not allow free choice of egg donors. In Israel, for example, women receive egg donations from anonymous donors at set prices. Dan Even, *Knesset Approves Bill Easing Restrictions on Egg Donation in Israel*, HAARETZ, June 7, 2010, <http://www.haaretz.com/news/national/knesset-approves-bill-easing-restrictions-on-egg-donation-in-israel-1.294755>.

198. MACINTOSH, *supra* note 176, at 42 (discussing THE PRESIDENT’S COUNCIL ON BIOETHICS, REPRODUCTION & RESPONSIBILITY: THE REGULATION OF NEW BIOTECHNOLOGIES, 107–10 (2004)).

199. *Cf.* 143 CONG. REC. H713-02, H714 (daily ed. Mar. 4, 1997) (statement of Rep.

member of the President's Council on Bioethics, suggests that, if cloning becomes an option, it should be used only by married couples.²⁰⁰ Other scholars express concerns regarding whether LGB people are "unfit" parents. For instance, Ian Wilmut, the leader of the group that cloned Dolly, expressed his concern that if a child is cloned by gay parents, he or she will not live in an "appropriate environment."²⁰¹ Similarly, Leon Kass, former chair of the President's Council on Bioethics from 2002–2005 and one of the most vocal opponents of cloning, has implied that, because cloning would likely be used most frequently by unmarried individuals or couples with nontraditional family arrangements, cloning puts the very well-being of children at risk by perpetuating the "usually sad situation of the 'single-parent-child.'"²⁰²

The argument that cloning allows for a departure from traditional heterosexual reproduction and thus harms the child is not based on the presumption that such nontraditional families cannot exist without cloning. Clearly, they already do. Even in the absence of reproductive cloning techniques, nontraditional families, including LGBTI families, are already very much a reality.²⁰³ In the 2000 Census, 27.5 percent of LGB²⁰⁴ couples

Vernon Ehlers) (arguing against cloning and stating that "[t]he good Lord ordained a time-honored method of creating human life, commensurate with substantial responsibility on the part of the parents, the responsibility to raise a child appropriately").

200. Wilson, *supra* note 9, at 4.

201. Ian Wilmut, *Dolly's False Legacy*, TIME, Jan. 11, 1999, at 74, available at <http://www.time.com/time/magazine/article/0,9171,989990-1,00.html> ("Each of us can imagine hypothetical families created by the introduction of a cloned child—a copy of one partner in a homosexual relationship or of a single parent, for example. What is missing in all this is consideration of what's in the interests of the cloned child. Because there is no form of infertility that could be overcome only by cloning, I do not find these proposals acceptable. My concerns are not on religious grounds or on the basis of a perceived intrinsic ethical principle. Rather, my judgment is that it would be difficult for families created in this way to provide an appropriate environment for the child.").

202. Kass, *The Wisdom of Repugnance*, *supra* note 168, at 696. See also KASS & WILSON, *supra* note 11, at 82–83 ("A clone, because asexually reproduced, lacks two parents; though I have called it a single-parent child, it would be more accurate to say that, since it is the twin rather than the offspring of its 'source,' it has *no* parents, biologically speaking Giving birth to one's mother does not exactly reproduce a normal mother-daughter relationship."); Kass, *The Wisdom of Repugnance*, *supra* note 168, at 682 ("Thanks to the prominence and the acceptability of divorce and out-of-wedlock births, stable, monogamous marriage as the ideal home for procreation is no longer the agreed-upon cultural norm. For this new dispensation, the clone is the ideal emblem: the ultimate 'single-parent child.'").

203. In the United States, there are approximately five million unmarried, cohabiting couples—the highest number in American history—yet they are entitled to only some of the legal safeguards available to married couples. See generally Pamela J. Smock & Wendy D. Manning, *Living Together Unmarried in the United States: Demographic Perspectives and Implications for Family Policy*, 26 LAW & POL'Y 87 (2004) (summarizing and synthesizing research on who cohabits in the United States and with what consequences). See also Erik Eckholm, *Saying No to "I Do," with the Economy in Mind*, N.Y. TIMES, Sept. 28, 2010, at A15 ("Among the total population 18 and older, the share of men and women who were married fell from 57 percent in 2000 to 52 percent in 2009 . . . the lowest

identified themselves as parents to a child under the age of eighteen, indicating that more than a quarter million children are currently being raised in same-sex couple households.²⁰⁵ These statistics are probably underinclusive: because census data related to sexual orientation is still not well measured, this number probably does not include children raised by single LGB parents.

Rather, arguments that cloning should be limited to married couples must be based on the presumption that the heterosexual family is the only appropriate venue for raising children.²⁰⁶ However, there is no evidence that the heterosexual family provides the only adequate, or even the superior, venue for childrearing. While scholars historically assumed that the children of married couples fare better than children who live in nonmarital or single parent households,²⁰⁷ recent studies suggest that this is not so clearly the case.²⁰⁸ In fact, it is difficult to isolate the effect of marriage from other relevant factors like education and financial status that contribute substantially to a child's well-being.²⁰⁹ Some married couples may be better able to provide for their children not because they are married but because their marriage is *recognized*, and because any state benefits they receive as a result of this recognition may be passed on to their children. In the absence of compelling evidence, there remains little rational reason for preserving and strengthening the institution of marriage for the sake of child welfare.²¹⁰

percentage since the government began collecting data more than 100 years ago.”).

204. I use the term LGB because the census does not ask about transgender identity. See JAIME GRANT, NAT'L GAY & LESBIAN TASK FORCE, HOW BIG IS THE LGBT COMMUNITY? WHY CAN'T I FIND THIS NUMBER? 4, http://www.thetaskforce.org/downloads/release_materials/tf_lgbt_community.pdf (last visited Mar. 26, 2011) (“It is important to note that none of these random samples identify or quantify transgender people at all. There has been no random sampling of the transgender population in U.S. history.”).

205. GARY J. GATES & JASON OST, THE GAY AND LESBIAN ATLAS 45 (2004). The actual number of LGBTI parents is probably larger than the census indicated. *Id.* Because the census only asks about the relationship between the people in the household, not about their sexual orientation, it likely did not capture how many single LGBTI parents live in the United States. *Id.* Moreover, some LGBTI parents may have chosen not to identify themselves as LGBTI in the census.

206. See also Amy L. Wax, *Traditionalism, Pluralism, and Same-Sex Marriage*, 59 RUTGERS L. REV. 377, 380 (2007) (“In general, traditionalists believe that the family form that has been most historically and socially respected and that has stood the test of time—the biological, heterosexual, ‘nuclear’ family—should occupy a privileged place today. [They believe that] this form should continue to be regarded, in law and custom, as the ideal model for our society.”).

207. See Vivian E. Hamilton, *Family Structure Children and Law*, 24 WASH. U. J.L. & POL'Y 9, 9 (2007) (“The claim that ‘marriage is good for children’ has long helped ground arguments for the institution’s extraordinary state support.”).

208. *Id.* at 14–21 (describing research on the effect of marriage on children).

209. See *id.* at 14.

210. But even if there were compelling evidence, the value of autonomy in choosing

At the same time, the available data provide absolutely no evidence that children of same-sex couples fare worse than their heterosexual counterparts.²¹¹ In fact, research has suggested that there is no connection between the presence of two opposite-sex parents and an optimal child-rearing environment. Rather, the factors most likely to affect a child's overall welfare include the child's DNA, socioeconomic status, social support network, and ability to access social resources.²¹² Implicit in the assumption that non-heteronormative environments are harmful to children is the notion that there is also no benefit to being raised in such an environment. Yet a recent study examining the welfare of children of lesbian mothers from conception through adolescence found that children of lesbian parents rated *better* than average in social skills, academics, and general competence, and they registered significantly fewer social problems on average.²¹³ Being a good parent, it seems, has nothing to do with the sex of one's romantic partner.

In arguing that cloning will harm children by creating nontraditional families, opponents of cloning disregard the reality that "kinship is a social and not a biological fact, a matter of culture rather than nature."²¹⁴ The traditional family structure as it exists today in the United States has evolved, just as all human marriage and kinship systems have, to be considered the exclusive forum for procreation and raising children.²¹⁵ The model of the heterosexual nuclear family as the only form of kinship is

one's own family structure must not be underestimated.

211. Charlotte J. Patterson, *Children of Lesbian and Gay Marriage*, 15 CURRENT DIRECTIONS IN PSYCH. SCI. 241, 241 (2006) (reviewing the research and concluding that "[m]ore than two decades of research has failed to reveal important differences in the adjustment or development of children or adolescents reared by same-sex couples compared to those reared by other-sex couples. Results of the research suggest that qualities of family relationships are more tightly linked with child outcomes than is parental sexual orientation.").

212. See, e.g., Michael Rosenfeld, *Nontraditional Families and Childhood Progress Through School*, 47 DEMOGRAPHY 755, 770 (2010) (discussing how socioeconomic status has a greater impact on a child's success in school than whether a child's parents are heterosexual or not); Michael S. Wald, *Adults' Sexual Orientation and State Determinations Regarding Placement of Children*, 40 FAM. L.Q. 381, 388-89 (2006) (finding that there are a large number of factors other than the sexuality of a child's parents which affect the welfare of the child, including "the overall quality of parenting as reflected in parental love, warmth, involvement and consistency; parental socioeconomic resources; quality of neighborhood and schools; (and) influences of peers and siblings") (internal citations and quotations omitted).

213. Nanette Gartrell & Henny Bos, *U.S. National Longitudinal Lesbian Family Study: Psychological Adjustment of 17-year-old Adolescents*, PEDIATRICS (June 7, 2010), <http://pediatrics.aappublications.org/cgi/content/abstract/peds.2009-3153v1>.

214. Elizabeth Freeman, *Queer Belongings*, in A COMPANION TO LESBIAN, GAY, BISEXUAL, TRANSGENDER, AND QUEER STUDIES 295, 299 (Haggerty & McGarry eds., 2007) (discussing JUDITH BUTLER, *BODIES THAT MATTER* (1993)).

215. *Id.*

predicated on a binary view of gender and sexuality.²¹⁶ Beliefs and expectations about how each gender should behave and to whom they should be attracted become reinforced and re-entrenched in a community over time in such a way as to make certain behaviors seem “natural,” rather than culturally produced.²¹⁷ Alternative ways of being in the world and in relation to other people are therefore foreclosed because the existing forms are so ingrained in custom and culture that they are believed to be *biologically* based.²¹⁸

In light of this evidence, it cannot really be a concern for child welfare that motivates the majority of cloning opponents. Rather, it is the fear that reproductive cloning diminishes the heterosexual monopoly on reproduction.²¹⁹

2. *Arguments That Cloning Threatens the Elementary Structure of Kinship—Exogamy and Incest Taboo*

A second and perhaps more sophisticated argument against cloning builds on Claude Lévi-Strauss’s theory that exogamy and the incest taboo are the basic elements of culture.²²⁰ Drawing on this theory, psychiatrist Stephen Levick suggests that the practice of exogamy—in other words, marrying people from outside the group—and the prohibition on incest are the basic of foundations of our culture because they promote biological (genetic) diversity.²²¹ His analysis implies that the practice of exogamy is

216. *Id.*

217. *Id.*

218. *Id.* This is not to suggest that culture acts entirely independent of biology; in fact, they are mutually constitutive. *See, e.g.*, JUDITH BUTLER, *BODIES THAT MATTER* 66–67 (1993) (“It must be possible to concede and affirm an array of ‘materialities’ that pertain to the body, that which is signified by the domains of biology, anatomy, physiology, hormonal and chemical composition, illness, weight, age, metabolism, life and death. None of this can be denied.”).

219. *Cf.* 144 CONG. REC. S599-05, S603 (daily ed. Feb. 11, 1998) (statement of Sen. Dale Brownback) (“Human cloning distorts the relationship between man and woman by negating the necessity of either one in the creation of new life and consequently also usurps the role of God in the creation of new life.”).

220. Lévi-Strauss argued that the practice of exogamy—marrying a woman outside the group one belongs to—is the “universal feature of all societies.” CLAUDE LÉVI-STRAUSS, *THE ELEMENTARY STRUCTURE OF KINSHIP* 18–22, 62 (Rodney Needham ed., James Harle Bell & John Richard Von Sturmer trans., Beacon Press 1969) (1949). He believed that if small groups want to flourish, they must require their women to marry outside the clan so as to build alliances with other groups. These exchanges of women between men function to ensure peaceable relations between social groups. The incest taboo, Lévi-Strauss argued, is fundamental to exogamy because it prohibits sexual relations between first kin, thus necessitating a search for sexual partners elsewhere. *Id.* at 20, 62.

