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After Sex

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Courtney Megan Cahill*

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All of the significant symbols of American kinship are contained within the figure of sexual intercourse, itself a symbol, of course.

—David Schneider, American Kinship: A Cultural Account¹

I. INTRODUCTION

People are procreating non-sexually more than ever before.² The use of the "new reproduction"—a term that comprises alternative reproductive technologies (ARTs) like alternative insemination, *in vitro* fertilization, and surrogacy³—to reproduce has exploded⁴ in the United States since the federal government first started collecting statistics on alternative reproduction in 1992,⁵ with the numbers of both ART cycles and babies born from those cycles increasing over one hundred percent in the last two decades.⁶ In fact, some commentators predict that emerging ARTs will soon create a situation where much, if not most, human procreation will occur without sex.⁷ The boldest

- 1. David M. Schneider, American Kinship: A Cultural Account 40 (1968) [hereinafter Schneider, American Kinship]; see also id. at 40–41 ("Sexual intercourse is the symbol which provides the distinctive features or the elements in terms of which the family is defined."); David M. Schneider, Kinship and Biology, in Ansley J. Coale et al., Aspects of the Analysis of Family Structure 83, 97 (1965) ([T]here is not a kinship system known to man that does not get involved in one way or another with . . . sexual intercourse.").
- See Douglas NeJaime, The Nature of Parenthood, 126 Yale L.J. 2260, 2286 (2017) [hereinafter NeJaime, The Nature of Parenthood] (citing statistics indicating that "[t]he use of [alternative reproductive technology] soared in the first part of the twenty-first century"). Even as this Article makes a distinction between "sexual" and "non-sexual" reproduction, it recognizes that sometimes these two forms of procreation overlap. See Courtney Megan Cahill, Reproduction Reconceived, 101 Minn. L. Rev. 617, 656-71 (2016) [hereinafter Cahill, Reproduction Reconceived].
- 3. See Dorothy E. Roberts, Race and the New Reproduction, 47 Hastings L.J. 935 (1996) (referring to alternative reproductive technologies as the "new reproduction").
- 4. Judith Daar, The New Eugenics: Selective Breeding in an Era of Reproductive Technologies 14 (2017).
- 5. Id. at 10.
- 6. *Id.* at 14. Note that the true number of ART cycles is considerably higher than this statistic given that the Centers for Disease Control and Prevention (CDC), which collects statistics on alternative reproduction, does not collect data on artificial insemination, just on *in vitro* fertilization. *Id.* at 15.
- 7. See, e.g., Dov Fox, Selective Procreation in Public and Private Law, 64 UCLA L. Rev. Discourse 294, 298–99 (2016) (arguing that "[t]he decades ahead are likely to see advances" in reproductive medicine and choice that "promise opportunities" for prospective parents "to relocate procreation from the bedroom to the laboratory." (internal quotation and citation omitted)); Dov Fox, Silver Spoons and Golden Genes: Genetic Engineering and the Egalitarian Ethos, 33 Am. J.L. & Med. 567, 567–68 (2007) (making the same prediction); Henry T. Greely, The End of Sex and the Future of Human Reproduction 191 (2016) (proposing that in "forty years . . . most pregnancies, among people with good health coverage, will be started not in bed but in vitro"); id. at 34 (stating that sexual repro-

statement in this regard comes from Professor Henry Greely, who recently predicted "the end of sex" as humans' dominant method of intentional reproduction. "[I]n the next twenty to forty years," Greely says, ARTs will render sex for reproduction irrelevant.8 "[S]ex [for procreation] . . . will largely disappear," he says, "or at least decrease markedly." If Greely and others are right, then we might soon inhabit a world after sex—or at least a world after sexual procreation.

Some scholars have challenged the "end of sex" prediction on the ground that most people are unlikely to opt for technology over sex in order to reproduce. This Article challenges the "end of sex" prediction for a different reason: because sex, it contends, is unlikely to vanish as a normative ideal in the law's approach to ART and the family that results from it. It argues that even if scholars are right that sexual procreation could obsolesce as a reproductive form with the evolution of ART, the "symbolism associated with sexual reproduction" will persist for some time as a reproductive norm in the law's engagement with ART, and it will do so in ways that curtail promising technological developments, undermine technology's radical potential, and curb procreative and familial autonomy. On this account, something more than technology is necessary to enable a procreative and familial world after sex. 12

Consider by way of analogy the legal relationship between marriage and non-marriage. Where society is reputedly "twenty to forty" years away from being "after sex" as its dominant method of procreation, it is arguably just a few years away from being "after marriage" ¹³

duction is the "method of reproduction that, at least in some critical details, will be replaced in the coming decades"); Paul Knoepfler, GMO Sapiens: The Life-Changing Science of Designer Babies 9 (2016) (predicting that in just a decade or so reproductive medicine will permit "[t]he creation of people via technology rather than by sex").

- 8. Greely, supra note 7, at 1.
- 9. Id.
- 10. See Lori Andrews, Coitus Defunctus, 532 Nature 35, 35 (2016) (reviewing Henry Greely: The End of Sex and the Future of Human Reproduction (2016)) (arguing that Greely's claim that technology will "replace sex as a way to create babies" is "problematic" and doubting that most people will choose the technologies that Greely showcases).
- 11. F. Allan Hanson, Technology and Cultural Tectonics: Shifting Values and Meanings 37 (2013); see also id. (questioning whether "people [will] tenaciously cling" to the meanings associated with sexual reproduction "even as they are revealed to be obsolete").
- 12. See Martha Albertson Fineman, The Neutered Mother, The Sexual Family and Other Twentieth-Century Tragedies 5 (1995) (arguing that the "sexual family"—that is, the family associated with and produced by heterosexual intercourse—is the "norm" or "baseline" for all families).
- 13. Jeff Degraff, This Is the End of Marriage, Capitalism, and God. Finally!, Salon (Feb. 6, 2016), http://www.salon.com/2016/02/06/this_is_the_end_of_marriage_capitalism_and_god_finally/ [https://perma.unl.edu/8ZHA-9WN5] (discussing reasons why marriage rates are declining).

as its dominant method of romantic affiliation. ¹⁴ Even so, a robust scholarly literature has coalesced around the legal relationship between marriage and non-marriage, with scholars illuminating the persistence of marital law and marital norms in the regulation of non-marital relationships. ¹⁵ Referring to this dynamic as "marital supremacy," ¹⁶ scholars have shown that marriage and its associated ideals remain the "metric," ¹⁷ "yardstick," ¹⁸ or baseline for all relationships, even in an increasingly non-marital world.

This Article argues that the law's engagement with ART reflects a similar dynamic—one which it calls sexual supremacy. If marital supremacy is what happens when the law makes ideal marriage the measure of non-marital relationships, 19 then sexual supremacy is what happens when the law makes ideal sexual procreation the measure of non-sexual procreation. In both cases, a non-traditional relationship or practice is regulated in the shadow of ideas and ideals about a traditional relationship or practice. This Article uses the more critically developed concept of marital supremacy to help bring into focus this dynamic of sexual supremacy, a phenomenon that not only casts doubt on predictions about getting to a point after sex in human reproduction, but also is in tension with the constitutional law of the family.

A close look at the law's engagement with ART in areas that have been the recent subject of intense debate—surrogacy,²⁰ gene edit-

- 14. Jay L. Zagorsky, Marriage May Be Obsolete: Fewer Couples Are Getting Hitched than Ever Before, SALON (June 3, 2016), http://www.salon.com/2016/06/03/marri age_may_be_obsolete_fewer_couples_are_getting_hitched_than_ever_before_part ner/ [https://perma.unl.edu/7AFK-7T2E] (discussing declining marriage rates worldwide).
- 15. See infra section III.A.
- 16. Serena Mayeri, *Marital Supremacy and the Constitution of the Nonmarital Family*, 103 Cal. L. Rev. 1277, 1279 n.2 (2015) (using the term marital supremacy "to refer broadly to the legal privileging of marriage over non-marriage, and marital over nonmarital families").
- 17. Albertina Antognini, *The Law of Nonmarriage*, 58 B.C. L. Rev. 1, 59 (2017) [hereinafter Antognini, *The Law of Nonmarriage*] (discussing and illuminating the persistence of marital norms in non-marriage regulation).
- 18. *Id.* at 12; see also Albertina Antognini, *Nonmarital Exceptionalism*, 51 U.C. Davis L. Rev. (forthcoming 2018) (manuscript at 6) (on file with author) [hereinafter Antognini, *Nonmarital Exceptionalism*] (stating that in many cases marriage remains "the gold standard" when courts evaluate non-marital relationships). For other recent work on this aspect of marital supremacy, see *infra* notes 104–106 & 116 and accompanying text.
- 19. See infra section III.A for a more complete explanation of this dynamic.
- 20. Surrogacy has long raised ethical and legal concerns, but has recently emerged as a subject of scholarly and legislative interest in the wake of marriage equality for same-sex couples, many of whom rely on surrogacy as their only method of biological family formation. See NeJaime, The Nature of Parenthood, supra note 2, at 2351 (discussing the constitutional status of surrogacy laws in the wake of marriage equality for same-sex couples); Michael Boucai, Is Assisted Procreation an

ing,²¹ and gamete donor anonymity²²—reveals signs of sexual supremacy, that is, signs that the law is willing to accommodate ART only to the extent that it conforms to ideals associated with sexual procreation and the sexually-produced family. To be sure, in some important ways the law has discarded paradigms about sexual procreation in its approach to ART. Many jurisdictions, for instance, permit alternative insemination by single women, and a few have expanded the number of legal parents that a child can have beyond the traditional parental dyad.²³ In many other ways, however, the law has retained sexual supremacy in a range of contested areas.