221. LEVICK, *supra* note 10, at 229 (“[T]he evolutionary task performed by the merger of half the genetic material of one individual with that of another may be the most fundamental basis for the social nexus on which society is built. Only sexual reproduction, but not cloning, *naturally* accomplishes this.” (emphasis added)).

analogous to traditional sexual reproduction: it helps to create a more diverse gene pool by forcing people from different groups to mix their genes.²²² Levick argues that, just as a group needs to practice exogamy to ensure its survival, so humankind must practice traditional sexual reproduction to endure.²²³

Similarly, Kass utilizes the incest taboo to argue against the use of cloning. He asserts that “social identity and social ties of relationship and responsibility are widely connected to, and supported by, *biological* kinship. Social taboos on incest (and adultery) everywhere serve to keep clear who is related to whom”²²⁴ Kass also endorses bioethicist James Nelson’s argument that a child cloned from a woman’s DNA might develop a sexual desire for her father, and may desire her mother’s father—her grandfather.²²⁵ For Kass, the objection to incest cannot fully be explained by concerns about inbreeding—or, indeed, on any rational terms at all.²²⁶ Rather, Kass believes that humans naturally carry a “wisdom” that allows them to feel disgusted when something is bad for humanity.²²⁷ Cloning and incest, as acts that ostensibly cause disgust, should therefore be illegal.

However, other scholars have argued that any argument against cloning based on the health of the gene pool “is so questionable that it raises the question of why otherwise rational people would believe in it.”²²⁸ While it is true that the mixing of genes is important to thwarting the diffusion of disease, this nevertheless does not justify banning reproductive cloning. The use of cloning as an *alternative* to biological reproduction cannot and would not cause any damage to the gene pool. It is likely that the large majority of people would not use cloning for reproduction and would instead rely on intimate sexual contact—the “old fashioned” way—to have children. Cloning will be advantageous only to the minority of

222. *Id.* See also *id.* at 297, n.92 (“[T]he exchange of genes in exogamy also provides social and psychological advantages that might be just as important in preventing incest as the risk of untoward genetic and evolutionary consequences.”).

223. *See id.* at 230 (“Cloning puts into conflict the ‘selfish’ genes of the individual with the need for the survival of community and society absolutely necessary for the survival of humans as a social species. Reproductive cloning might turn out to be the Achilles’ heel of shortsighted selfish genes”).

224. Kass, *The Wisdom of Repugnance*, *supra* note 168, at 695 (emphasis added).

225. *Id.* at 695 (citing James Lindemann Nelson, *Cloning, Families, and the Reproduction of Persons*, *BIOLAW*, June 1997, at S144). See also LEON KASS, *LIFE, LIBERTY, AND THE DEFENSE OF DIGNITY: THE CHALLENGE FOR BIOETHICS* 159 (2002) (“And what will happen when the adolescent clone of Mommy becomes the spitting image of the woman with whom Daddy once fell in love?”).

226. Kass, *The Wisdom of Repugnance*, *supra* note 168, at 687 (“[W]e are suspicious of those who think that they can rationalize away our horror, say, by trying to explain the enormity of incest with arguments only about the genetic risks of inbreeding.”).

227. *Id.*

228. MACINTOSH, *supra* note 176, at 39.

people for whom other forms of ART are inadequate and who desire to have genetic ties to their children. Because cloning may be expensive and other alternatives will be available, it is likely that people who choose cloning will do so as a last resort. As such, cloning should not pose any major threats to the gene pool.²²⁹ Moreover, even if cloning were used by a larger section of the population, which is unlikely to happen, it would take more than a thousand years to affect the diversity of the gene pool.²³⁰ Some scientists even argue that cloning would encourage diversity in the gene pool “to the extent it results in the descent of genes that otherwise would be lost owing to infertility or other causes.”²³¹

Both Levick and Kass misuse the notions of exogamy and the incest taboo by couching the social function of exogamy and incest in “biological” and “natural” terms. Expressions of disgust at the incest relationship are far from natural, despite what Kass would have us believe. In fact, Lévi-Strauss, in his work on the structures of kinship, is skeptical of the true biological origin and function of the incest taboo.²³² For Lévi-Strauss, the incest taboo, though universal in its existence, is *cultural* or *social* in its content. It is therefore not purely “natural” to avoid incest.²³³

229. See JOHN HARRIS, *ON CLONING* 95 (2004) (arguing that if everyone were to use cloning it would prevent any increase in genetic diversity, but this is extremely unlikely). See also Camporesi & Bortolotti, *supra* note 21, at 4 (noting that “[a] realistic approach to the accessibility of cloning techniques for reproductive purposes leads to the conclusion that it would not be a mass phenomenon, but an option for a limited number of people [w]hich means that the risks for biodiversity might not be significant after all,” and suggesting that the assumption that biodiversity is of moral value may itself be flawed); Richard A. Epstein, *A Rush to Caution: Cloning Human Beings*, in *CLONES AND CLONES*, *supra* note 12, at 262, 275 (arguing that cloning will likely only be used by a small number of people, that it is different than inbreeding, and that it is not clear that cloning could cause much, if any, of a reduction in biodiversity); Cass R. Sunstein, *Is There a Constitutional Right to Clone?*, 53 *HASTINGS L.J.* 987, 997 (2002) (“[I]t simply defies belief to suggest that cloning would become so popular as to reduce, in any significant way, the existing level of genetic diversity.”).

230. Robertson, *Two Models of Human Cloning*, *supra* note 81, at 627 (“Finally, even if the clones of clones always did asexually reproduce, the species effects are too distant in the future—fifty-two generations of human reproduction is more than 1000 years—to function as an acceptable justification for interfering with an infertile couple’s procreative liberty now.”).

231. MACINTOSH, *supra* note 176, at 39.

232. LÉVI-STRAUSS, *supra* note 220, at 29 (“Even if the incest prohibition has its roots in nature it is only in the way it affects us as a social rule that it can be fully grasped. In form and in field of application it varies greatly from group to group. . . . In this case there is no need to add that the prohibition is less concerned with true consanguinity, which is often impossible to establish, if at all, than with the purely social phenomenon by which two unrelated individuals are classed as ‘brothers’ or ‘sisters,’ ‘parents’ or ‘children.’”).

233. See *id.* Lévi-Strauss asserts, in fact, that arguments for a “natural” basis for sanctions against the mating of close kin are clearly undermined when one considers the practices of Australian aboriginals who are “probably the least concerned with biological proximity.” *Id.* at 13. As he puts it, unions are permitted among these groups such as “grand-uncle with grand-niece, the effects of which cannot be particularly favorable.” *Id.*

In Judith Butler's words, "[K]inship is a kind of *doing*, one that does not reflect a prior structure but which can only be understood as an enacted practice."²³⁴ Cultures reproduce rules about kinship from generation to generation; while they may be deemed absolute or "natural," they are, in fact, simply a social construction. Similarly, Martha Nussbaum points out that the disgust Kass focuses on is a social construction—a dynamic notion that evolves between ages and cultures.²³⁵

In relying on Lévi-Strauss's theories, both Levick and Kass are attempting to preserve a traditional notion of the family founded in heterosexual reproduction through intercourse. Butler argues that Lévi-Strauss's incest taboo functions not only to defend exogamous reproduction of children, but also to "maintain a unity to be part of the 'clan' through compulsory exogamy, as it is articulated through compulsory heterosexuality. Women from elsewhere secure the reproduction of cultural identity in this way."²³⁶ Following this logic, Lévi-Strauss's kinship model preserves the *existing dominant culture*, for our purposes, heterosexual reproduction through intercourse.

Underlying both Levick and Kass's arguments is thus homophobia and fear of disrupting the heteronormative status quo. A closer look at Levick's analysis reveals that he is less concerned by the problem of biodiversity and more focused on the belief that, although marriage is not essential for sexual reproduction, "it still can create what is arguably the best social context within which to rear children."²³⁷ Levick is thus primarily concerned with the protection of the family (and marriage) which he deems "the most fundamental civilizing and regulative unit of society."²³⁸ He goes on to suggest that cloning might decrease "the influence of certain sexuality repressive forces in society," which would result in increasing "the incidence of sexual perversion."²³⁹ This reliance on heterosexual marriage as the sole basis for ensuring diversity in the gene pool reveals Levick's argument to be fundamentally flawed. His commitment to repression of "perversion" hints at his baser motives. Indeed, in another place in his book, Levick considers the argument that cloning would be beneficial to same-sex couples and concludes that cloning should be permissible only to the extent that gene splicing exists, because only then

234. Butler, *Is Kinship Always Already Heterosexual?*, *supra* note 1, at 249 (citing DAVID SCHNEIDER, *A CRITIQUE OF THE STUDY OF KINSHIP* (1984)).

235. MARTHA C. NUSSBAUM, *FROM DISGUST TO HUMANITY* 24–25 (2010). For example, Nussbaum notes that homosexual sex has not always been found disgusting by heterosexual males, explaining that in many cultures such as Ancient Greece and contemporary Western Europe, same-sex acts are not objects of disgust. *Id.*

236. Butler, *Is Kinship Always Already Heterosexual?*, *supra* note 1, at 247.

237. LEVICK, *supra* note 10, at 229.

238. *Id.* at 230.

239. *Id.* at 230.

could same-sex couples be good parents.²⁴⁰ The irrationality of this argument merits no further discussion.

3. *Arguments That LGBTI People Will Purposely Clone Queer Children*

The argument that LGBTI people will clone themselves in order to perpetuate their own gay “kind”²⁴¹ is presented by both opponents and proponents of LGBTI rights. Opponents imagine that cloning may result in the growth of the LGBTI population.²⁴² Kass mockingly notes that some gay activists testified to the National Bioethics Advisory Commission that, “should homosexuality be shown to have a genetic basis, homosexuals would have an obligation to reproduce through cloning to preserve their kind!”²⁴³ In a similar vein, Eric and Richard Posner express concern about the spread of infertility by the use of cloning. Their concerns about infertility include an anxiety about cloning’s potential to increase “gay genes” in the population:

The spread of infertility through cloning might be even more rapid if, as realism requires, “reproductive failure” were defined broadly enough to encompass the situation of a homosexual couple, for whom cloning might be an attractive alternative to adoption, artificial insemination (if it is a lesbian couple), or surrogate motherhood (if it is a male homosexual couple). Assuming that all or most homosexual orientation is genetic, the fraction of homosexual genes in the gene pool would be increased if cloning resulted in a disproportionate increase in reproduction by homosexuals, who might be thought “functionally” infertile to the extent that they do not reproduce sexually.²⁴⁴

Even assuming that homosexuality is indeed genetic—a very controversial and simplistic assumption, as I discuss below—and even if LGBTI people will indeed choose to use cloning when they could rely on other ARTs, framing LGBTI individuals as inherently or “functionally” infertile is simple bigotry. LGBTI people may be or may not be infertile, like members of the general population. LGBTI people may choose not to

240. *Id.* at 249–50.

241. KASS & WILSON, *supra* note 11, at 86.

242. See, e.g., KEN HAM, *How Should a Christian Respond to “Gay Marriage”?*, in THE NEW ANSWERS BOOK 2, <http://www.answersingenesis.org/articles/nab2/christian-respond-gay-marriage> (“The idea is already with us that gay ‘couples’ should be freely able to donate their sperm to surrogate mothers or to clone their DNA to perpetuate their own genes. So if there is any genetic basis to homosexuality (i.e., ‘made that way’), then this too will increase the frequency of homosexuality in future generations.”).

243. KASS & WILSON, *supra* note 11, at 86.

244. Posner & Posner, *supra* note 105, at 256 (internal citations omitted).

procreate *coincidentally*, but this in no way suggests they are functionally infertile. They can choose to reproduce in “traditional” ways, to clone, to co-parent, or to adopt. Some LGBTI people have children from previous heterosexual marriages, and some are bisexual. No wonder, then, that in response to Eric and Richard Posner’s argument, Victoria Davion asserts that “[t]he homophobia involved in objecting to cloning on the basis that it might produce more homosexual people is obvious.”²⁴⁵ As many scholars have pointed out, the argument that infertility could be “spread” through cloning finds no support in reality.²⁴⁶ LGBTI people who would have had no children before being given the opportunity to use cloning and who now reproduce would actually extend and strengthen the gene pool.

The argument that LGBTI couples will pass a “gay gene” on to their cloned children is merely a high-tech version of the traditional claim that gays need to “recruit” others using immoral measures in order to “pass on the disease” of homosexuality.²⁴⁷ For years, many courts embraced the narrative that adult gays were trying to recruit children. In Larry Catá Backer’s research on narratives of homosexuality in state courts between 1960 and 1996, he discovered that state court judges frequently take the position (at least implicitly) that “young people become life-long ‘homosexuals’ after being recruited by adults.”²⁴⁸ State court judges are not alone in this belief: during the oral arguments in *Lawrence v. Texas*, the landmark Supreme Court case that struck down anti-sodomy laws, Justice Scalia indicated “that the state would have an interest in preventing children from being steered into homosexuality.”²⁴⁹

The recruitment argument relies on the belief that being gay is

245. Victoria Davion, *Coming Down to Earth on Cloning: An Ecofeminist Analysis of the Homophobia in the Current Debate*, 21 HYPATIA 58, 67 (2006).

246. See PENCE, CLONING AFTER DOLLY, *supra* note 113, at 88 (arguing that Eric and Richard Posner’s claim “has many scale-to-issue problems” and makes “many dubious assumptions”); Kerry Lynn Macintosh, *Brave New Eugenics: Regulating Assisted Reproductive Technologies in the Name of Better Babies*, U. ILL. J.L. TECH. & POL’Y 257, 300 (2010) (“[I]nfertility is not always heritable. It has many non-genetic causes, including scarring from venereal disease and delayed childbearing. Thus, it is scientifically inaccurate to assume that every man or woman who employs ART is transmitting infertility to the next generation. Moreover, even though some men and women do harbor genetic defects in their sperm and eggs, it is highly unlikely that [ARTs] will cause the infertile to outnumber the fertile and doom the species.”).