Consider surrogacy law. Some states will not recognize surrogacy agreements if the intended parents are unmarried, lack a biological connection to any child that may result from those agreements, or are unable to satisfy a state's implicit requirement of dual-gender parenting. Scholars have criticized these regimes for prioritizing marriage, biology, and gender over other routes of family formation, like function and intent. We might also criticize them for embodying sexual supremacy: the use of ideas and ideals about sexual procreation to regulate non-sexual procreation. Surrogacy parentage law privileges

LGBT Right?, 2016 Wis. L. Rev. 1065, 1067 (discussing "marriage equality's impact . . . in the campaign to lift" surrogacy bans in some states).

^{21.} Gene editing through technologies like CRISPR/Cas9 has emerged as a site of intense controversy in light of recent scientific developments in that area. See infra notes 209–210 and accompanying text.

^{22.} Anonymous egg and sperm donation is legal in the United States and is the dominant industry norm, but several commentators have recently argued in favor of legislative bans on that practice. For a summary of these commentators' arguments, see I. Glenn Cohen, Sperm and Egg Donor Anonymity: Legal and Ethical Issues, in The Oxford Handbook of Reproductive Ethics 527 (Leslie Francis, ed., 2016) (discussing the "raging debate" in the United States today over sperm donor anonymity and summarizing the various arguments offered by opponents and proponents of that practice).

^{23.} On the trend toward legal recognition of multiple parents, see June Carbone & Naomi Cahn, Parents, Babies, and More Parents, 92 Chi.-Kent L. Rev. 9 (2017). Both of these developments—single parenting and poly-parenting—disrupt some of the norms associated with traditional sexual procreation, including the norm of two and its attendant gender-based assumptions regarding essential mothering and fathering. Even here, though, sexual procreative norms remain, as when jurisdictions continue to remain silent on the legal status of children born to single women as a result of alternative insemination. See infra note 173 and accompanying text.

^{24.} See infra subsection III.B.1.

^{25.} See NeJaime, The Nature of Parenthood, supra note 2, at 2307–16; see also Douglas NeJaime, Marriage Equality and the New Parenthood, 129 Harv. L. Rev. 1185, 1258–59 (2016) [hereinafter NeJaime, The New Parenthood] (stating that "[i]n a family law system in which intent and function govern over biology and gender, same-sex and different-sex couples are similarly situated, both inside and outside marriage," and that "in a world in which marriage equality is accepted—the post-Obergefell world—sexual-orientation nondiscrimination becomes a more universal norm").

norms—like marriage, biology, and gender—that have long been associated in law and culture with sexual procreation and the "sexual family": the nuclear family bound by marriage and biology and "founded on the heterosexual couple."²⁶

Consider also ART domains beyond surrogacy. The well-worn bioethical critique of alternative reproduction as a process that "designs children" (and that warrants regulation for precisely that reason)²⁷ is animated by sexual supremacy, as are the numerous recent proposals to eliminate a key industry norm in the practice of alternative reproduction: gamete donor anonymity. In both cases, sexual procreation is the dominant model for alternative reproduction. Opponents of designer procreation either argue or strongly suggest that alternative reproduction ought to approximate the naturalness and randomness of sexual procreation,²⁸ and opponents of gamete donor anonymity either argue or strongly suggest that donor-conceived children ought to enjoy the same right as sexually-conceived children to know their biological progenitors.²⁹

All of these examples show the law regulating and engaging with non-sexual reproduction in the shadow of sexual procreation—not sexual procreation as it actually exists, moreover, but as it ideally exists. For instance, no jurisdiction requires sexual procreators to be married or engage in dual-gender parenting, but some jurisdictions require the parents of children produced through surrogacy to satisfy both of those requirements. Similarly, designer procreation happens all the time with sexual procreation, yet no one supports prohibiting it in that context. Finally, sexually-conceived children are not entitled to know the identity of both of their biological progenitors, even as commentators increasingly argue that donor-conceived children ought to enjoy that so-called right. Looking closely at sexual supremacy, as this Article does, therefore reveals two aspects of it: the use of sexual procreation as a metric or baseline for the regulation of non-sexual reproduction, and the asymmetrical application of ideals about sexual reproduction to non-sexual reproduction.

The persistence of norms relating to sexual procreation in the law's engagement with alternative reproduction is not surprising. During ART's early medical use, doctors sexualized certain ART procedures—

^{26.} Fineman, supra note 12, at 145.

^{27.} See infra notes 216–45 and accompanying text. The scholar most closely allied with this position is Michael Sandel. See generally Michael J. Sandel, The Case Against Perfection: Ethics in the Age of Genetic Engineering (2007) (discussing and critiquing "designer children" and "designer parents").

^{28.} See infra subsection III.B.2.

^{29.} The scholar most closely allied with this position is Naomi Cahn. See, e.g., Naomi Cahn, Do Tell! The Rights of Donor-Conceived Offspring, 42 Hofstra L. Rev. 1077 (2014) (generally discussing donor-conceived children's alleged "right to know" their genetic progenitors).

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like making the husband administer the syringe on a woman being artificially inseminated—in order to make them appear more like having sex, thereby naturalizing them.³⁰ More generally, core familial structures like marriage persist in the law even, or perhaps especially, when those structures evolve,³¹ and prominent cultural theorists have identified procreative sex as the core or "central" symbol of American kinship.³² "All of the significant symbols of American kinship are contained within the figure of sexual intercourse," the late anthropologist David Schneider wrote.³³ Indeed, many cultures "conceptualize the creation of the [very] cosmos on the model of sexual reproduction."³⁴

That said, the persistence of ideals about sexual procreation in the law's engagement with alternative reproduction makes it harder to suggest, as some scholars recently have, that sex will end in the next few decades,³⁵ or that ART represents the liberation of "sex from reproduction" and the "banishment of sex from reproduction." To be sure, scholars might be right that technology will soon make it possible for sexual reproduction to end as a reproductive form, or at least as the dominant form of intentional reproduction. The law, however, is likely to be more resistant, holding onto sexual reproduction as a reproductive norm in much the same way that the law has held onto marriage as an affective norm in the regulation of non-marriage.

If that is right, then sexual supremacy could frustrate the radical potential of the technologies that will ostensibly get us to a point after sex in intentional human reproduction, necessitating something more than scientific innovation to guarantee the end of sex's dominion in American kinship. One possibility, this Article submits, is the constitutional law of the family, which increasingly prohibits two features of sexual supremacy: the official privileging of sexual procreation and the differential treatment of sexual and alternative reproduction. This Article maintains that along with technology, constitutional law could get us to a world past or after sex as a dominant form and norm in reproduction and family formation.

^{30.} See Gaia Bernstein, The Socio-Legal Acceptance of New Technologies: A Close Look at Artificial Insemination, 77 Wash. L. Rev. 1035, 1050 (2002).

^{31.} See, e.g., Fineman, supra note 12, at 6 ("[T]he tenacity and vitality of our inherited beliefs or ideologies about the family has meant that the changes are in some ways superficial—merely altering form, while leaving aspiration and expectation undisturbed."); Reva B. Siegel, "The Rule of Love": Wife Beating as Prerogative and Privacy, 105 Yale L.J. 2117, 2119 (1996).