247. See, e.g., Eskridge & Stein, *supra* note 113, at 107 (discussing the fear experienced by homophobic parents that homosexuals will recruit their children). See generally William N. Eskridge, Jr., *No Promo Homo: The Sedimentation of Antigay Discourse and the Channeling Effect of Judicial Review*, 75 N.Y.U. L. REV. 1327 (2000) (demonstrating that while the specific content of anti-gay rhetoric has shifted over time, the underlying bias driving such rhetoric has remained constant).

248. Larry Catá Backer, *Narrative and Jurisprudence in State Courts: The Example of Constitutional Challenges to Sex Conduct Regulation*, 60 ALB. L. REV. 1633, 1640 (1997).

249. KENJI YOSHINO, COVERING: THE HIDDEN ASSAULT ON OUR CIVIL RIGHTS 105–06 (2006).

unnatural. It implies that no one is born gay and that more LGBTI individuals “must be created through recruitment and toxic exposure to the gay lifestyle or its affirmation.”²⁵⁰ As such, cloning provides the LGBTI community with a means for self-perpetuation through technology that cannot be achieved in the “natural” way. Yet the internal logic of this argument is flawed. If it is true that no one is born gay, then no one is cloned gay, either; gayness, if unnatural, does not reside in DNA. A genetic basis for homosexuality has not been identified,²⁵¹ and the question of whether one’s sexual orientation is the result of nature or nurture (or both) remains hotly contested both inside and outside the LGBTI community.²⁵² In any event, cloning does not produce photocopies of humans, as discussed at length above.

Perhaps surprisingly, the view that cloning would benefit the LGBTI community by allowing people to preserve gay culture and/or queer their social environments is also widespread among LGBTI-friendly commentators.²⁵³ Robertson notes that, because gay men who use cloning

250. Phillip A. Bernhardt-House, *The Werewolf as Queer, the Queer as Werewolf, and Queer Werewolves*, in *QUEERING THE NON/HUMAN* 159, 164 (Noreen Giffney & Myra J. Hird eds., 2008) (invoking the literary figure of the werewolf to illustrate the argument that the queer community needs to artificially “create” more of its kind).

251. See THOMAS C. CARAMAGNO, *IRRECONCILABLE DIFFERENCES?: INTELLECTUAL STALEMATE IN THE GAY RIGHTS DEBATE*, 104-05 (2002).

252. Recent experiments show that it is likely that a hormonal and perhaps genetic component contributes to the development of sexual identity. See Kemp, *supra* note 153, at 11-12. Research on twins suggests that while sexual orientation may be influenced by genetics, genes are by no means its sole determinant. See generally Peter S. Bearman & Hannah Brückner, *Opposite-Sex Twins and Adolescent Same-Sex Attraction*, 107 *AM. J. SOC.* 1179 (2002) (reviewing studies on the origins of sexual orientation based on social, genetic and hormonal influences and concluding that genetic or hormonal influences alone could not explain sexual preferences). The origin of homosexuality and how the community should represent it for the sake of its political and legal strategy has been a source of debate within the community itself. See generally Janet Halley, *Sexual Orientation and the Politics of Biology: A Critique of the Argument from Immutability*, 46 *STAN L. REV.* 503 (1994) (describing the debate within the gay community and criticizing both sides). Notably, some gay rights activists have tried to utilize research showing a biological basis for homosexuality. *Id.* at 507-16. By emphasizing the biological aspects of sexuality, they hope to prove that sexual orientation is immutable and that gays and lesbian should therefore be a protected class for the purpose of equal protection claims. *Id.* By contrast, social constructionists argue, *inter alia*, that such a move transfers the power to decide who deserves protection by the law from the political arena back to science, and removes agency and choice from the equation. *Id.* at 550-553.

253. Michael Shapiro points out that if sexual orientation is influenced by genes, cloned offspring may share the sexual orientation of their genetic parent. See Michael H. Shapiro, *I Want a Girl (Boy) Just Like the Girl (Boy) that Married Dear Old Dad (Mom): Cloning Lives*, 9 *S. CAL. INTERDISC. L.J.* 1, 188 (2000). As such, he argues, LGBTI parents may engage in “shaping behaviors” in order to ensure that any genetic predisposition for the favored sexual preference is realized. *Id.* at 189. While he acknowledges that “for those who believe that departures from the paradigm of nuclear family structure are already unduly and dangerously stretched when same-sex couples raise children, the addition of cloning may compound the problem,” he further notes that “it remains unclear just what

will still need to rely on an egg donor and surrogate, their primary interest in the technology may be in having a child with a particular genome, rather than having a genetically-related child; thus, they may choose to clone their own DNA “perhaps in part to increase the chances that the child will be gay and thus perpetuate gay culture.”²⁵⁴ One commentator even goes so far to suggest that “if ‘preserv[ing] the race’ is important to you, cloning gives you your best odds for getting one. But that’s the only thing cloning could eventually do for homosexuals”²⁵⁵

Both the “preserve the race” argument and the recruitment-through-cloning argument rely on a dichotomous conception of sexual orientation: just as one is biologically either male or female (a disputable assumption in itself²⁵⁶), so too one is either gay or straight. But gender and sexuality cannot be neatly summarized or disciplined into categories.²⁵⁷ Queer theorists point out that regardless of the origin of homosexuality (nature, nurture, or some combination thereof), sexual orientation is not an essential phenomenon, and the notion that sexual orientation can be categorized is itself socially constructed.²⁵⁸ Only after the medicalization of

harms, if any, would be occasioned by this particular departure from the paradigm.” *Id.* Eskridge and Stein suggest that while some in the LGBTI community may feel that cloning offers them the possibility of perpetuating queer culture, the greatest benefit cloning would provide them is likely the opportunity to have children, and perhaps to perpetuate “queer-friendliness”:

While it would be foolish for them to have children in order to replicate their sexual orientation, few queer people want children for this reason only, and most queer people with children find the nurturing, sharing, and other generative experiences to be among the most rewarding of their lives—just as straight people do. Moreover, even though queer cloning would not necessarily produce more queer children, there is good reason to think it will contribute to a more “queer-friendly” culture in general. Social scientific studies and anecdotal evidence suggest that the (nonclone) offspring of gay men and lesbians are more likely than people in general to be queer-friendly.

Eskridge & Stein, *supra* note 113, at 105.

254. Robertson, *Two Models of Human Cloning*, *supra* note 81, at 637.

255. Chandlur Burr, *Cloning for Survival*, THE ADVOCATE, Apr. 15, 1997, at 9.

256. See generally Anne Fausto-Sterling, *The Five Sexes: Why Male and Female are Not Enough*, in SEXUALITY AND GENDER 468 (Christine L. Williams & Arlene Stein, eds.,) (2002), available at <http://frank.mtsu.edu/~phollowa/5sexes.html> (arguing that the current two-sex system is inadequate to encompass the full spectrum of human sex expression, and proposing a five-sex system in its place).

257. See also EVE SEDGWICK, EPISTEMOLOGY OF THE CLOSET 8 (1990) (“It is a rather amazing fact that, of the very many dimensions along which the genital activity of one person can be differentiated from that of another (dimensions that include preference for certain acts, certain zones or sensations, certain physical types, a certain frequency, certain symbolic investment, certain relations of age or power, a certain species, a certain number of participants, etc. etc. etc.), precisely one, the gender of object choice, emerged from the turn of the century, and has remained, as *the* dimension denoted by the now ubiquitous category of “sexual orientation.”).

258. JAGOSE, *supra* note 169, at 10–16 (reviewing constructionist positions); DAVID M. HALPERIN, ONE HUNDRED YEARS OF HOMOSEXUALITY 49 (1990) (explaining that even if a gay gene would be found it cannot adequately explain the categories of sexual orientation).

homosexuality and the invention of homosexuality as we know it, during the eighteenth century, did homosexual become an identity category.²⁵⁹ Thus, the compartmentalization of society into “homosexual” and “heterosexual” is a relatively new phenomenon that serves to regulate sexual acts and desires, deeming some appropriate and good (and therefore natural) and others deviant and inferior.²⁶⁰ Advances in cloning or other biotechnologies, no matter how complex, cannot possibly perpetuate social constructs. Only the meanings we layer upon bodies, acts, and desires can do that. The recruitment-through-cloning narrative therefore stands on shaky ground, and it seems that arguments by LGBTI proponents are based on an essentialist view of what it means to be gay.²⁶¹

259. MICHEL FOUCAULT, *HISTORY OF SEXUALITY* 43 (1988) (“[W]e must not forget that the psychological, psychiatric, medical category of homosexuality was constituted from the moment it was characterized—[Carl] Westphal’s famous article of 1870 on ‘contrary sexual sensations’ can stand as its date of birth.”). See also SEDGWICK, *supra* note 257, at 2–3, 8–9, 34–35 (1990) (explaining how the homosexual/heterosexual dichotomy emerged in the West, and noting that “the word ‘homosexual’ entered Euro-American discourse during the last third of the nineteenth century”).

260. *Cf.*, JAGOSE, *supra* note 169, at 16 (“To foreground only those processes that resulted historically in the formation of homosexuality is to imply that heterosexuality—that frequently unmarked but no less historically contingent category—is somehow the more self-evident, natural or stable construction. This assumption is naturalized in a culture that commonly understands homosexuality to be a derivative or less evolved form of heterosexuality.”).

261. Another relevant issue is the inverse of the former point. If cloning technologies enable us to pinpoint a “gay gene,” would more people abort their children? Indeed, law professor Radhika Rao argues that one reason to ban cloning is that instead of enhancing the rights of LGB people, it will be widely used to “to screen them out of the population.” Radhika Rao, *What’s So Strange About Human Cloning?*, 53 *HASTINGS L.J.* 1007, 1016 (2002). See also Eskridge & Stein, *supra* note 113, at 108–09 (“Some heterosexuals might use cloning or gene splicing to try to ensure that their children would be heterosexual.”). By and large, these concerns are unfounded, as cloning technology is unlikely to bring about any significant changes. First, even if a genetic connection between sexual identity and genes exists, because of the significant role that other factors play in the development of sexual identity, it is very unlikely that it will ever be possible to screen out LGBT people, much less that cloning technology would enable this. *Id.* at 104–05, 109. Second, screening techniques are already accessible through IVF and PGD, and yet the law does not prohibit the use of IVF. Moreover, genetic tests for some forms of intersexuality (namely Turner and Klinefelter syndromes) are currently available even for those experiencing non-IVF pregnancy, and there have been a large number of terminations. See generally Caroline Mansfield, Suellen Hopfer & Theresa M. Marteau, *Termination Rates After Prenatal Diagnosis of Down Syndrome, Spina Bifida, Anencephaly, and Turner and Klinefelter Syndromes: A Systematic Literature Review*, 19 *PRENATAL DIAGNOSIS* 808 (1999) (reviewing studies from several different countries on the percentage of pregnancy terminations after prenatal diagnosis of Turner and Klinefelter syndromes, and finding a seventy-two percent average termination rate with diagnoses of Turner syndrome and fifty-eight percent with diagnoses of Klinefelter syndrome).

4. *Arguments That Cloning Is Not a Natural Form of Reproduction*

A fourth argument commonly used against reproductive cloning is that it is an attempt to “play God” and is thus immoral on religious grounds.²⁶² Perhaps the argument that cloning, in particular, is akin to playing God stems from a concern not about human intervention in general, but about the limits that society should impose on the use of science in the creation of humanity. While IVF more closely imitates the “natural” reproductive process,²⁶³ cloning is considered a form of “artificial interference,”²⁶⁴ creating a product that we can anticipate and manipulate in advance. Thus, arguments that scientists should not play God are better understood as warnings against hubris.²⁶⁵ The secular version of this argument is that cloning allows for “unnatural” intervention in the natural world: procreation through “human design and manipulation.”²⁶⁶

Like so many of the arguments against cloning, the idea of cloning as playing God relies on a strict, binary understanding of the natural world, where everything that is not biologically “natural” is ipso facto immoral. In that, it is similar to social regulation and control of sexuality more broadly, which is established largely through this natural-unnatural, moral-immoral dichotomous reasoning.²⁶⁷

The framing of cloning as unnatural is not only problematic: it is inaccurate. Cloning has clear precedents in nature.²⁶⁸ For example,

262. See Bonnie Steinbock, *Cloning Human Beings: Sorting Through the Ethical Issues*, in HUMAN CLONING: SCIENCE, ETHICS, AND PUBLIC POLICY 68, 69–70 (Barbara MacKinnon ed.) (2000) (“In his charge to [the National Bioethics Advisory Commission], President Clinton warned against the temptation to ‘play God.’”). See also GARETH JONES, CLONES, THE CLOWNS OF TECHNOLOGY? 77–78 (2001) (“Cloning can be condemned because it exceeds the limits of the delegated *dominion* given to the human race by God.”); NAT’L BIOETHICS ADVISORY COMM’N, *supra* note 172, at 45 (“The warning against ‘playing God’ serves to remind human beings of their finiteness and fallibility. By not recognizing appropriate limits and constraints on scientific aspirations, humans reenact the Promethean assertion of pride or hubris.”).