^{32.} See David M. Schneider, A Critique of the Study of Kinship 53 (1984) (citing sexual intercourse as a "central" or defining feature of American kinship).

^{33.} Schneider, American Kinship, supra note 1, at 40.

^{34.} Hanson, supra note 11, at 33.

^{35.} See supra note 7 and accompanying text.

^{36.} Daar, supra note 4, at 2.

^{37.} Hanson, supra note 11, at 37.

This Article proceeds in five parts. Part II summarizes the technological advances that scholars claim could enable a world after sex as humans' dominant mode of reproduction in the next two to four decades and considers the corresponding shifts in society and culture that support that claim. It also argues that if these scholars are right, then reproductive technology holds enormous promise to challenge and disrupt the traditional family. Part III presents the case for why ideas and ideals about sexual procreation are likely to persist in the law's approach to non-sexual reproduction, confounding predictions about the end of sex in human reproduction and limiting the radical potential of the technologies that will purportedly get us to a point after sex.

Part III builds that case by first explaining what this Article means by sexual supremacy, using the more critically developed concept of marital supremacy to describe its dynamic by way of analogy. While marital supremacy can take many forms, this Part focuses on an aspect that is helpful for understanding sexual supremacy: the law's use of marital ideals to define the substance of non-marriage. After defining sexual supremacy and describing its dynamic by way of analogy to marital supremacy, Part III reveals the work that sexual supremacy is doing in the law's contemporary engagement with alternative reproduction. It focuses in particular on the presence of sexual supremacy in the law of surrogacy, debates over egg and sperm donor anonymity, and legal and bioethical debates over designer children in the gene editing context and beyond. Just as ideals about marriage define the legal and cultural terrain of non-marriage, this Part shows, so too do ideals about sexual procreation and the sexually-produced family define the legal and cultural terrain of non-sexual reproduction.

Parts IV and V reconsider and reimagine, respectively, claims about the end of sex in intentional human reproduction. Part IV uses the observations made in the previous Part to suggest that sex will not end anytime soon in the law's engagement with alternative reproduction, notwithstanding the evolution of the technology that could make the end of sex for reproduction a possibility. This Part shows not only that sex is likely to persist as a normative ideal in the law's approach to non-sexual reproduction, but also that it will persist in ways that frustrate the radical potential of many of the technologies thought to enable a world after sex. Even so, there are limits on the extent to which sexual supremacy may constrain the law's engagement with non-sexual reproduction, and Part V considers some of them. It imagines the end of sex not from the standpoint of technology, as other scholars have, but from the standpoint of the law, offering constitutional arguments that could help to enable a reproductive and familial

world less tethered to norms and ideals about sexual reproduction and the sexually-produced family. Part VI concludes.

II. AFTER SEX AS A REPRODUCTIVE FORM

Will sex for procreation go the same way as the VCR and Sony Walkman? So one might think based on some scholars' recent predictions about alternative reproductive technology and its potential to revolutionize human reproduction. Section II.A summarizes those predictions as well as some of the reproductive technologies on which they are based. That section also considers the social and legal shifts in family life and reproduction that render those predictions more plausible than they might appear at first blush. Section II.B considers the promise that a world of non-sexual reproduction holds for the family. It argues that if scholars are right about the reproductive technologies on the horizon, then the future of alternative reproduction holds enormous potential to disrupt the traditional family associated with sexual reproduction.

A. The Future of Sexless Reproduction

1. The Technology of Sexless Reproduction

The use of ARTs to procreate has witnessed an "explosion"³⁸ since the Centers for Disease Control and Prevention (CDC) first started collecting statistics on them in 1996. In that year, approximately 64,000 ART cycles were performed, resulting in approximately 21,000 live babies born. Ten years later, approximately 138,000 ART cycles were performed, resulting in approximately 55,000 live babies born—a 114% and 162% increase, respectively, in just one decade.³⁹ Similarly, the ten-year period from 2002 to 2012 (the last year for which CDC data is available) also witnessed growth both in ART cycles and in babies born, increasing during that time by 28% and 34%, respectively.⁴⁰ According to the CDC, 1.6% of all children born in the United States in 2012 were the result of ART.⁴¹

^{38.} DAAR, supra note 4, at 16.

^{39.} Id. at 14.

^{40.} Id. at 13-14.

^{41.} As mentioned earlier, actual ART use in the United States is much higher than these statistics suggest given that the CDC does not include in its data artificial insemination by sperm donor (AID), a form of ART that results in approximately 60,000 live babies born each year. See DAAR, supra note 4, at 10–11 (noting that "the federal government's exclusive focus on IVF limits study of other forms of assisted conception" and that the "impact of an IVF-only definition of ART is the potential for skewing perceptions about the demographics of ART users," which include "those who use AID"). Given the under-inclusiveness of the CDC's definition of alternative reproduction, it is more accurate to say that more than 3% of all children born in the United States in 2012 were the result of ART, rendering it a "far greater" player "in family formation than domestic infant adoption." Id. at

Scholars predict that the ART "boom"⁴² of the early twenty-first century will continue on its upward trajectory, especially given extraordinary advances in reproductive science and medicine. Some scholars, in fact, argue that ART's increasing use and sophistication could in time create a situation where alternative reproduction replaces sex as humans' principal vehicle of perpetuating the species, at least intentionally.

Professor Dov Fox, for example, has recently argued that "[i]mpressive advances in reproductive medicine and technology"⁴³ support his earlier prediction that "prospective parents might one day forgo the genetic randomness of sexual reproduction for increasingly powerful and affordable opportunities to choose for certain biological traits or dispositions in their future children."⁴⁴ "As advances in genetic science permit increasing prenatal control over offspring traits," Fox contends, "even fertile couples may choose to relocate procreation from the bedroom to the laboratory."⁴⁵ Similarly, Professor Paul Knoepfler argues that ARTs could lead to "[t]he creation of people via technology rather than by sex."⁴⁶ "Not only would sex be unnecessary," Knoepfler writes, "but there could also be almost no physical parental involvement at all to produce a baby."⁴⁷

Most outspoken—and insistent—about the obsolescence of sex as humans' principal mode of intentionally reproducing is Professor Henry Greely, who recently predicted in his book *The End of Sex and the Future of Human Reproduction (End of Sex)*, among other outlets,⁴⁸ that technology will replace sex for reproductive purposes in as little as two to four decades. In "forty years," Greely writes in the widely reviewed *End of Sex*,⁴⁹ "most pregnancies among people with

- 42. Daar, supra note 4, at 23.
- 43. Fox, supra note 7, at 299 (citation omitted).
- 44. Id. at 298 (citation omitted).
- 45. Id.
- 46. Knoeppler, supra note 7, at 9; see also Paul Knoeppler, You're Only Human, but Your Kids Could Be So Much More, WIRED (Dec. 1, 2015), https://www.wired.com/2015/12/youre-only-human-but-your-kids-could-be-so-much-more/ [https://perma.unl.edu/9B4L-BVHG] (stating a similar position).
- 47. Knoepfler, supra note 7, at 13.
- 48. See generally Greely, supra note 7; see also Aurora Macrae Crerar, Will Genetic Advances Make Sex Obsolete?, NPR (June 16, 2016), https://www.npr.org/sections/health-shots/2016/06/16/482189322/will-baby-making-move-from-the-bedroom-to-the-lab (interview with Henry Greely); The End of Sex and the Future of Baby-Making, Aspen Ideas Festival (2017), https://www.aspenideas.org/session/end-sex-and-future-baby-making [https://perma.unl.edu/Z5E4-WLDX] (Greely's interview with Carl Zimmer).
- 49. For reviews, see Glenn C. Altschuler, *Mid Twenty-First Century Birthers, Review*, PSYCH. TODAY (June 7, 2017) (reviewing HENRY GREELY, THE END OF SEX AND THE

^{9;} see also NeJaime, The Nature of Parenthood, supra note 2, at 2285 nn. 141-42 (citing recent statistics indicating that ART use has "soar[ed]" in the twenty-first century).

good health coverage will be started not in bed but in vitro."50 Sexual reproduction, he contends, is the "method of reproduction that, at least in some critical details, will be replaced in the coming decades."51 As Greely explained to New York Times science writer Carl Zimmer before an audience at the Aspen Ideas Festival in June 2017, people will continue to have sex for many of the reasons that they already do: "because they like it," "as a token of love," "because they're forced to," and "to make money." What they will do with decreasing frequency, he predicts, is have sex in order to reproduce. "There will be sex but there will be a lot less sex for making babies," Greely says. Sex itself will not end, he reassures, but it will end as a vehicle for intentional reproduction.⁵³