263. Kass, *The Wisdom of Repugnance*, *supra* note 168, at 695–96 (“[A]rtificial insemination and IVF with donor sperm, or whole embryo donation . . . [is] a not altogether unproblematic practice . . . [T]here is in each case (as in all sexual reproduction) a known male source of sperm and a known female source of egg.”).

264. Richard Dawkins, *What’s Wrong with Cloning?*, in CLONES AND CLONES, *supra* note 12, at 54, 63 (telling a story about a panel in which he participated where participants expressed concerns about the “unnaturalness” of cloning).

265. Steinbock, *supra* note 262, at 70.

266. See, e.g., KASS & WILSON, *supra* note 11, at 26.

267. Anal sex, for example, is considered “unnatural” because it does not lead to procreation. ALAN SOBLE, SEXUAL INVESTIGATIONS 10, 28 (1996) (explaining that natural law philosophers such as Thomas Aquinas have seen anal coitus as against nature because it does not lead to procreation).

268. Parthenogenesis is an asexual form of reproduction by the females of some species whereby embryos or seeds grow and develop without fertilization from a male of

“twinning,” or the creation of identical (monozygotic) twins, occurs when the fertilized egg spontaneously divides, creating two cells that continue dividing on their own, and eventually resulting in two separate embryos in the womb.²⁶⁹ These two embryos are thus identical because they come from the same fertilized egg. In some mammals, twinning is the default; in humans, roughly one in every three hundred births is a result of twinning.²⁷⁰ Human clones (of each other, not of their parents) have thus always existed, and no one claims that they are unnatural. Indeed, Christine Hauskeller argues “[t]hat the artificial character is important for the meaning of ‘cloning’ is shown by the fact that the term is never used for the natural division of a zygote resulting in identical human twins.”²⁷¹

At the same time, the claim that cloning is playing God disregards the widespread use of other accepted technologies that ostensibly “interfere” with “natural” reproduction, such as the morning-after pill, IVF, surrogacy, postmortem reproduction, sex selection, genetic engineering, and even the transplantation of artificial organs. As their use becomes more common, they are accepted as more natural. What purpose is served by categorizing some technologies as natural while framing other, marginally different technologies as unnatural?

A deeper examination reveals that underlying this concern about playing God is a heteronormative conception of the “natural”—and thus the “correct”—way to conceive a child. For Kass, for example, there is something of profound value in the “natural” process of heterosexual reproduction. He claims that the process of having children by “one female, one male, (usually) through coitus—is established . . . not by human decision, culture or tradition, but by nature.”²⁷² Even in IVF and other forms of ART—which Kass treats as a evil—there is “a known male source of sperm and a known single female source of egg—a genetic father and a genetic mother—should anyone care to know (as adopted children

the species. *Parthenogenesis*, THE COLUMBIA ENCYCLOPEDIA (6th ed. 2000), available at <http://www.encyclopedia.com/doc/1E1-partheno.html>. Parthenogenesis is common among social insects like the honeybee and the ant and has also been observed in some snakes, fish, and monitor lizards. *Id.* Some research even suggests that human reproduction through parthenogenesis might be more “natural” than what we think of as traditional sexual reproduction today. Judith Longstaff Mackay explains:

The most intriguing aspect of my research was why we have sex at all. After all, sexual reproduction in animals started only 300 million years ago. Life on earth got on pretty well for 3000 million [sic] years before that with asexual reproduction. . . . [S]exual reproduction . . . takes more time, it uses more energy, and mates may be scarce or uncooperative.

Judith Longstaff Mackay, *Why Have Sex?*, 332 BRIT. MED. J. 623, 623 (2001).

269. LIM, *supra* note 87, at 180–82.

270. MICHAEL D. WEST, THE IMMORTAL CELL: ONE SCIENTIST’S QUEST TO SOLVE THE MYSTERY OF HUMAN AGING 214 (2003).

271. Hauskeller, *supra* note 84, at 826.

272. Kass, *The Wisdom of Repugnance*, *supra* note 168, at 689.

often do) who is genetically related to whom.”²⁷³ He argues that a child made through cloning, rather than begotten through this natural process, will be morally and socially disadvantaged by having only a single genetic ancestor.²⁷⁴ He thus implies that having a child by heterosexual intercourse—or even by a process that imitates it—is the sole natural and moral way to reproduce. As Victoria Davion points out, this is one of the most homophobic and heterosexist assumptions about cloning because it clearly posits reproduction by a male and female via intercourse as superior to other forms.²⁷⁵

Asexual and sexual reproduction both result in the birth of a child; the only difference is in the lack of unification between sperm and egg in the former. To describe cloning as unnatural is to glorify heterosexual reproduction. In the words of Dion Farquhar,

The ontology of “natural” biogenetic married heterosexual reproduction depended on its binary other of “unnatural” sterility—the “case” of physiological or social pathology (homosexuals, unmarried people and so on). Now, a new “other” to “natural” reproduction has been introduced by biotechnology—“artificial” donor-assisted asexual reproduction—and it must quickly work to erase its otherness²⁷⁶

Cloning technology calls into question the seemingly bright line between “natural” and “unnatural” forms of reproduction. In doing so, it has the potential to dismantle the nature-culture binary that is fundamental to some of the most common (and most discriminatory) arguments against cloning and against “alternative” sexual orientations.

C. Conclusion

A review of the key arguments against cloning demonstrates that the majority are either largely unfounded or have been adequately addressed and refuted in the scientific and theoretical literature. Some of the traditional arguments discussed most extensively in cloning literature do raise serious questions about the risks of a reproductive technology that is not yet fully understood. Concerns about the procedure itself should be taken seriously, and further research should be conducted to ensure that cloning technology is safe and efficient. Those arguments that are motivated by homophobic and heterosexist concerns, however, must be

273. *Id.* at 695–96.

274. *See id.*

275. Davion, *supra* note 245, at 64.

276. Dion Farquhar, *Gamete Traffic/Pedestrian Crossings*, in *PLAYING DOLLY: TECHNOCULTURAL FORMATIONS, FANTASIES, & FICTIONS OF ASSISTED REPRODUCTION* 17, 21 (E. Ann Kaplan & Susan Squier eds., 1999).

distinguished from more legitimate arguments against cloning with which they are frequently bound up. As a result, their heterosexist and homophobic motivations are disguised by neutral language and appeals to scientific reasoning. Yet, upon further examination, these arguments appear to be motivated largely by fears over the potential use of cloning by non-traditional families and the advantages it will provide for them, including the possible expansion of LGBTI families in the population. My intent in this Part has been to shift the focus from the natural and scientific to a consideration of the way in which legal, social, and scientific discourses shape the meaning of what we think of as moral, natural, and biological. In the final Part, I show how a binary view of nature, nurture and sexual orientation has been collapsed into the current legal regime, and try, using legal tools, to challenge the existing, discriminatory law.

VI.

A RIGHT TO CLONE?: CLONING AS A FUNDAMENTAL RIGHT OR AN EQUAL PROTECTION ISSUE

At present, the federal government prohibits federal funds from being used for reproductive cloning research, and several states prohibit research on reproductive cloning and attempts to clone human beings.²⁷⁷ These restrictions arguably implicate the constitutional rights of LGBTI couples and individuals, including the right to equal protection under the law. This is a normative argument that sometimes stretches the current American constitutional law by looking at how this regime *could* look, and not what it currently looks like. I adopt a broader notion of equality than currently recognized by the U.S. Supreme Court because my aim is to provide a forward-thinking vision of the way the regulation of cloning could and should be interpreted, not just by the Court, but by the legislature and the public.

A. The Current Ban on Funding Research Cloning and Potential Future Bans

Currently, in the United States, there is no federal law prohibiting the use of, or research on, reproductive cloning.²⁷⁸ Even in the absence of federal legislation, however, the U.S. government has found many ways to block research on reproductive cloning. Immediately after the announcement of the creation of Dolly the sheep, then-President Clinton issued a presidential directive prohibiting the use of federal funds for

277. See *infra* Part VI(A).

278. Payne, *supra* note 6, at 956–57.

cloning humans.²⁷⁹ He also instructed the National Bioethics Advisory Commission to issue a report on the ethical implications of human cloning.²⁸⁰ Several months later, that Commission called for a prohibition on human cloning, finding cloning to be unsafe for the cloned fetus and, therefore, unethical.²⁸¹ It also acknowledged that human cloning raises ethical concerns and that these concerns should be addressed and debated before cloning is allowed.²⁸² Following the issuance of the Committee's recommendations, President Clinton urged the private sector to adopt a voluntary ban on cloning human beings.²⁸³

In 2001, the Bush Administration issued a decision on stem cell research, stating that federal funds could not be used for the research of human embryonic stem cells, except for research on a limited number of cell lines that had already been created.²⁸⁴ This decision made it almost impossible for scientists to receive funding for human embryonic stem cell research.²⁸⁵ In 2002, the National Academy of Science recommended that the ban be extended for an additional five years.²⁸⁶

Most recently in 2009, President Obama's administration lifted the strict limitations on human embryonic stem cell research.²⁸⁷ At the same time, however, President Obama declared that his administration would never allow human reproductive cloning because "it is dangerous, profoundly wrong and has no place in our society or any society."²⁸⁸ Recently, a federal district court judge struck down Obama's stem cell

279. Memorandum on the Prohibition on Federal Funding for Cloning of Human Beings, 1 PUB. PAPERS 233 (Mar. 4, 1997).

280. NAT'L BIOETHICS ADVISORY COMM'N, *supra* note 172 (recopying letter from the President sent on Feb. 24, 1997, requesting review of ethical issues associated with cloning).

281. *Id.* at 108 ("The Commission concludes that at this time it is morally unacceptable for anyone in the public or private sector, whether in a research or clinical setting, to attempt to create a child using somatic cell nuclear transfer cloning. The Commission reached a consensus on this point because current scientific information indicates that this technique is not safe to use in humans at this time.").

282. *Id.* ("Moreover, in addition to safety concerns, many other serious ethical concerns have been identified, which require much more widespread and careful public deliberation before this technology may be used.").

283. Judith A. Johnson, *Human Cloning*, in CLONING: CHRONOLOGY, ABSTRACTS AND GUIDE TO BOOKS 19, 25 (Stephen D. Fairbanks ed., 2004) [hereinafter Johnson, *Human Cloning*].

284. *Id.* at 25–26.

285. *See, e.g.*, LIM, *supra* note 87, at 345 ("It is incredibly difficult to raise private money to sustain a reasonable research program.").

286. Johnson, *Human Cloning*, *supra* note 283, at 27 ("The panel stated that the ban should be reconsidered within 5 years, but only if compelling new data on safety and efficacy are presented and a national dialogue on the social and ethical issues suggests that a review is warranted.").

287. Exec. Order No. 13,505, 74 Fed. Reg. 10,667 (Mar. 9, 2009).

288. Sheryl Gay Stolberg, *Obama Lifts Bush's Strict Limits on Stem Cell Research*, N.Y. TIMES (Mar. 10, 2009), http://www.nytimes.com/2009/03/10/us/politics/10stem.html?_r=1.

research order as violating the Dickey-Wicker Amendment,²⁸⁹ which prohibits the use of federal funds for research involving the destruction, endangerment, or creation (for research purposes) of human embryos.²⁹⁰ The U.S. Court of Appeals for the District of Columbia has issued a stay, pending appeal.²⁹¹

In addition, the Food and Drug Administration (FDA) has declared that the use of cloning is subject to its approval.²⁹² The FDA is generally authorized to regulate biologic products, drugs, and medical devices.²⁹³ The agency has asserted that anyone involved in cloning research must submit an investigational new drug application.²⁹⁴ However, no such applications have been submitted, perhaps because the FDA has made it clear that it will reject these applications.²⁹⁵ The FDA's jurisdiction over cloning has never really been explained²⁹⁶ and has been criticized and challenged by a few scholars who argue that the FDA does not have authority in this instance.²⁹⁷ In any event, it is clear that research on reproductive cloning in the United States currently has no chance of being funded and may never

289. Balanced Budget Downpayment Act, Pub. L. No. 104-99, §128, 110 Stat. 26, 34 (1996).

290. *Sherley v. Sebelius*, 704 F. Supp. 2d 63, 73 (D.D.C. Aug 23, 2010) (“[T]he will of Congress, as expressed in the Dickey-Wicker Amendment, is to prohibit federal funding of research in which human embryos are destroyed. Accordingly, it is in the public interest to enjoin defendants from implementing the Guidelines.”).

291. *Id.*

292. See Richard A. Merrill & Bryan J. Rose, *FDA Regulation of Human Cloning: Usurpation or Statesmanship?*, 15 HARV. J. L. & TECH. 85, 99–100 (2001) (discussing and quoting statements from key FDA staff members asserting FDA jurisdiction over cloning).

293. *What Does FDA Regulate?*, FED. FOOD & DRUG ADMIN., <http://www.fda.gov/AboutFDA/Transparency/Basics/ucm194879.htm> (last visited Feb. 8, 2011).

294. See Letter from Stuart L. Nightingale, M.D., FDA Assoc. Comm’r for Med. Affairs (Oct. 26, 1998), available at <http://www.fda.gov/ScienceResearch/SpecialTopics/RunningClinicalTrials/ucm150508.htm> (last visited Oct. 10, 2010) (“[T]he appropriate mechanism to pursue a clinical investigation using cloning technology is the submission of an investigational new drug application (IND) to FDA.”).