Greely maintains that two developments in reproductive science and medicine will facilitate the world after sex that he envisions. The first development concerns the way in which human embryos are produced. Today, human conception occurs through the joining of gametes-eggs and sperm-that originate in the ovaries (in most women) and in the testes (in most men).⁵⁴ In the near future, Greely posits, eggs and sperm will originate instead from something as simple as a common skin cell through a process called in vitro gametogenesis (IVG), which involves the creation of eggs and sperm through human stem cells known as "induced pluripotent stem cells," or "human iPSCs." ⁵⁵ IPSC creation was successfully performed by scientists on mouse cells in 2006 and later on human skin cells in 2007;⁵⁶ it

Future of Human Reproduction (2016)) https://www.sce.cornell.edu/sce/altschuler/pdf/altschuler_review_20160607_1029.pdf [https://perma.unl.edu/FA9S-CMUH]; Andrews, supra note 10; Emma Green, Making Babies, No Sex Necessary, Atlantic (June 27, 2017), https://www.theatlantic.com/health/archive/2017/ 06/babies-sex/531735/ [https://perma.unl.edu/NQ4X-LQX3]; Tanya Lewis, Review: The End of Sex, The Scientist (May 13, 2016), https://www.the-scientist .com/?articles.view/articleNo/46086/title/Review—The-End-of-Sex/ [https://perma .unl.edu/W354-DX76]; Kaiponanea T. Matsumura, The End of Sex and the Future of Human Reproduction, 57 Jurimetrics 433 (2017) (reviewing Henry Greely, THE END OF SEX AND THE FUTURE OF HUMAN REPRODUCTION (2016)); Sonia Suter, Book Review, 3 J.L. & Biosci. 436 (2016) (reviewing Henry Greely, The End of SEX AND THE FUTURE OF HUMAN REPRODUCTION (2016)).

- 50. Greely, supra note 7, at 191.
- 51. Id. at 34.
- 52. The End of Sex and the Future of Baby-Making, supra note 48.
- 54. Eggs originate in some men—transgender men who retain their reproductive organs from birth—in the ovaries, and sperm originates in some women—transgender women who retain their reproductive organs from birth—in the testes. 55. Greely, supra note 7, at 12.
- 56. See Kazutoshi Takahashi et al., Induction of Pluripotent Stem Cells from Adult Human Fibroblasts by Defined Factors, 131 Cell 861 (2007). For academic and popular coverage of this procedure and its legal and ethical implications, see Sonia M. Suter, In vitro Gametogenesis: Just Another Way To Have a Baby?, 3 J.L. & Biosci. 87 (2016); Kelly Murray, Could We One Day Make Babies from

has been replicated so many times since those landmark experiments that "[m]aking iPSCs [in this way] has now become routine."57

The second development in reproductive science and medicine that in Greely's view will pave the way for the end of sex as humans' primary mode of reproducing is genomic profiling. Today, limited genomic profiling of embryos exists in the form of preimplantation genetic diagnosis, or PGD, which is the process of "tak[ing] away a few cells from an early 'test tube' embryo, test[ing] them for a genetic trait or two, and us[ing] that information to decide whether to give the embryo a chance to become a baby."⁵⁸ PGD today "is only weakly informative, as well as expensive, unpleasant, and even dangerous, thanks both to the limitations of genetic testing and to the necessity of using IVF as part of PGD."⁵⁹ In the future, Greely predicts, PGD will become "easier" and "better"⁶⁰ because of considerable advances in the two processes on which PGD relies: DNA (or genome) sequencing and DNA interpretation.⁶¹

- Only Skin Cells?, CNN (Feb. 9, 2017), https://www.cnn.com/2017/02/09/health/embryo-skin-cell-ivg/index.html [https://perma.unl.edu/P55A-YUXK]; Tamar Lewin, Babies from Skin Cells? Prospect Is Unsettling to Some Experts, N.Y. Times (May 16, 2017), https://www.nytimes.com/2017/05/16/health/ivg-reproductive-technology.html.
- 57. Greely, supra note 7, at 99. While scientists have generated egg and sperm cells in mice through the iPSC process and have created baby mice with mouse eggs created through IVG, they have yet to generate (or join) egg and sperm cells in humans through that process. See Lewin, supra note 56 (stating that "in vitro gametogenesis, or I.V.G., so far has been used only in mice" but noting that "stem cell biologists say it is only a matter of time before it could be used in human reproduction—opening up mind-boggling possibilities"); Antonio Regalado, A New Way to Reproduce, MIT Tech. Rev. (Aug. 7, 2017), https://www.technologyreview.com/s/608452/a-new-way-to-reproduce [https://perma.unl.edu/7VVK-AHET] (reporting that "[s]o far, the exact biochemical formula for prompting a stem cell to mature into functional human eggs or sperm remains out of reach. No human skin cell has been turned into a bona fide human reproductive cell. But many scientists believe it's only a matter of time—maybe only a year or two—before they get the right recipe").
- 58. Greely, supra note 7, at 2.
- 59. *Id.* at 3. It is "expensive," "unpleasant, and even dangerous" because it is only performed on embryos created through IVF, a costly process that involves hormone-induced ovarian stimulation and transvaginal egg retrieval on a patient who may or may not be under general anesthesia. *Id.* at 54. It is "only weakly informative" because it currently offers parents limited—although for many parents important—information, including an embryo's sex or "DNA associated with a genetic disease found in the family." *Id.* at 11. Its current limitations mean that PGD is only infrequently used by prospective parents today; as Greely observes, PGD is an "uncommon curiosity" that in 2012 appealed to only 5% of individuals undergoing IVF cycles. *Id.* at 88.
- 60. Id. at 107.
- 61. DNA sequencing has "changed dramatically over the past forty years," Greely notes, and, in his view, will continue to become more sophisticated, more accurate, and less costly. In 2009, for instance, whole sequencing of a single human genome cost \$48,000. Just one year later, that cost was reduced to \$5,000, and by

Greely uses the term "Easy PGD"⁶² to refer to the two processes described above that will quite possibly revolutionize reproduction: IVG and genomic profiling. Where IVG will make possible the relatively cheap and easy production of hundreds of embryos, advances in genomic profiling will make possible the relatively cheap and easy profiling of those embryos by fertility specialists and prospective parents. These two processes together compose "Easy PGD," which is at once an extension of the past—"just another application of two long-standing (and entirely legal) medical procedures, IVF and PGD"⁶³—and "a large part of the future"⁶⁴ of human reproduction as one where the species is perpetuated mainly through mechanisms other than sex.

2. The Social and Legal Shifts Favoring Sexless Reproduction

While outlandish at first blush, the claim by Greely and others that sex for procreation will become irrelevant for most people in as soon as a few decades finds some support in current social and legal trends around intimate and family life. Aside from both the growing popularity of alternative reproduction and the increasing sophistication of the technology that facilitates it, there are other reasons to believe that non-sexual reproduction could become a more common route of family formation in the future.

First, more people today are having less sex, thereby paving the way, perhaps, for sex's decreasing salience in all aspects of our lives, including in reproduction. A number of recent studies indicate notable declines in sexual frequency for all age groups, including the group most likely to avail itself of advances in ART: young people.⁶⁵ Re-

- 62. *Id.* at 3.
- 63. Id. at 175.
- 64. Id. at 105.

²⁰¹⁵ a Bay Area company was offering whole genome sequences for \$1,500-\$2,000. This rapid decline in the cost of whole genome sequencing makes it "entirely plausible to expect a \$200 genome [per embryo] within five or ten years." Id. at 112. Greely also predicts that scientists will be able to produce whole genome sequences in just a few hours within the next twenty to forty years. Id. at 113. Genomic interpretation will also continue to improve, providing prospective parents information not only about serious early-onset genetic conditions like Tay-Sachs disease but also about later onset diseases like Alzheimer disease as well as about a range of cosmetic and behavioral traits. See id. at 114-19.