295. MACINTOSH, *supra* note 176, at 84.

296. Merrill & Rose, *supra* note 292, at 97 (“No ‘inside’ account of the FDA’s decision to assert jurisdiction over cloning has yet appeared. We may never know whether the Clinton White House pressured the Agency to act in order to forestall restrictive legislation or whether the Agency took the initiative despite administration reluctance. Nor has the FDA offered a full-blown defense of its legal reasoning, complete with consideration of alternatives and explanation of its rejection of plausible objections, as it would have been obliged to do if it had thought it necessary to comply with the rulemaking requirements of the APA.”).

297. See, e.g., MACINTOSH, *supra* note 176, at 84–85; Merrill & Rose, *supra* note 292, at 101 (“None [of the FDA’s statements] said, for example, what applications of cloning technology the FDA *believes* it has the authority to regulate.”). But see generally Gail H. Javitt & 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 (2003) (arguing that the FDA does possess jurisdiction to regulate cloning).

be authorized by the FDA.

In the background of these debates over government funding for cloning research lurks the spectre of an outright ban on reproductive cloning. The House of Representatives voted twice to ban human cloning,²⁹⁸ but the proposed law did not pass in the Senate.²⁹⁹ Several states, however, have enacted statutes governing cloning.³⁰⁰ These statutes vary in substance and in scope. Some prohibit only human cloning but allow therapeutic cloning, and some call for a complete ban on cloning of any kind.³⁰¹

B. LGBTI People Are Disparately Impacted by the Current Limitations and Would Be Similarly Harmed by a Total Ban on Reproductive Cloning

1. Federal Funding Ban

The ban on funding research cloning puts LGBTI couples at a disadvantage relative to opposite-sex couples who can reproduce without the involvement of a third party. This disadvantage is not merely a result of biological factors: the government has refused to fund the most promising method that would allow LGBTI couples to have genetically-related children with minimum involvement of third parties. This inequality is therefore rooted not only in biology but in government action. Because the federal government funds research that enables opposite-sex

298. H.R. 534, 108th Cong. § 302 (2003) (“It shall be unlawful for any person or entity, public or private, in or affecting interstate commerce, knowingly (1) to perform or attempt to perform human cloning; (2) to participate in an attempt to perform human cloning; or (3) to ship or receive for any purpose an embryo produced by human cloning or any product derived from such embryo.”); H.R. 2505, 107th Cong. § 302 (2001) (same). *See also* Human Cloning Ban and Stem Cell Research Protection Act of 2007, S. 812, 110th Congress (2007); Human Cloning Ban and Stem Cell Research Protection Act of 2005, S. 876, H.R. 1822, 109th Cong. (2005). *See also* Jeffrey Brainard, *After Heated Debate, U.S. House Votes Again to Ban Cloning*, CHRON. HIGHER EDUC. (D.C.), Mar. 14, 2003, at A24 (noting that the ban passed in the House, 241 to 155, and that House lawmakers “had approved a complete ban on cloning in 2001 by a comparable tally, 265 to 162”).

299. MACINTOSH, *supra* note 176, at 77 (noting that while the ban did not pass in the Senate, “this failure did not reflect support for reproductive cloning; rather, some senators wanted to preserve the right of scientists to engage in *research* cloning.”) (emphasis added).

300. For a comprehensive overview of therapeutic and reproductive cloning laws by state, see *Human Cloning Laws*, NAT’L CONF. OF STATE LEGISLATURES, <http://www.ncsl.org/IssuesResearch/Health/HumanCloningLaws/tabid/14284/Default.aspx> (last visited Nov. 29, 2010).

301. In some states, cloning human beings for purposes of reproductive cloning is a criminal act. *See, e.g.*, ARK. CODE ANN. § 20-16-1002 (2006) (performing or participating in human cloning is a Class C felony); IND. CODE § 35-46-5-2 (Supp. 2010) (engaging in human cloning is a Class D felony). In others, only a civil fine is imposed. *See, e.g.*, MICH. COMP. LAWS § 333.16275 (2006) (engaging in or attempting to engage in human cloning can result in a \$10,000,000 fine).

couples to have genetically-related children, banning funding to research that would similarly benefit LGBTI couples denies these couples equal protection of the laws. The ban on federally funding cloning research should thus be challenged as a form of unconstitutional discrimination.

The Equal Protection Clause of the Fourteenth Amendment guarantees equal treatment under the law among similarly situated classes.³⁰² At present, the ban on funding research on reproductive cloning places those couples who wish to reproduce asexually at a disadvantage compared to those who are not affected by the ban.³⁰³ I define the classes based on their ability to produce children who are genetically related to at least one partner with minimal third-party involvement. The unaffected class consists of opposite-sex couples who have the option to produce genetically-related children by coitus or through the use of currently available ARTs. The disadvantaged class includes all those couples who cannot produce children genetically related to at least one parent without significant reliance on third parties but-for the use of cloning. De facto, LGBTI couples would be prominent in the second class.³⁰⁴

If the inability of an LGBTI couple to conceive a genetically-related child together with minimal reliance on third parties were simply a biological fact, it would not raise any equal protection or other constitutional issues. However, because emerging technologies in the field of reproductive cloning may offer the LGBTI community the chance to have genetically-related children (possibly even with a mix of both partners' genes), bans on federal funding of research that would help to refine and ensure the safety and efficacy of these procedures unconstitutionally denies LGBTI people a right that is not similarly denied

302. U.S. CONST. amend. XIV, § 1 (“No State shall . . . deny to any person within its jurisdiction the equal protection of the laws.”).

303. This is not to say that only couples are affected by the ban. Clearly, single individuals who wish to reproduce asexually are also disadvantaged by it. However, for the purposes of an equal protection challenge, it is most strategic to identify two groups who are similarly situated in nearly every way in order to demonstrate that a law discriminately targets or impacts one group relative to the other. If a challenge to a funding ban is successful, this will benefit single individuals as well.

304. This class also obviously includes some infertile opposite-sex couples. However, the fact that this class includes some opposite sex couples does not diminish the legal implications of the disparate impact felt by same-sex couples. For example, miscegenation laws discriminated not only against black people but also against white people and other minorities, and yet the court found that bans on interracial marriage violated the Equal Protection Clause and Due Process. *Loving v. Virginia*, 388 U.S. 1, 8 (1967) (rejecting Virginia’s argument that because “miscegenation statutes punish equally both the white and the Negro participants in an interracial marriage, these statutes, despite their reliance on racial classifications do not constitute an invidious discrimination based upon race”). Similarly, in the employment context, courts have found that while the claimed discrimination in hiring examinations did not apply only to members of a racial minority, the hiring practices indeed discriminated on the basis of race. *See, e.g., Castro v. Beecher*, 459 F.2d 725 (1st Cir. 1972).

to opposite-sex couples.

One may argue that the government does not treat these two groups differently. The members of the unaffected class reproduce via coitus without the aid of funding or research from the state, while the affected class is simply biologically different. Thus, the affected class is asking not for equal treatment, but for positive rights: affirmative assistance in conceiving genetically-related children. Furthermore, LGBTI people enjoy access to the same benefits that are provided to opposite-sex couples: they are free to use ARTs and other medical interventions that improve fertility.

Yet such a reading not only falls prey to the fallacious nature/culture dichotomy discussed above, it also ignores the current landscape of reproductive health research. In fact, the state *already* provides funding and research that benefits the unaffected class. The government has invested a great deal funding and research in enabling fertile and infertile³⁰⁵ opposite-sex couples to procreate in safe and healthy ways with minimum involvement of third parties. According to the data provided by the National Institutes of Health, since 2006, the United States has directly invested \$300 million in research on infertility, and more than \$1.8 billion on women's health,³⁰⁶ a category that includes research on reproductive health.³⁰⁷ Such funding is no doubt dedicated, *inter alia*, to research on drugs that promote ovulation (clomiphene and gonadotropins) and allow couples to conceive genetically-related child without a third party's organs. Opposite-sex couples who employ ARTs enjoy the fruits of research that enables them to procreate in safe and efficient ways, often without the involvement of third parties.³⁰⁸ Even those couples who do not use ARTs

305. Infertility, according to the American Society for Reproductive Medicine, is defined as engaging in coital unprotected sex for one year without conception occurring. *Infertility*, AM. SOC. REPROD. MED., <http://asrm.org/topics/detail.aspx?id=36> (last visited Mar. 31, 2011).

306. *Estimates of Funding for Various Research, Condition and Disease Categories*, NIH RESEARCH PORTFOLIO ONLINE, <http://report.nih.gov/rcdc/categories/#bpopup> (estimated budget for FY 2010 and FY 2011 not included in calculation).

307. See AGENDA FOR RESEARCH ON WOMEN'S HEALTH FOR THE 21ST CENTURY, A REPORT OF THE TASK FORCE ON THE NIH WOMEN'S HEALTH RESEARCH AGENDA FOR THE 21ST CENTURY 63–65 (1999), <http://orwh.od.nih.gov/research/report.pdf> (describing current NIH research on reproductive health and offering recommendations for a future research agenda).

308. For example, the government encourages research on PGD. See, e.g., *Study of the Efficacy of 24 Chromosome Preimplantation Genetic Diagnosis (PGD)*, CLINICALTRIALS.GOV (Dec. 12, 2010), <http://clinicaltrials.gov/ct2/show/NCT01219283> (announcing PGD clinical trials advertised by the National Institutes of Health). As noted above, *supra* note 54, PGD is a technique that can identify genetic defects in pre-embryos. The purpose of this procedure is to allow couples who have difficulty reproducing because of genetic problems to have a healthy baby with their own genes. Of course, such couples could instead simply rely on third-party organs. Thus, the main purpose of the technique is to allow a couple to have a genetically-related child without the involvement of third

rely on a variety of other medical tools and technologies over the course of their pregnancy, including ultrasounds, alpha-fetoprotein screening, amniocentesis, and chorionic and villus sampling, all of which have been supported by years of technological development and financial investment by the government. The American health system is thus deeply invested in supporting opposite-sex couples to reproduce without the involvement of a third party, while no funding is similarly devoted to the LGBTI community for these purposes.³⁰⁹ In challenging the ban on funding for cloning research, the LGBTI community would not be asking for an affirmative right; rather, it would merely be asking that the government not deny federal funding to research that would equally enable them to have genetically-related children.

One also may argue that these classes are biologically different in a way that justifies the different distribution of funding. When the government funds research on breast cancer, a disease that affects mainly women, it does not discriminate against men. Indeed, sex discrimination jurisprudence recognizes some physical and inherent differences between men and women and uses them to justify different treatment on the basis of sex.³¹⁰ However (and this is precisely the point), what society treats as inherent or natural physical or biological differences are in reality the result of social practices that collapse actual variations in favor of binary differences, becoming entrenched over time through medical and legal discourse. The notion of “biological difference” is in fact little more than misguided prejudice pressed into service as legal justification for outright sex discrimination.³¹¹ I am not arguing that biology is meaningless, but rather that the ban on cloning research shapes our understanding of what is biologically possible. It may be possible, *biologically*, for LGBTI couples to have genetically-related children with minimal involvement of third parties. It is the law, not biology, that impedes this opportunity; it is the law that shapes biology more than biology shapes the law.

Finally, some might argue that the federal government’s decision to

parties.

309. To be sure, LGBTI individuals and couples benefit from government funding of reproductive technologies: they use ART and other reproductive medicines, and give birth in hospitals the same way that others do. Yet providing funding for research that allows opposite-sex couples to have genetically-related children without relying on third parties, and denying funding for the same exact purpose for other groups, is per se discrimination.

310. See, e.g., Elizabeth M. Schneider, *A Postscript on VMI*, 6 AM. U. J. GENDER & L. 59, 62 (1997) (discussing the role of “inherent [sex] differences” in the Supreme Court’s reasoning in *U.S. v. Virginia*, 518 U.S. 515 (1996)).

311. See, e.g., Martha T. McCluskey, *Rethinking Equality and Difference: Disability Discrimination in Public Transportation*, 97 YALE L.J. 863, 871 (1988) (“Instead of attempting to distinguish real from stereotypical differences, [some feminists argue that] equality doctrine should challenge the male-biased norms that make difference, including physical differences, a problem for women.”).

ban federal funding of reproductive cloning is not amenable to an equal protection analysis.³¹² The Supreme Court has held that the “legislature’s decision not to subsidize the exercise of a fundamental right does not infringe the right.”³¹³ Thus, in a 5-4 decision, the Supreme Court upheld a statute that prohibited the use of federal funds for informing women about the availability of abortion services.³¹⁴ The majority quoted a previous decision in which it held that “the government may ‘make a value judgment favoring childbirth over abortion, and . . . implement that judgment by the allocation of public funds.’”³¹⁵

I suggest, however, that the ban on funding research on reproductive cloning differs from these cases. When the government funds research on sexual reproduction but implements a ban on research on asexual reproduction (a ban that harms a specific group), it unequally distributes money for the same purpose. In another context, where the government directs funding toward one group but denies it to another, the Supreme Court has held that the government cannot discriminate in providing funding for the same purpose to different groups.³¹⁶ Thus, the Supreme Court found that a Texas statute denying schools state funds for the education of children who were not “legally admitted” to the United States while simultaneously funding the education of citizens and documented immigrants violated the Equal Protection Clause.³¹⁷ Similarly, the federal

312. The question is not whether the state should positively support research on certain issues. The right to procreate is a negative right, assuring that the state does not interfere in people’s private decisions to have or not have children. JOHN ROBERTSON, *CHILDREN OF CHOICE: FREEDOM AND THE NEW REPRODUCTIVE TECHNOLOGIES* 23 (1994). This right does not include the obligation to assist in having children. *See id.* (arguing that there is no constitutional right to provide services or resources to assist in conception). My argument therefore focuses on the inequity in distributing valuable resources to only one group and thereby denying them to another.

313. *Regan v. Taxation with Representation of Wash.*, 461 U.S. 540, 549 (1983).

314. *Rust v. Sullivan*, 500 U.S. 173 (1991). *But see* *Legal Servs. Corp. v. Velasquez*, 531 U.S. 533 (2001) (limiting *Rust* to cases involving governmental speech).

315. *Rust*, 500 U.S. at 192–93 (quoting *Maier v. Roe*, 432 U.S. 464, 474 (1977)).

316. *See Burt*, *supra* note 6, at 501 (“[T]he use of federal funds for reproductive or research cloning outside specific circumstances remains forbidden. If government funding were equated with private philanthropy, it would be difficult to imagine a basis for challenging the government’s decision to spend its funds for some purposes but not for others, as it saw fit. In our constitutional scheme, however, the government has obligations that private philanthropists do not; the government is obliged to honor public norms of behavior that private parties are free to avoid.”).

317. *Plyler v. Doe*, 457 U.S. 202 (1982). Similarly, in the context of the Establishment Clause, the Court found that the “government should not prefer one religion to another, or religion to irreligion,” when it allocates funding to schools. *Board of Educ. of Kiryas Joel Village Sch. Dist. v. Grumet*, 512 U.S. 687, 703 (1994) (holding that passage of a school-redistricting law resulting in the creation of a special school district for practitioners of a “strict” form of Judaism violated the Establishment Clause of First Amendment). *See also Lemon v. Kurtzman*, 403 U.S. 602 (1971) (holding that Pennsylvania’s Nonpublic Elementary and Secondary Education Act, which allowed the state to reimburse nonpublic

ban on reproductive cloning arguably violates the Equal Protection Clause by conferring a benefit—reproductive health research leading to the ability to conceive without third-party involvement—on heterosexual couples that it does not confer on LGBTI couples.

2. *Total Ban on Cloning*

A ban on practicing reproductive cloning similarly discriminates against LGBTI couples relative to their heterosexual counterparts. The government does not interfere with opposite-sex couples' right to use ART in order to have a genetic child. Fertile, opposite-sex couples are able to use the gametes of both partners in artificial insemination and IVF or even to use other people's organs. If the choice of LGBTI couples to enjoy the exact same act with a different technique is denied, then the government treats these two groups differently. Furthermore, much of the cloning rhetoric discussed in this article—some of which comes from governmental bodies—suggests that bans on reproductive cloning may be motivated by discriminatory intent.³¹⁸ While discriminatory intent can be difficult to prove (and may be exceptionally so in the context of a still unrefined technology), disproportionate impact may be easier to demonstrate. While current, facially-neutral state bans on cloning do not single out LGBTI people in particular, a compelling argument may be made that they disparately impact this group.³¹⁹ There is no question that a ban on reproductive cloning would disproportionately impact LGBTI couples, perhaps more than any other group. Indeed, as Eric and Richard Posner have argued, this is one of the main groups that would benefit from cloning technology.³²⁰ By contrast, the ban has little or no effect on fertile (and

schools for the salaries of teachers who taught secular material, violated the Establishment Clause of the First Amendment because the primary beneficiaries of the Act were “church schools”). While *Grumet* is an Establishment Clause case, the court did not invalidate the law solely because the state endorsed one religion, but rather because one group that was similarly situated was treated more favorably than others. *Id.* at 703 (“Because the religious community of Kiryas Joel did not receive its new governmental authority simply as one of many communities eligible for equal treatment under a general law, we have no assurance that the next similarly situated group seeking a school district of its own will receive one.”). Implicitly, the Court relied on reasoning based on equality as well as traditional Establishment Clause considerations.

318. See *Washington v. Davis*, 426 U.S. 229 (1976) (holding that a government act would not be unconstitutional solely because it has a racially disproportionate impact, but a purpose to discriminate must be present.).

319. See, e.g., *Yick Wo v. Hopkins*, 118 U.S. 356, 373–74 (1886) (“Though the law itself be fair on its face, and impartial in appearance, yet, if it is applied and administered by public authority with an evil eye and an unequal hand, so as practically to make unjust and illegal discriminations between persons in similar circumstances, material to their rights, the denial of equal justice is still within the prohibition of the constitution.”).

320. See Posner & Posner, *supra* note 105, at 256 (noting that “cloning might be an attractive alternative to adoption” for homosexual couples). See also Daar, *supra* note 4, at 528 (“A third possible benefit of cloning would be to assist single individuals and same sex

many infertile) opposite-sex couples.

In any event, whether a ban on reproductive cloning violates equal protection or not, it is easier to establish that a total ban infringes upon a fundamental right, an argument I will explore in the following section.

C. The Current Funding Limitations and Any Future Ban on Cloning Human Beings Infringes on LGBTI Individual's Fundamental Right to Reproduce

Arguably, a ban on using reproductive cloning, if safe, infringes on the private decision to have a child via cloning. While the right to procreate without government interference has been recognized by the Court as a fundamental right,³²¹ it is not clear that this would be interpreted to apply to cloning. Some scholars have argued that the use of cloning is covered by the right to procreation, because its purpose is no different from that of sexual reproduction, and it resembles other forms of sexual reproduction, such as ART, which use a third party's gamete.³²² Conversely, others have suggested that such a right does not exist because the differences between sexual reproduction and cloning are too great to warrant the expansion of reproductive rights to cloning.³²³ Scholars on this side of the debate largely

couples in their efforts to reproduce.”).

321. *Stenberg v. Carhart*, 530 U.S. 914, 920 (2000) (“[T]his Court, in the course of a generation, has determined and then redetermined that the Constitution offers basic protection to the woman's right to choose.”); *Skinner v. Oklahoma*, 316 U.S. 535, 541 (1942) (“Marriage and procreation are fundamental to the very existence and survival of the race. The power to sterilize, if exercised, may have subtle, far reaching and devastating effects.”); *Carey v. Population Servs. Int'l*, 431 U.S. 678, 685 (1977) (“The decision whether or not to beget or bear a child is at the very heart of this cluster of constitutionally protected choices. . . .”); Angela Campbell, *Ethos and Economics: Examining the Rationale Underlying Stem Cell and Cloning Research Policies in the United States, Germany, and Japan*, 31 AM. J.L. & MED. 47, 70 (2005) (“The constitutional right to procreative and reproductive freedom has been recognized by the United States Supreme Court in a number of cases.”). See also ROBERTSON, CHILDREN OF CHOICE, *supra* note 312, at 22–42 (arguing that there is a constitutional right to procreate using ART).

322. See Elizabeth Price Foley, *The Constitutional Implications of Human Cloning*, 42 ARIZ. L. REV. 647, 695 (2000) (“Because cloning is merely an asexual form of procreation, it is arguably as much a fundamental constitutional right as our right to procreate by either passion or the petri dish.”); John A. Robertson, *Human Cloning and the Challenge of Regulation*, 339 NEW ENG. J. MED. 119, 120 (1998) (“Whether described as “replication” or as “reproduction,” the resort to cloning is similar enough in purpose and effects to other reproduction and genetic-selection practices that it should be treated similarly.”); Pratheep Sevanthinathan, *Heavy Regulation of Human Cloning as an Alternative to a Complete Ban*, 10 QUINNIPIAC HEALTH L.J. 219, 242 (2007) (“[I]n light of *Skinner*, *Lifchez*, and the abortion cases, there seems to be a constitutionally protected right to procreate and therefore there may be a right to reproductive cloning.”).

323. Lori B. Andrews, *Is There a Right to Clone? Constitutional Challenges to Bans on Human Cloning*, 11 HARV. J.L. & TECH. 643, 666–67 (1998) (“[C]loning is too qualitatively different from normal reproduction and from the types of assisted reproduction protected by the *Lifchez* case to simply assume the same Constitutional protections apply.”); Kass, *The Wisdom of Repugnance*, *supra* note 168, at 699 (“The

rely on the arguments I addressed earlier in this paper, which, as I have explained, are founded on false assumptions.³²⁴

However, even among scholars who support recognition of the right to clone as a fundamental right, there are disagreements regarding which uses of cloning should be more valued. John A. Robertson suggests that individuals are interested in cloning for two reasons: infertility and genetic selection/design.³²⁵ The first group includes those who are infertile or suffer from reproductive failure; for them, cloning is the only way to have a genetically-related child. Robertson places lesbian couples in this group because, while they might not be infertile as that term is traditionally understood, their right to choose a relationship that does not involve male reproductive organs should be protected if possible.³²⁶ Applying this rationale, many transgender and intersex individuals would also fall into this category, as cloning may offer their only opportunity to have a genetically-related child with minimum third party involvement.

The second group Robertson identifies includes individuals who seek to use cloning solely for purposes of selecting the child's genome.³²⁷ He argues that the people in this category have a weaker claim to constitutional protection, and that policymakers are entitled to prohibit them from cloning or at least to give priority to the first group. This camp includes fertile people who choose to clone their child, whether alive or dead, in order to have a twin of that child. Robertson includes gay men in this camp as well.³²⁸ He argues that because gene-splicing techniques are not likely to be available in the near future, gay men acquire no clear advantage by using cloning, since they will still require of the assistance of a surrogate mother and egg donor.³²⁹

While I agree that good public policy will take into consideration the purposes of using cloning, I think Robertson places too much emphasis on reproductive failure as the basis for using cloning and focuses too much on genetics as the factor that determines one's right to use cloning. Without gene splicing, cloning does not assist LGBTI people in having genetically-related children any more than current ARTs. Cloning does, however,

assertion of a negative 'right to reproduce' certainly makes sense when it claims protection against state interference with procreative liberty, say, through a program of compulsory sterilization. But surely it cannot be the basis of a tort claim against nature, to be made good by technology, should free efforts at natural procreation fail When the exercise of a previously innocuous freedom now involves or impinges on troublesome practices that the original freedom never was intended to reach, the general presumption of liberty needs to be reconsidered.").

324. See *supra* Part V.

325. Robertson, *Two Models of Human Cloning*, *supra* note 81, at 617–18.

326. *Id.* at 635–36.

327. *Id.* at 627–31.

328. *Id.* at 636–37.

329. *Id.*

reduce third-party involvement in the process. With regard to the fundamental right to procreate free from government intervention, I would suggest that the dividing principle should be the harm principle, rather than the question of who has a “right” to have genetically-related child. The harm principle suggests that the entire LGBTI community is disadvantaged by their limited options, and that they therefore have a compelling interest in cloning that should be recognized even if they are not “infertile” for the purposes of other ARTs. Accordingly, as long as the use of cloning does not harm anyone, there is no reason to interfere with the private decision to use cloning as a method for having children. The law does not prohibit the use of surrogacy arrangements and organ donation, both of which have the potential to result in exploitation.³³⁰ Cloning, by contrast, may actually *reduce* the involvement of third parties, thereby reducing the chance of exploitation. If surrogacy is not banned in the United States, there is no reason to ban other technologies that might serve to reduce any harm that may be caused by surrogacy and similar arrangements. Denying LGBTI people the use of cloning infringes upon their right to be free from state interference in reproductive and relational decision-making.

More to the point, the right to procreate without the state intervention is not based solely on a right to make private choices. One of the rationales the Supreme Court relied on in *Roe v. Wade*³³¹ is that the proper basis for women’s right to private sexual choices “is not privacy but equal social standing.”³³² Restrictions on abortions contributed to women’s inequality as a class. Thus, as at least one scholar has suggested, “The equality interpretation of *Roe*—and particularly the notion that limits on abortion are a form of class legislation—will be increasingly important as we encounter new reproductive technologies like cloning”³³³ Under this

330. See, e.g., *supra* Part II(B).

331. 410 U.S. 113 (1973).

332. See Balkin, *supra* note 12, at 844–6 (“*Roe v. Wade* was premised on three ideas: First, a fertilized ovum does not obtain constitutional rights from the moment of conception. Second, the state nevertheless has legitimate and powerful interests in the life and potential personhood of the developing embryo or fetus. Third, those interests, although quite important, must yield, at least in the earlier stages of the pregnancy, to preserve the rights of women.”).

333. *Id.* at 855. Balkin, however, speculates that “[c]loning and other genetic technologies are not necessary to ameliorate women’s inequalities with men, and indeed one can easily imagine how these technologies might someday be used to undermine women’s equality.” *Id.* at 856. Balkin concludes that cloning may pose some risks for women and will not serve as an equalizer for women because it will increase demand for eggs and wombs, creating pressure for women—especially poor women—to serve as egg donors and gestation mothers, possibly with some risk to their health. Balkin does not consider the great advantage that cloning offers to LGBTI people, and also does not acknowledge how cloning may offer great advantages to women by releasing them from the need for sperm donors, or by allowing them to get pregnant at an older age. See, e.g., Marie Aline Seabra Ferreira, *The Sexual Politics of Human Cloning: Mothering and Its*

framework, a ban on cloning, which directly disadvantages the LGBTI community and further perpetuates existing inequalities, should be invalidated.