^{65.} For instance, a 2016 study reported that millennials, the generation of children born between 1982 and 2002, are having less sex than their Gen-X predecessors and that the younger half of millennials "is twice as likely to be sexually active in their first years of adulthood as Gen X-ers were." Janet Burns, Millennials Are Having Less Sex than Other Gens, but Experts Say it's (Probably) Fine, Forbes (Aug. 16, 2016), https://www.forbes.com/sites/janetwburns/2016/08/16/millennials-are-having-less-sex-than-other-gens-but-experts-say-its-probably-fine/#3ea3a aa3d958 [https://perma.unl.edu/LY27-FCNF]. For the 2016 study, see Jean M.

searchers have offered several rationales for these declines, but at least one of them suggests that falling sex rates could persist well into the future: the nature of communication in the digital age.⁶⁶ Smart phones and other devices are widely viewed as causing declines in human intimacy,⁶⁷ and the emergence of virtual reality products like Oculus Rift and HTC Vive could facilitate what researchers see as the waning of physical interaction in the digital age on an even larger scale.⁶⁸ Indeed, virtual sex is already available with the aid of a head-set,⁶⁹ and if technological advances continue, then sex for any purpose, be it recreational or procreative, could become less common. Correspondingly, such advances could cause reproduction through

Twenge et al., Sexual Inactivity During Young Adulthood is More Common Among U.S. Millennials and iGen: Age, Period, and Cohort Effects on Having No Sexual Partners After Age 18, 46 Archives Sexual Behav. 433 (2017). Researchers have also identified "a particular trend toward sexual inactivity among millennial and nascent Gen-Z women" and they also note that "15 percent of the 20to 24-year-old set has not had sex since coming of age, which is a 6 percent bump from early '90s rates." Burns, supra. A CDC study released two years ago also found that "[t]he percentage of high school students who are currently sexually active (had sexual intercourse during the past three months) has decreased from 38% in 1991 to 30% in 2015." CTRS. FOR DISEASE CONTROL & PREVENTION, CDC Releases Youth Risk Behavior Survey Results, https://www.cdc.gov/features/yrbs/ index.html [https://perma.unl.edu/7QRB-U9XG]. Moreover, a 2017 study indicates that sexlessness is affecting older folks, too. That study reported declines in sexual frequency for American adults that were similar across gender, race, region, educational level, and work status, and that were largest among adults in their 50s, those with school-age children, and those who did not watch pornography. Moreover, controlling for both age and time period, the study's authors found that those born in the 1930s—the so-called "silent generation"—had sex the most often, whereas those born in the 1990s had sex the least often. See Jean M. Twenge et al., Declines in Sexual Frequency Among American Adults. 1989-2014, 46 Archives Sexual Behav. 2389 (2017). It is worth noting that adult sexual frequency rates might actually be lower than those reported in this study, given people's general tendency to lie on surveys and given their specific tendency to over-report how often they are having sex. See generally Seth Ste-PHENS-DAVIDOWITZ, EVERYBODY LIES: BIG DATA, NEW DATA, AND WHAT THE IN-TERNET CAN TELL US ABOUT WHO WE REALLY ARE 5 (2017) (observing that an analysis of Google searches "give[s] a far less lively—and, [the author] argues, far more accurate—picture of sex during marriage" than surveys suggest).

- 66. See Burns, supra note 65.
- 67. See, e.g., Sherry Turkle, Reclaiming Conversation: The Power of Talk in a Digital Age (2015); Sherry Turkle, Stop Googling. Let's Talk, N.Y. Times (Sept. 26, 2015), https://www.nytimes.com/2015/09/27/opinion/sunday/stop-googling-lets-talk .html.
- 68. Both of these products are virtual reality devices that are now commercially available. See Brian X. Chen, Virtual Reality Check: Rating the HTC Vive and the Oculus Rift, N.Y. Times (Apr. 5, 2016), https://www.nytimes.com/2016/04/06/technology/personaltech/virtual-reality-check-rating-the-htc-vive-and-the-oculus-rift .html.
- See Alyson Krueger, Virtual Reality Gets Naughty, N.Y. Times (Oct. 28, 2017), https://www.nytimes.com/2017/10/28/style/virtual-reality-porn.html.

technology, including the kind of technology discussed earlier, to become normalized, naturalized, and eventually more widespread.

Second, more sub-groups are using ART to procreate and societal trends suggest that ART use by those groups will continue to increase in the future. For instance, same-sex couples and single sexual minorities are growing consumers of alternative reproduction, 70 fueled in large part by increasing social acceptance of gays and lesbians and by the legal availability of same-sex marriage for them. 71 Similarly, older women are increasingly using ART to procreate, 72 as are unpartnered men and women. Indeed, the birthrate for women that were both older

- 70. See, e.g., Daar, supra note 4, at 11 (observing that "commercial sperm banks report that about half of their clientele... are lesbian couples and single women"); Caitlin McCarey, Lesbian Designer Babies, Huffington Post (May 26, 2016), https://www.huffingtonpost.com/caitlin-mccarey/lesbian-designer-babies_b_9823 468.html [https://perma.unl.edu/U7PF-A5AJ].
- 71. On this point, a recent study by the Williams Institute reports that "[m]arried same-sex couples are much more likely than their unmarried counterparts to have kids," suggesting that the legal availability of marriage could contribute to increasing rates of procreation within that class, See 700,000 Americans Are Married to a Same-sex Spouse, Married Same-sex Couples More Likely to Raise Adopted, Foster Children and Are More Economically Secure, New Reports Show, WILLIAMS INSTITUTE (Mar. 5, 2015), https://williamsinstitute.law.ucla.edu/press/ press-releases/married-same-sex-couples-more-likely-to-raise-adopted-fosterchildren-and-have-more-economic-resources-new-reports-show/ [https://perma .unl.edu/S8CE-NPWM]; see also DAAR, supra note 4, at 206 (stating that the "[i]ncorporation of more and novel family structures into the fabric of our culture will broaden the need and correspondingly the availability of reproductive assistance" in the form of ART). The legal availability of marriage for same-sex couples might stimulate even unmarried gays and lesbians to use alternative reproduction as a method of family formation, as marriage equality, at least on one reading, could legitimize gay identity and gay parenting regardless of whether either exists within a marital setting. See NeJaime, The New Parenthood, supra note 25, at 1253 (arguing that marriage equality embodies a broader principle of sexual orientation equality in matters pertaining to family formation and that the marriage equality precedent might—counterintuitively—reduce the salience of marriage itself as the basis for parentage recognition).
- 72. Recent CDC data "supports the observation that increases on the demand side [of ART] are attributable in part to the greater numbers of older women seeking treatment." Daar, supra note 4, at 21. Delayed procreation, particularly for women, negatively impacts fertility, and could therefore stimulate older women to seek technological assistance to reproduce. See id. at 20–22, 82. Whether married or not, women are having children at older ages, and older women are much more likely to have children than they were a few decades ago. See Nicholas Bakalar, Women Waiting Longer to Have Children, N.Y. Times (Feb. 29, 2016), https://www.nytimes.com/2016/03/01/science/age-when-american-women-have-children.html ("American women are having their first babies at increasingly older ages."); Claire Cain Miller, Single Motherhood, in Decline Over All, Rises for Women 35 and Older, N.Y. Times (May 8, 2015), https://www.nytimes.com/2015/05/09/upshot/out-of-wedlock-births-are-falling-except-among-older-women.html?ac tion=click&contentCollection=Science&module=RelatedCoverage®ion=Mar ginalia&pgtype=article.

and unmarried has increased significantly since 2002—by 48%.⁷³ Many of those women, the *New York Times* reports, "used sperm donors,"⁷⁴ and an increasing number of them are using surrogacy to have children.⁷⁵ The percentage of single fathers having children through surrogacy and adoption has also increased significantly in the last ten years, both in the United States and abroad. In California, for instance, three times more single men are raising children than two decades ago, and many of them are turning to surrogacy in order to do so.⁷⁶

B. The Promise of Sexless Reproduction

If scholars are right about the reproductive technologies on the horizon, then the future of alternative reproduction holds significant promise to disrupt the traditional family associated with sexual reproduction. Consider in vitro gametogenesis, or IVG. Creating eggs and sperm from the skin cells of humans—rather than from unborn embryos—the IVG process has the capacity to revolutionize the family because it could allow individuals, or even an individual, to generate eggs and sperm from their own skin cells and to use those gametes to create a child.⁷⁷ IVG with human iPSCs could eliminate many of the intermediaries who help effectuate family formation for infertile couples and individuals, including state and private actors who facilitate the adoption process, sperm donors, egg donors, or some combination of all of those things. It could allow a same-sex male or female couple to create a child genetically related to both members,⁷⁸ a single individual to become a "uniparent" by using gametes generated from her own cells,⁷⁹ or even three or more people to combine their gametes to create a child—something which commentators call "multiplex parenting."80

- 73. Miller, supra note 72.
- 74. *Id*.
- 75. Kelly Wallace, *Is 50 the New 40 for Motherhood?*, CNN (Apr. 6, 2016), http://www.cnn.com/2015/03/02/living/feat-rise-50-year-old-mom/index.html [https://perma.unl.edu/G78V-9X77] (discussing older women turning to surrogacy as a method of family formation).
- 76. Nicholas Blincoe, Why Men Decide to Become Single Dads, Guardian (Nov. 2, 2013), https://www.theguardian.com/lifeandstyle/2013/nov/02/men-single-dad-father-surrogacy-adoption [https://perma.unl.edu/2A6B-4VTM].
- 77. See Greely, supra note 7, at 136.
- 78. *Id.* at 135. While "scientists believe it will be possible to make eggs from a man's skin cell and sperm from a woman's skin cell," they note that creating sperm through the iPSC process on women "would be more difficult because women lack Y chromosomes." Regalado, *supra* note 57.
- 79. Greely, supra note 7, at 135.
- 80. *Id.* at 190; see also Suter, supra note 56, at 88 (suggesting that "IVG could facilitate 'multiplex' parenting, where groups of more than two individuals (whether

More radical yet, IVG with human iPSCs could enable the end of sex both as a reproductive activity and as a marker of gender because it could obviate the need not only for sexual intercourse to reproduce but also for one person who is "XX" and another who is "XY" to do so.81 In addition, by permitting a biological male to make a "female" reproductive contribution (the egg) and a biological female to make a "male" reproductive contribution (the sperm),82 IVG could disaggregate biological sex and gender in ways that begin to challenge the law's last remaining basis for differential treatment of men and women: biological difference.83

In domains as varied as federal immigration law and state adoption law (and many others in between), so-called biological differences between the sexes are accepted as constitutionally permissible reasons to treat them differently and unequally.⁸⁴ Admittedly, the so-called legitimate reproductive difference that so often makes a relevant legal difference relates not so much to eggs and sperm, but rather to the fact that only biological females can gestate and bear children.⁸⁵ Even so, putting to one side the possibility that alternative reproductive medicine could one day offer the prospect of artificial wombs ges-

all male, all female, or a combination) procreate together, producing children who are the genetic progeny of them all").

^{81.} Greely, supra note 7, at 135.

^{82.} As noted earlier, generating sperm cells from female skin cells through the iPSC process could prove challenging given that women lack Y chromosomes. See Regalado. supra note 57.

^{83.} See, e.g., Cary Franklin, The Anti-Stereotyping Principle in Constitutional Sex Discrimination Law, 85 N.Y.U. L. Rev. 83 (2010) (discussing cases upholding biological difference as a limit on the constitutionally grounded anti-stereotyping principle); NeJaime, The Nature of Parenthood, supra note 2, at 2352.

^{84.} See, e.g., NeJaime, The Nature of Parenthood, supra note 2, at 2352 (discussing the role of biological difference in immigration law and in the law of unwed fathers and adoption); Noa Ben-Asher, The Two Laws of Sex Stereotyping, 57 B.C. L. Rev. 1187, 1219–21 (2016) (discussing and critiquing judicial reliance on biological difference to justify laws that treat unwed mothers and unwed fathers differently in the contexts of adoption and citizenship transmission).

^{85.} See NeJaime, The Nature of Parenthood, supra note 2, at 2267. Sometimes, courts cite the gestation of children as a constitutionally adequate justification for laws that treat men (fathers) and women (mothers) differently on the theory that gestation permits women, but not men, to develop relationships with their children before birth. See Lehr v. Robertson, 463 U.S. 248, 260 n.16 (1983) (stating that whereas "[t]he mother carries and bears the child, and in this sense her parental relationship is clear," fathers must do more to prove their paternal commitments) (citation omitted). Other times, courts cite the birth of children as a constitutionally adequate justification for laws that treat men (fathers) and women (mothers) differently on the theory that the event of birth is evidence of maternity but not of paternity. See Nguyen v. I.N.S., 533 U.S. 53, 61–63 (2001) (upholding the federal government's unequal treatment of unwed mothers and unwed fathers in the citizenship transmission context on the ground that birth 'assures' that a biological relationship exists between mothers and their children but not between fathers and their children).

tating a child outside a woman's body (thereby eliminating the truly last marker of reproductive difference),⁸⁶ reproductive practices like IVG that disrupt the relationship between genetics and gender could start to unsettle the traditional family founded on heterosexual reproduction and dual-gender parenthood.

In sum, dizzying advances in the technology of non-sexual reproduction, coupled with trends in society that are likely to increase rates of non-sexual reproduction, support scholars' claim that in the near future, significantly more intentional human reproduction will occur without sex. On this account, technology and culture will coalesce to ensure the deliberate "creation of people via technology rather than by sex." As Greely more colorfully puts it: "Instead of being conceived in a bed, in the backseat of a car, or under a 'Keep off the Grass' sign, children will be conceived in clinics." The twentieth century's untethering of sex and procreation through the legalization of contraception will continue into the twenty-first. Now, however, instead of the flourishing of non-procreative sex, society will witness the flourishing of non-sexual procreation and the radically different family enabled by it

III. THE PERSISTENCE OF SEX AS A REPRODUCTIVE NORM: SEXUAL SUPREMACY

Part III now unsettles the claim, presented in Part II, that sex will disappear from our reproductive landscape in as soon as a few decades, or will soon factor considerably less in that landscape than it does currently. Some scholars have already disputed that claim on descriptive grounds. Reviewing Greely's *The End of Sex* in the science magazine *Nature*, for instance, Professor Lori Andrews predicts that technology is unlikely to "replace sex as a way to create babies" for a number of reasons, including the fact that people today are not rushing to use technology to control their children's genetic inheritance

^{86.} This could happen sooner than we might think. See Sabrina Stierwalt, Could Artificial Wombs Be a Reality?, Sci. Am. (Jan. 24, 2017), https://www.scientificamerican.com/article/could-artificial-wombs-be-a-reality/ [https://perma.unl.edu/6AQV-7DSQ].

^{87.} Knoepfler, supra note 7, at 9.

^{88.} Greely, supra note 7, at 1.

^{89.} Eisenstadt v. Baird, 405 U.S. 438 (1972) (holding that the Fourteenth Amendment's Equal Protection Clause prohibits the government from treating single persons and married persons differently with respect to their decisions to use contraception); Griswold v. Connecticut, 381 U.S. 479 (1965) (holding that the Fourteenth Amendment's Due Process Clause protects a right to marital privacy that prohibits the government from criminalizing married persons' use of contraception).

even though a limited form of such technology currently exists.⁹⁰ Andrews also doubts that most people will be able to afford, or that most insurance will cover, the kinds of prenatal genetic technologies that will allow non-sexual reproduction to flourish—and sexual reproduction, correspondingly, to end.⁹¹

This Article is skeptical about sex's ostensible end for a different reason: because sexual procreation, it submits, is likely to persist as a reproductive norm in the law's engagement with ART, even if it could otherwise end as a reproductive form on which people rely to have children. In a way, Greely's predictive claim is a more extreme version of the recent observation that alternative reproduction represents a clean break from, or a clear alternative to, sexual procreation. "ART is designed to bypass or substitute for" sexual procreation, Professor Daar writes. 92 "By disaggregating sex from reproduction," she continues, "ART is the story of both technical sophistication and social liberation." As another commentator puts it, ART removes "sex from the equation" and represents the "banishment of sex from reproduction."

Even if those statements are technically true, sexual procreation remains an integral part of the reproductive "equation" by constituting the lens or frame through which the law views and regulates alternative reproduction. As they have in the past, ideas and ideals about sexual procreation will likely shape legal engagements with alternative procreation, 96 and they will do so in ways that undermine procreative liberty and undercut the radical potential of the technologies that could make a future after sex even possible.

This Part refers to the persistence of sexual procreative ideals in the law's contemporary engagement with alternative reproduction as sexual supremacy. Sexual supremacy, it shows, is the law's use of ideals about sexual procreation to regulate non-sexual procreation. Sexual supremacy, it argues, marks the law's current approach to alternative reproduction and will likely continue to do so even as ART evolves in more sophisticated ways toward the so-called "end of sex." Indeed, this Part suggests that while alternative reproductive technology might soon be able to completely "disaggregat[e] sex from reproduction,"97 the law is likely to lag behind, remaining tethered to a particular conception of sexual procreation while it engages with its non-sexual counterpart.

^{90.} Andrews, supra note 10, at 35.