D. Laws That Discriminate Against LGBTI People Merit Heightened Scrutiny

1. Federal Funding Ban

The mere fact that a group is treated differently than other groups does not immediately suggest that the Equal Protection Clause has been violated. By their very nature, laws categorize people into groups, benefiting some at the expense of others.³³⁴ The Supreme Court uses a three-tiered approach to determine whether a law that disadvantages a class of people violates the Equal Protection Clause. In general, a law will be upheld so long as it is “rationally related to a legitimate state interest.”³³⁵ However, if the law is alleged to disadvantage a “protected” class (classes delineated by race or national origin being the key example) or to obstruct a fundamental right, the Court will typically apply a higher level of scrutiny.³³⁶ A law that disadvantages all African-Americans vis-à-vis other Americans, for example, will only be upheld if the law is “narrowly tailored” to a “compelling governmental interest.”³³⁷ In the middle tier, a law disadvantaging a group that receives intermediate scrutiny—women, for example—will be upheld only if it is *substantially* related to an important government interest.³³⁸

Vicissitudes, 4 J. ASSOC. RESEARCH MOTHERING 113 (2002) (arguing that cloning can be the signifier of a real equality for women and bring about real change in sex roles, as women will no longer need to be immediately connected to motherhood because men can have children independently; because of this, women will no longer be seen as automatic care providers and will not be enlisted into procreative projects by virtue of their anatomy). See also *supra* note 12.

334. See, e.g., *Skinner v. Oklahoma*, 316 U.S. 535, 539–40 (1942) (“Under our constitutional system the States in determining the reach and scope of particular legislation need not provide ‘abstract symmetry.’”); *Patson v. Pennsylvania*, 232 U.S. 138, 144 (1914) (“They may mark and set apart the classes and types of problems according to the needs and as dictated or suggested by experience.”) (internal citations omitted).

335. *Cleburne v. Cleburne Living Center*, 473 U.S. 432, 440 (1985).

336. See, e.g., *Kadrmas v. Dickinson Pub. Schs.*, 487 U.S. 450, 457–58 (“Unless a statute provokes ‘strict judicial scrutiny’ because it interferes with a ‘fundamental right’ or discriminates against a ‘suspect class,’ it will ordinarily survive an equal protection attack so long as the challenged classification is rationally related to a legitimate governmental purpose.”).

337. *Wygant v. Jackson Bd. of Educ.*, 476 U.S. 267, 274 (1985).

338. See *Craig v. Boren*, 429 U.S. 190, 197 (1976) (“To withstand constitutional challenge, previous cases establish that classifications by gender must serve important governmental objectives and must be substantially related to the achievement of those objectives.”).

It is not clear what level of scrutiny would be accorded LGBTI individuals under an equal protection analysis. At present, gays and lesbians are not recognized as a protected class, and laws alleged to discriminate against them receive only rational basis review.³³⁹ However, two federal courts recently suggested in dicta that classifications based upon sexual orientation should be reviewed using a standard more searching than rational basis.³⁴⁰

Significantly, the U.S. Attorney General recently announced that “classifications based on sexual orientation should be subject to a more heightened standard of scrutiny.”³⁴¹ While the Supreme Court, not the Department of Justice, ultimately decides what level of scrutiny to apply in challenges to laws that discriminate against a particular class, this announcement nevertheless provides valuable support for future claims that discrimination against LGB people merits a heightened level of review.

Even if courts will not apply heightened scrutiny to the federal ban on funding for reproductive cloning research, a court may decide to apply

339. See also Kenji Yoshino, *The New Equal Protection*, 124 HARV. L. REV. 747, 756 (2010). Yoshino also notes that it is possible that the Supreme Court will give formal heightened scrutiny to gays and lesbians, but suggests that the Court has “every incentive” to apply the “rational basis with bite” standard instead of introducing a new class of individuals who benefit from strict scrutiny. *Id.* at 761–62.

340. See *Perry v. Schwarzenegger*, 704 F. Supp. 2d 921, 997 (N.D. Cal. 2010) (“Although Proposition 8 fails to possess even a rational basis, the evidence presented at trial shows that gays and lesbians are the type of minority strict scrutiny was designed to protect.”); *Collins v. Brewer*, 727 F.Supp.2d 797, 804 (D. Ariz. July 23, 2010) (“Some form of heightened scrutiny might apply to plaintiffs’ claims, but it is unnecessary to decide whether or which type of heightened scrutiny might apply to plaintiffs’ claims. . . . Moreover, the court applies a ‘more searching form of rational basis review’ when a classification harms politically unpopular groups or personal relationships.”). Furthermore, the Ninth Circuit Court of Appeals recently applied a heightened standard of review in a challenge to “Don’t Ask, Don’t Tell,” the government policy that banned openly gay soldiers from serving in the military. *Witt v. Dep’t of the Air Force*, 527 F.3d 806, 807–09 (9th Cir. 2008) (holding that the Don’t Ask, Don’t Tell Act constitutes an intrusion “upon the personal and private lives of homosexuals, in a manner that implicates [substantive due process rights], and is subject to heightened scrutiny.”). While the Ninth Circuit applied heightened scrutiny only to the plaintiff’s substantive due process claim and not her equal protection claim, the Supreme Court’s constitutional jurisprudence, especially in the field of reproduction, shows that “equal protection and substantive due process . . . [are] regularly interlocking and powerfully complementary sources of protection.” Laurence H. Tribe, *Lawrence v. Texas: The “Fundamental Right” That Dare Not Speak Its Name*, 117 HARV. L. REV. 1893, 1902 n.32 (2004). Tribe thus argues that “due process and equal protection, far from having separate missions and entailing different inquiries, are profoundly interlocked in a legal double helix.” *Id.* at 1989. Thus, an argument might be made for extending strict scrutiny to equal protection claims brought by gay and lesbian plaintiffs.

341. Statement of the Attorney General on Litigation Involving the Defense of Marriage Act, Feb 23, 2011, available at <http://www.justice.gov/opa/pr/2011/February/11-ag-222.html>.

“rational basis with bite.”³⁴² Under this framework, the court may invalidate legislation under rational basis review when the legislation is motivated by animus toward a specific group.³⁴³ Unfortunately, such animosity will be hard to establish in the cloning context because restrictions on cloning are likely to appear neutral on their face, as they prohibit the use of cloning by all individuals, not just gays and lesbians.³⁴⁴

Because it is not clear what level of scrutiny a court would apply, when I analyze equal protection claims in the following section I consider the likely outcome under both rational basis and heightened scrutiny.

2. Total Ban on Cloning

Although it cannot be predicted with any certainty, it is not impossible that a challenge to a total ban on cloning would be examined under some form of heightened scrutiny, based either on the infringement of a fundamental right or its disproportionate impact on the group most affected by the prohibition to clone (the LGBTI population). First, as stated before, if the ban on human cloning disproportionately affects LGBTI couples, it may receive a higher standard of review for the reasons given above. Second, as stated above, the right to be free from government interference has long been recognized as a fundamental right that triggers heightened scrutiny. Based on this theory, a future ban on reproductive cloning constitutes a restriction on exercising a fundamental right and will be evaluated by a court using strict scrutiny. If the use of ART by opposite-sex couples, especially when using a third party’s gamete, is a fundamental right, cloning should be likewise. Therefore, when I analyze the ban on cloning, I will use heightened scrutiny.

E. There Is No Legitimate State Interest to Support the Current Funding Ban or Any Future Cloning Ban

1. Federal Funding Ban

Having addressed the level of review the Supreme Court is likely to

342. Yoshino, *The New Equal Protection*, *supra* note 339, at 759–63.

343. *Id.* The Supreme Court has applied a heightened version of rational basis review in *Romer v. Evans*, 517 U.S. 620 (1996) (invalidating an amendment to the Colorado state constitution that would have prevented cities, towns, and counties in Colorado from recognizing gays and lesbians as a protected class), and *Cleburne v. Cleburne Living Center*, 473 U.S. 432 (1985) (overturning the City of Cleburne’s denial of a special use permit to a group home for “13 retarded men and women”).

344. See Foley, *supra* note 322, at 709 (“The possible discriminatory impact of a cloning ban on homosexuals and women would not be enough, ipso facto, to warrant invalidation under the Equal Protection Clause; a discriminatory purpose would have to be demonstrated.”).

apply to a constitutional challenge to the law banning the funding of cloning research and to a total ban on cloning itself, I turn now to the question of whether the ban on funding cloning research serves a legitimate state interest (as required under rational basis review) or is narrowly tailored to a compelling state interest (as required under heightened scrutiny). The two government committees commissioned to investigate cloning concluded that cloning is unethical because it is risky. While both found that cloning implicates other ethical issues, their conclusions were primarily based on concerns about safety.³⁴⁵ The government would thus likely argue that the ban is meant to prevent the harm that would occur in the process of cloning research—for example, harm to cloned human fetuses that are not yet viable and that may die as part of the ordinary course of research, or to eventual human subjects who agree to participate in the gestation of cloned children. However, the risks involved in cloning research are not fundamentally different from those implicated in research on other reproductive technologies.³⁴⁶ While cloning research may raise some unique issues of safety, in other ways it may be safer than coital reproduction because DNA with known abnormalities is less likely to be cloned.³⁴⁷ Because several U.S. agencies carefully regulate such research to ensure its safety, concerns about physical safety will rarely provide a sound basis for prohibiting cloning by couples seeking to have biologically-related children for rearing.³⁴⁸

Even if a court finds that this safety rationale is legitimate or even compelling, the federal ban on funding for reproductive cloning is arguably not related—much less narrowly tailored—to that interest. To the contrary, it may even be *counter* to such an interest. The ban on research funding will not prevent the technology from being developed. Rather, it will negatively impact the way in which the technology develops.³⁴⁹ Cloning is currently researched in other countries and in private laboratories in the United States.³⁵⁰ Due to the lack of support by federal funding, the ban in

345. NAT'L BIOETHICS ADVISORY COMM'N, *supra* note 172, at ii ("At present, the use of this technique to create a child would be a premature experiment that would expose the fetus and the developing child to unacceptable risks. This in itself might be sufficient to justify a prohibition on cloning human beings at this time"); PRESIDENT'S COUNCIL ON BIOETHICS, *supra* note 108, at 99–105 ("[C]loning-to-produce-children is not now safe [C]oncerns revolve around potential dangers to the cloned child, as well as to the egg donor and the woman who would carry the cloned child to birth.").

346. *See, e.g.*, MACINTOSH, *supra* note 176, at 64–69.

347. John A. Robertson, *Liberty, Identity, and Human Cloning*, 76 TEX. L. REV. 1371, 1411 (1998).

348. *Id.*

349. Daar, *supra* note 4, at 569.

350. *See* Annas, Andrews & Isasi, *supra* note 193, at 165 (stating that the ban on the use of federal funds for cloning has had little effect on private fertility research and clinics). *See generally* Camporesi & Bortolotti, *supra* note 21, at 1–2 (discussing American researchers who transferred a cloned human embryo in Cyprus because the law in the

particular states, and the FDA's possible prohibitions on use, "[a] ban in any particular U.S. state will merely move operations across state lines,"³⁵¹ or to private laboratories within the United States with no government supervision at all.³⁵² As a result, the much-discussed risks to the cloned child may, in fact, be intensified by potentially irresponsible, unregulated studies.³⁵³ Furthermore, while government-funded research must comply with the Common Rule, which provides guidelines for the protection of research subjects, private researchers are not bound by these rules.³⁵⁴ The ban on using federal funding for cloning research has therefore simply shifted the development of knowledge to other places and lessened the government's control over the quality and safety of cloning technology. It seems clear, therefore, that the ban on funding research cloning does not further any legitimate government concern and may, in fact, be counterproductive. As such, the federal ban may not survive even rational basis scrutiny.³⁵⁵ A less harmful means of addressing this issue would be to

United States possibly prohibited human cloning and noting that the company stated they did not conduct the research in Cyprus or the United States); Nell Boyce & David E. Kaplan, *The God Game No More: The Feds Crack Down on a Human Cloning Lab*, U.S. NEWS & WORLD REP., July 9, 2001, at 20 (reporting on attempts to clone human beings in New York, which were stopped after the intervention of the FDA, and noting that the laboratory subsequently moved overseas).

351. *Id.* at 569.

352. *Id.* at 569–70 ("But we are also aware of hints at secret research being conducted on reproductive cloning. Those hints are coming from places outside the United States, but we are not immune from clandestine efforts at human cloning within our borders. Last summer at a symposium sponsored by the National Academy of Sciences, Dr. Brigitte Boisselier, a chemist with Clonaid, announced that she had made progress toward human cloning. Though Dr. Boisselier did not discuss the location of her research efforts, later reports revealed that she had been operating in a laboratory in Nitro, West Virginia. The 'laboratory,' as it turns out, was a single classroom in the Nitro Community Center, a facility that also houses a day care center and the Nitro Police Department.").