^{91.} Id. at 36.

^{92.} Daar, *supra* note 4, at 1–2.

^{93.} *Id.* at 2.

^{94.} Hanson, supra note 11, at 17.

^{95.} Id. at 37.

^{96.} See infra note 30 and accompanying text.

^{97.} Daar, supra note 4, at 2.

Section III.A begins by briefly defining sexual supremacy and by using a more critically developed concept to understand its workings by way of analogy: marital supremacy. Marital supremacy illustrates how the substance and structure of a traditional form so often linked in law and culture to procreation (marriage)⁹⁸ might persist in the law even as society has moved past, or is moving past, that form. It also serves as a cautionary tale for those who predict that the future entails both the end of sex for intentional reproduction and the liberation of sex from reproduction, as marital supremacy suggests a more complicated picture of what the evolution of kinship looks like and how it occurs.

After defining and explaining sexual supremacy by way of analogy in section III.A, section III.B reveals instances of sexual supremacy in the law's current approach to ART, specifically, in surrogacy law, in proposed regulations of egg and sperm donation, and in legal and ethical debates over designer children in the gene editing context and beyond.

A. Sexual Supremacy Defined and the Marital Supremacy Analogy

1. Sexual Supremacy Defined

Sexual supremacy is the law's privileging of sexual procreation and its presumed norms in the regulation of non-sexual reproduction. Sexual supremacy involves the privileging of a certain kind of family associated with sexual reproduction: the "sexual family," defined by Professor Martha Fineman as the "foundational" family "founded on the heterosexual couple—a reproductive, biological pairing."99 In addition, sexual supremacy involves the privileging of a certain kind of process commonly associated with sexual reproduction: a process that is somewhat random and open to chance rather than overly curated and tightly controlled. 100 Section III.B illustrates how the law often makes both of these things—the ideal sexual procreative family (biological, dual gender, married) and the ideal sexual procreative process (random, open to chance)—the measure of non-sexual reproduction by requiring non-sexual reproduction to resemble them in order to receive recognition and protection. In this sense, sexual supremacy resembles the phenomenon to which section III.A now turns, one that has received careful attention by legal scholars and whose dynamic is

^{98.} See, e.g., Obergefell v. Hodges, 135 S. Ct. 2584, 2590 (2015) (referring to marriage and procreation as "related rights").

^{99.} Fineman, supra note 12, at 145.

^{100.} For a more detailed overview of sexual procreation's presumed characteristics in arguments supporting ART regulation, see Cahill, *Reproduction Reconceived*, supra note 2, at 657–62.

helpful for understanding what this Article means by sexual supremacy: marital supremacy.

AFTER SEX

2. The Marital Supremacy Analogy

A robust body of scholarship has coalesced around the concept of marital supremacy, defined as the privileging of marriage, even in a world where people are marrying less frequently. Professor Serena Mayeri used the term "marital supremacy" in a recent article "to refer broadly to the legal privileging of marriage over non-marriage, and marital over nonmarital families." Like Mayeri, some scholars have focused on the law's privileging of marriage over non-marriage by revealing instances where the law channels, or even coerces, unmarried partners into an actual marriage. Others have broadened the concept of marital supremacy by focusing on the law's privileging of marriage within non-marriage. Scholars in this second group have detailed the extent to which the law molds non-marriage to marital

^{101.} Mayeri, supra note 16, at 1279 n.2. Mayeri elaborates on the presence of marital supremacy in the Supreme Court's illegitimacy cases from the 1960s and 1970s, which simultaneously vindicated some of the rights of non-marital children under the Constitution and upheld the primacy of marriage over non-marriage. Notwithstanding advocates' more expansive constitutional arguments against marital supremacy, Mayeri shows, the Court struck down non-marriage classifications not because they promoted traditional marriage, but rather because they harmed so-called "innocent" non-marital children. See id.

^{102.} See, e.g., Nancy Leong, Negative Identity, 88 S. Cal. L. Rev. 1357, 1406-10 (2015) (cataloguing the ways in which the law uses marital status as a basis for discriminatory treatment, privileging not just marital over non-marital relationships but marital relationships over singledom); Kaiponanea T. Matsumura, A Right Not To Marry, 84 FORDHAM L. REV. 1509 (2016) [hereinafter Matsumura, A Right Not To Marry] (describing how several states have responded to the recognition of same-sex marriage in their jurisdictions by either automatically converting same-sex domestic partnerships and civil unions into marriage, without the consent of the domestic partners, or continuing the receipt of same-sex partnership benefits, like health insurance, on domestic partners entering into a marriage); Kaiponanea T. Matsumura, Choosing Marriage, 50 U.C. Davis L. Rev. 1999 (2017) [hereinafter Matsumura, Choosing Marriage] (detailing and criticizing instances where the law co-opts cohabitants into marriage without them necessarily choosing marriage); Melissa Murray, Accommodating Nonmarriage, 88 S. Cal. L. Rev. 661, 664 (2015) [hereinafter Murray, Accommodating Nonmarriage] (discussing instances where courts conflate non-marriage and marriage when protecting the rights of unmarried cohabitants and criticizing "the broader elision—and erasure—of nonmarriage in our law and culture"); Melissa Murray, Obergefell v. Hodges and Nonmarriage Inequality, 104 CAL. L. REV. 1207, 1239-57 (2016) [hereinafter Murray, Nonmarriage Inequality] (exposing places where the law prioritizes marriage over non-marriage, particularly in a post-marriage-equality world, and reviewing the capture of non-marriage by marriage in the areas of relationship recognition, the extension of rights and benefits (like wrongful death), and non-marital parenting).

norms, paradigms, and ideals.¹⁰³ These scholars focus less on the law's channeling of intimate partners into an actual marriage and more on the law's imposition of marital norms and ideals on unmarried relationships¹⁰⁴—often to the latter's detriment.¹⁰⁵

This second understanding of marital supremacy is the one that is most useful for understanding what this Article means by sexual supremacy. Marital supremacy understood in this sense involves two related aspects: the imposition of marital ideals on non-marital relationships and the selective application of those ideals to non-marital relationships. ¹⁰⁶ Both aspects of marital supremacy appear in a variety of doctrinal areas, but are most often on display when courts evaluate non-marital relationships to determine whether they function like a marriage and therefore merit legal recognition. ¹⁰⁷

- 103. See, e.g., Antognini, Nonmarital Exceptionalism, supra note 18; Antognini, The Law of Nonmarriage, supra note 17, at 52-58 (discussing instances where the law requires non-marital relationships to conform to the dominant cultural norms surrounding marriage in order to receive recognition and protection); Courtney Megan Cahill, Regulating at the Margins: Non-Traditional Kinship and the Legal Regulation of Intimate and Family Life, 54 Ariz. L. Rev. 43, 54-61 (2012) [hereinafter Cahill, Regulating at the Margins] (revealing instances where the law uses marital ideals to regulate unmarried relationships); Ariela R. Dubler, In the Shadow of Marriage: Single Women and the Legal Construction of the Family and the State, 112 Yale L.J. 1641 (2003) (discussing the law's reliance on marriage, both historically and today, when extending legal protections to unmarried cohabitants); Clare Huntington, Postmarital Family Law: A Legal Structure for Nonmarital Families, 67 Stan. L. Rev. 167 (2015) (documenting the imposition of marital family law on non-marital families in areas like child custody and child support and critiquing the corrosive impact of that imposition); Murray, Nonmarriage Inequality, supra note 102, at 1225-39 (observing the privileging of marriage within non-marriage in Supreme Court landmarks like Lawrence v. Texas and Moore v. City of East Cleveland and arguing that the Court in these cases extended constitutional protection to non-marital relationships only because they conformed to the Court's vision of the ideal marital family); Douglas NeJaime, Before Marriage: The Unexplored History of Non marital Recognition and Its Relationship to Marriage, 102 CAL. L. REV. 87 (2014) (documenting the use of marriage norms in cases extending legal protection to unmarried cohabitants).
- 104. See Antognini, The Law of Nonmarriage, supra note 17, at 11 (observing that courts rely on "marriage as the yardstick" when determining whether to distribute property at the dissolution of a non-marital relationship).
- 105. See id. at 59 (stating that "the metric of marriage results in making recovery difficult for nonmarital couples where the relationship veers in any way from what marriage ought to look like"); Huntington, supra note 103 (documenting the corrosive impact that the imposition of marital family law has had on non-marital families and their children).
- 106. I have explored this second aspect of marital supremacy—the asymmetrical imposition of marital norms on unmarried partnerships—at greater length elsewhere. See generally Cahill, Regulating at the Margins, supra note 103.
- 107. Kerry Abrams, $Marriage\ Fraud$, 100 Cal. L. Rev. 1, 26–30 (2012) (discussing the law's use of functional marriage tests generally as a way of determining who ought to qualify for government benefits).