353. LIM, *supra* note 87, at 321–22 ("Unreasonable government restrictions may lead undesirably to clandestine activities in some offshore laboratory . . .").

354. See ANDREA L. BONNICKSEN, CRAFTING A CLONING POLICY 120–22 (2002) (explaining that all public agencies are required to comply with the Federal Policy for the Protection of Human Subjects, known as the Common Rule, a uniform requirement in cases involving the participation of human subjects). While the FDA requires research on cloning to comply with these rules, its jurisdiction to do so is doubtful, as discussed *supra* Part VI(A). See also REBECCA DRESSER, HUMAN CLONING AND THE FDA: THE HASTING CENTER REPORT (2003), http://findarticles.com/p/articles/mi_go2103/is_3_33/ai_n9103292/?tag=content;coll ("Human cloning fits awkwardly, if at all, into the regulatory definitions.").

355. Further, the ban on research cloning harms LGBTI individuals in particular, because the absence of government regulation also means no one ensures that research relevant to LGBTI people is being conducted. One way to divide research funding and to supervise the direction of the research would be to distribute funding by categories. See BONNICKSEN, *supra* note 354, at 132 (suggesting that the federal government could open categories of funding for cloning research). This division of funding would ensure that the specific and practical needs of the beneficiaries of cloning technologies, including the LGBTI community, are met. For example, if the government provided funding, it could

heavily regulate cloning research, directing funding to responsible and supervised studies.

2. *Total Ban on Cloning*

Because a total ban on human reproductive cloning would not simply displace research to other states or private entities, the state interest in banning reproductive cloning may be greater than its interest in banning only funding for cloning research. Moreover, the government may be more easily able to articulate a state interest in banning reproductive cloning that does not apply to research funding, such as the effect that cloning will have on the adoption market. Under rational basis review, an equal protection challenge to a ban on cloning—at least given the current state of the technology—is thus not likely to succeed. If a court applied heightened scrutiny, however, the scope of the ban on cloning would be relevant to the determination of whether a statute is narrowly tailored: a general ban may be too broad, while ban on specific uses of cloning may be constitutional.

Assuming that cloning eventually becomes safe and efficient enough for use in human reproduction, the government may likely nevertheless justify a ban by relying on at least some of the arguments discussed throughout this paper. As I have offered responses to those arguments already, I focus now on an argument the government may put forth that is less easily countered: that the effect of cloning on adoption provides a compelling state interest for banning the use of reproductive cloning.

Some scholars have expressed concern that efficient reproductive cloning might adversely affect the adoption market.³⁵⁶ Currently, in the United States, three quarters of women seeking to adopt are sterile or have some kind of infertility problem, and most individuals try fertility treatments before adopting.³⁵⁷ The opportunity to have a genetically-related child might cause some to choose cloning if it were available. Anita L. Allen suggests that the high demand for, and low availability of, white

ensure that one category included research on gene-splicing technology and its combination with cloning. The LGBTI community might also benefit from the creation of a category dedicating research funds to the exploration of different methods of cloning, such as SCNT and parthenogenesis. As long as such supervision is denied by the ban, the harm to those who make use of asexual reproduction continues to grow. While it is an open question whether the government has a constitutional obligation to direct money to research specific issues, it is definitely an appropriate aim of fair legislation.

356. See Neil Levy & Mianna Lotz, *Reproductive Cloning and a (Kind of) Genetic Fallacy*, 19 *BIOETHICS* 232, 247 (2005) (“If cloning were to become widely available, the primary motive for adoption would be removed.”). See also Allen, *supra* note 18, at 57.

357. U.S. DEP’T. OF HEALTH & HUMAN SERVICES, SERIES 23 NO. 27: ADOPTION EXPERIENCES OF WOMEN AND MEN AND DEMAND FOR CHILDREN TO ADOPT BY WOMEN 18-44 YEARS OF AGE IN THE UNITED STATES, 2002 2, 11 (2008), available at http://www.cdc.gov/nchs/data/series/sr_23/sr23_027.pdf.

children in the United States available for adoption in the United States will cause some potential parents to choose cloning over adoption.³⁵⁸ In addition, LGBTI people currently make up a substantial portion of the adoption market.³⁵⁹ Thus, if a large portion of the LGBTI community chooses cloning rather than adoption, a significant number of children waiting to be adopted could be left without adoptive parents.³⁶⁰ Of course, any effect that cloning *may* have on the adoption market remains speculative. We do not know how expensive cloning might be, how successful and appealing the technology will be, or any of the numerous other factors that could influence the popularity of cloning compared to adoption.³⁶¹

Will a possible reduction in adoption rates provide the government with a legitimate or even compelling reason to justify a prohibition on use of cloning? The government has an interest in adoption based on the need to ensure that every citizen has a home and every child a legal guardian. But if cloning could be banned on the basis of an expected reduction in adoption rates, IVF could be banned as well. If the government wishes to make adoption more attractive, there exist many more moderate and less harmful ways to do so. First and foremost, states that prohibit LGBTI parents from adopting could lift their bans. Additionally, the bureaucracy accompanying the adoption process could be decreased and practices that may deter some prospective parents, such as open adoption, could be reduced or eliminated. Finally, the government could offer additional financial incentives for people who adopt, or at least subsidize adoption

358. Allen, *supra* note 18, at 57.

359. GATES, BADGETT, MACOMBER & CHAMBERS, *supra* note 14, at 6.

360. Some experience with other ARTs supports this assumption. Data suggests that the number of adoptions decreased after ART became an option *See, e.g.*, Raquel Bernal, Luoja Hu, Chiaki Moriguchi & Eva Nagypal, *Child Adoption in the United States: Historical Trends and the Determinants of Adoption Demand and Supply, 1951-2002*, at 11 (Dec. 26, 2007) (unpublished report on file at Northwestern University Dep't. of Economics), *available at* <http://faculty.wcas.northwestern.edu/~cmo938/adoptAEA.pdf> ("The ratio of women who delivered biological children with ART to the number of women who adopted unrelated children domestically has increased from 15% in 1992, 34% in 1996 and to 60% in 2002 . . . in other words, ART likely had a sizeable impact on the demand for domestic infants in recent years."). A recent study suggests that public policy has a significant influence on whether individuals choose adoption over IVF. For example, increase in the adoption subsidies correlates with a raise in the number of adoptions. *See generally* Gumus & Lee, *supra* note 102, at 21, 24-25. Conversely, Glenn Cohen and Daniel L. Chen found no empirical support to the assumption that states that mandate covering IVF in health insurance experience decreases in the number of adoptions. Cohen & Chen, *Trading-Off Reproductive Technology and Adoption: Does Subsidizing IVF Decrease Adoption Rates and Should It Matter?*, 95 MINN. L. REV. 485, 554 (2010).

361. In addition, there are reasons that people choose to adopt that might safeguard the adoption market from the effects of cloning. For example, some people adopt for humanitarian and religious reasons while others adopt for more pragmatic reasons like age or the desire to avoid pregnancy and childbirth.

fees.

F. Conclusion

Almost certainly, my legal arguments would not be accepted by the Supreme Court in its current incarnation. This is not to say, however, that the analysis is incorrect. By the time that cloning is safe and ready for use, the Court may offer greater protection for LGB (or LGBTI) individuals, or may look more favorably upon reproductive technologies. Just as with IVF, cloning may slowly come to be more accepted over time. The composition of the Court will continue to change, and the jurisprudence on reproductive rights and assisted reproductive technologies may shift as well. It is inevitable that some courts will have to adjudicate cases regarding ART, perhaps resulting in the creation of rights that do not now exist. Finally, I have attempted to offer an argument that may be useful not only in litigation, but also before Congress or state legislatures. Biology as it is currently understood should not be allowed to control our understanding of what is scientifically and legally possible.

IX.

CONCLUSION

Prospective parents in the LGBTI community face a number of obstacles. Cloning—to the extent that is safe and available—could present a better alternative than the options currently available to those who prefer a genetically-related child. It could provide an easier way to have such a child with minimal involvement of third parties. Combined with gene splicing, it might allow for LGBTI couples, or even close friends, to have a child who carries the mixed genes of both parties. In order for such possibilities to become a reality, however, we need further research. Members of the LGBTI community should express their interest in this research to ensure that they are not ultimately excluded from the opportunity to use it.

At the same time, cloning should not be treated as the key to LGBTI equality. In the midst of recent debates over same-sex marriage, some commentators have suggested that reproductive cloning would work to undermine arguments against same-sex marriage.³⁶² Some gay-rights

362. Marcy Darnovsky, *Female Sperm and Gay Guinea Pigs*, S.F. CHRON., Mar. 12, 2008, at C9, available at <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/03/12/EDBNVHRRR.DTL>. (“[A] few researchers and pundits are proposing that same-sex procreation with bio-engineered gametes will undermine one of the key arguments of same-sex marriage opponents.”); LEE M. SILVER, REMAKING EDEN, CLONING AND BEYOND IN A BRAVE NEW WORLD 188 (1997) (“[I]t is interesting to note that a major argument used by the Religious Right in its opposition to same-sex unions is based on the notion that marriage is supposed to serve the purpose of procreation. According to this line of reasoning, gay unions should not be sanctioned because they are biologically barren. If we

advocates argue that allowing LGBTI individuals to give birth through cloning with a same-sex partner would actually help the fight for marriage equality by making them part of the group that is able to reproduce genetic children not unlike heterosexual couples who use ARTs.³⁶³ Professor David Orentlicher goes so far as to suggest that the use of gene splicing could make “the gay family . . . look more like the heterosexual family, and this could help diminish societal stigmatization of gays. Prejudice is rooted in large part in perceived differences. Lessening the differences between gays and heterosexuals might therefore help combat discrimination by heterosexuals against gay persons.”³⁶⁴

Cloning should *not* be used as a means to promote same-sex marriage by making queer families more closely resemble traditional families. Ending discrimination against the LGBTI community should not depend on establishing a similarity to heterosexuals but should instead be based on the recognition of each individual’s autonomy and freedom to practice whatever form of gender or sexual orientation they desire. As stated by Marcy Darnovsky, Associate Executive Director at the Center for Genetics and Society:

Anti-gay sentiment is not caused by the inability of same-sex couples to have biologically related children, but by fear and intolerance. The solutions to homophobia will not be found in test tubes and Petri dishes, but in challenging and changing our laws, policies and culture.³⁶⁵

If cloning were to become universally available for the LGBTI community, it does not follow that everyone in the community should be expected to have children, much less genetically-related children.³⁶⁶ As more LGBTI couples and individuals begin to behave according to heterosexual norms, this may result in the creation of a subordinate class of people, discriminated against for not complying with the (now larger and even more powerful) dominant culture. It is for this reason that I have subtitled this Article “Cautious Optimism,” as we must be mindful of the unintended consequences that may attend the push for reproductive

take the Religious Right at its word, the ability of gay women, or gay men, to co-procreate should validate their right to become married.”).

363. *Id.*

364. Orentlicher, *supra* note 56, at 651, 653.

365. Darnovsky, *supra* note 362, at C-9.

366. Some queer theorists have expressed a similar concern with regard to same-sex marriage. *See, e.g.*, MICHAEL WARNER, THE TROUBLE WITH NORMAL: SEX, POLITICS AND THE ETHICS OF QUEER LIFE (1999). Warner argues that the gay movement has become a normalizing movement toward a “post-gay” pseudo-dignity, awarded by the heterosexual dominant culture for disavowing sex and politics surrounding sex. This results in the establishment of a hierarchical order in which one queer ethically dominates another, allowing the dominant culture to decide who gets to accept whom. *Id.* at 41–80.

cloning by the LGBTI community. Nevertheless, it remains important to fight for political goals even as a group remains committed to critique and transformation.

In lobbying for cloning rights and regulation, the LGBTI community should take steps to ensure that the use of reproductive cloning does not serve to create new, internal social hierarchies among those members of the community who do and do not have genetically-related children. At present, cloning opponents continue to rely on homophobic fears and heterosexist assumptions about what families “should” look like. Unfounded theories about a gay agenda must be challenged for what they are—outright bigotry and fear-mongering. More sophisticated criticisms focused on maintaining diversity in the gene pool, protecting the welfare of the child, and addressing ethical issues surrounding the sometimes slippery slope of using artificial processes in reproduction should be responded to by relying on sound reasoning and the best evidence available to cloning advocates. The LGBTI community should work to simultaneously expose the base homophobic assumptions behind such arguments and to debunk the myth that homosexuality is immoral, unnatural, and harmful to society.

In the foreseeable future, the debate over cloning is likely to remain complicated and tense. There is still much to be learned about cloning before it can be declared safe and efficient. As technology so rapidly changes and develops, it is likely that new reproductive methods that are similar to cloning or with a similar mission will become available. These technologies will likely create new challenges, new vocabularies, and more ethical debates. Yet the opposition to new reproductive technologies, especially those that would further the expansion of nontraditional families, would likely fall victim to similar arguments and opposition. However, heterosexist arguments should not provide the grounds on which the feasibility of cloning or other reproductive technologies are determined. While every technology should be treated and considered for itself, this Article provides tools to deconstruct these arguments. Public dialogue on cloning regulation should include the LGBTI community as we work together to create a safe, effective, and promising new reproductive future.