Graves v. Estabrook, a case that addressed whether an unmarried cohabitant could recover under the tort of negligent infliction of emotional distress for the death of her fiancé, illustrates this phenomenon. There, the defendant argued that the plaintiff's lack of a legal or blood relationship to the victim barred recovery for the tort of negligent infliction of emotional distress in New Hampshire, which, the defendant maintained, rejected bystander liability for injuries to de facto, as opposed to de jure, family members. Decause the plaintiff was at most a de facto family member of the victim, the defendant reasoned, her emotional distress claim must necessarily fail.

In reversing the lower court's dismissal of the plaintiff's claim for failure to satisfy the relatedness prong of her emotional distress tort, the court held that the class of plaintiffs eligible to bring that tort in New Hampshire included unmarried cohabitants who in effect approximated legal spouses.¹¹¹ To determine whether unmarried cohabitants in any given case satisfied that standard, the court continued, lower courts ought to consider "the duration of the relationship, the degree of mutual dependence, the extent of common contributions to a life together, [and] the extent and quality of shared experience."112 More specifically, courts ought to look at whether cohabitants had a "relationship that [was] stable, enduring, substantial, and mutually supportive . . . cemented by strong emotional bonds and provid[ing] a deep and pervasive emotional security."113 The court concluded that because the victim and plaintiff's lengthy relationship exhibited these qualities, the latter was eligible to recover under New Hampshire's negligent infliction of emotional distress tort. 114

Graves exemplifies the first aspect of marital supremacy as understood by this Article because it evaluates non-marriage in the image of ideal marriage and requires the former to look like the latter to receive protection. Professor Courtney Joslin cites Graves as an example of a case that abandons "a bright line marriage rule" in favor of a functional test that is more accommodating of non-marriage. While technically true, Graves nevertheless incorporates an ideal image of marriage into that functional test, 116 thereby effectively importing

^{108.} Graves v. Estabrook, 818 A.2d 1255 (N.H. 2003).

^{109.} See id. at 1258.

^{110.} See id. at 1259.

^{111.} See id. at 1261-62.

^{112.} Id. at 1262 (internal quotation and citation omitted).

^{113.} Id.

^{114.} See id.

Courtney G. Joslin, The Gay Rights Canon and the Right to Nonmarriage, 97
B.U. L. Rev. 425, 487 (2017).

^{116.} See Melissa Murray, Family Law's Doctrines, 163 U. Pa. L. Rev. 1985, 2017 (2015) (arguing that "[e]ven as family law doctrine has attempted to respond to the changing nature of family life, certain truths remain fixed as bedrock principles that subtly—and not so subtly—inform the work of judges and legislatures").

marriage into its performative evaluation of non-marriage and using the "vernacular of marriage" to appraise non-marriage. 117 Did the co-habitants in *Graves* mutually depend on each other? 118 Was their relationship "stable, enduring, substantial, and mutually supportive... cemented by strong emotional bonds"? 119 In asking these and related questions, *Graves* effectively places non-marriage in the shadow of what it conceives to be the ideal marriage. In so doing, it accommodates non-marriage by protecting the legal rights of its members, but only to the extent that non-marriage approximates normative marriage.

Graves also exemplifies the second aspect of marital supremacy as understood by this Article because it subjects non-marriage not just to marital ideals but to marital ideals from which legal marriage is actually exempt. For instance, the Graves court considered the plaintiff and her fiancé to be in a relationship akin to marriage because they had a "deep and pervasive bond," were "mutually supportive," and made extensive "common contributions to a life together." 120 We might assume—and even hope—that married persons do these things, but the law does not require them to do so in order to be married and receive the benefits that legal marriage affords. Indeed, in other cases like Graves, courts have considered whether non-marital couples' relationships were marked by continuous cohabitation, the intermingling of finances, and the maintenance of joint bank accounts.¹²¹ One court even considered whether each non-marital partner "maintained his or her own career and financial independence,"122 finding that because they did maintain such independence they were not in a "stable, marital-like relationship" deserving of protection. 123

Joslin also recognizes that functional tests of the kind employed by the *Graves* court often reinforce marital norms by making legal protection contingent on approximating ideal marriage. *See* Joslin, *supra* note 115, at 487 (recognizing that "while there may be some situations where a court may conclude that the refusal to extend marital protections to unmarried individuals is unconstitutional, this is likely only where those unmarried individuals are living in a way that looks a lot like that of a marital family").

- 117. Murray, Accommodating Nonmarriage, supra note 102, at 665.
- 118. Graves, 818 A.2d at 1262.
- 119. Id.
- 120. See id.
- 121. See, e.g., In re Marriage of Pennington, 14 P.3d 764, 770–71 (Wash. 2000) (listing these and other factors when determining whether unmarried cohabitants were in a marriage-like relationship deserving of legal protection). For an analysis of Pennington and other cases, see Antognini, The Law of Nonmarriage, supra note 17, at 17 (arguing that some lower courts have "import[ed] the characteristics of marriage into a nonmarital relationship wholesale").
- 122. Pennington, 14 P.3d at 772.
- 123. Id. at 772-73. This particular requirement—the financial dependence and intermingling requirement—is especially interesting in light of the fact that more and more married couples choose to maintain financial independence within mar-

The point here is that marital supremacy does not just subject non-marriage to marital ideals—it subjects non-marriage to marital ideals that do not apply to most marriages and that may not adequately describe most marriages today. 124 As Professor Albertina Antognini has recently observed, "some [courts] impose even *stricter* requirements [on unmarried persons] than those that exist in a marriage." 125 Her analysis of non-marriage case law suggests that courts use "the nonmarital relationship to enforce *traditional marital values*," 126 but not necessarily *actual marital requirements*. On this account, marital supremacy applies marital ideals to non-marital relationships in a selective and asymmetrical way, holding non-marriage to a much higher marital standard than actual marriage.

riage. See, e.g., Charlotte K. Goldberg, The Schemes of Adventuresses: The Abolition and Revival of Common-Law Marriage, 13 Wm. & Mary J. Women & L. 483, 538 (2007) (observing that "courts seem to use a very traditional model for marriage for determining whether a cohabitant relationship is enough like marriage to provide shared property rights," and "[t]hat model, a long-term relationship with intertwined financial affairs, differs significantly from many marriages today," which "are very often short-term with separate finances"); Family Finances, Separate Accounts Save a Love Life, Guardian (Feb. 8, 2003), https://www.theguardian.com/money/2003/feb/08/familyfinance.valentinesday2003 [https://perma.unl.edu/33DE-7UW3].

- 124. An exception here is immigration law, which requires certain legal marriagesmarriages between citizens and non-citizens—to satisfy the law's ideal marriage. See Abrams, supra note 107, at 4. In addition, functional tests often subject nontraditional familial relationships to more stringent standards than those imposed on traditional familial relationships. See, e.g., Katharine K. Baker, Quacking Like a Duck?: Functional Parenthood Doctrine and Same-Sex Parents, 92 CHI.-KENT L. REV. 135, 169 n.156 (2017) (arguing that functional parent or de facto parent tests subject non-traditional parents to parental norms and ideals from which traditional genetic or marital parents are completely exempt); Clare Huntington, Staging the Family, 88 N.Y.U. L. Rev. 589 (2013) (revealing the marital and familial ideals that the law incorporates into functional or performative tests); Melissa Murray, What's So New About the New Illegitimacy?, 20 Am. U. J. Gender, Soc. Pol'y & L. 387, 400-09 (2012) (arguing that the law has traditionally protected unmarried fathers only to the extent that they functioned according to the law's ideal marital father); Mary Anne Case, Marriage Licenses, 89 MINN. L. REV. 1758 (2005) (arguing that formal marriage provides a performative freedom within marriage that functional marriage tests do not provide); Mary Anne Case, Couples and Coupling in the Public Sphere: A Comment on the Legal History of Litigating for Lesbian and Gay Rights, 79 VA. L. REV. 1643 (1993) (arguing that functional analyses of same-sex couples' relationships historically required them to approximate the ideal marriage).
- 125. Antognini, Nonmarital Exceptionalism, supra note 18, at 55 (emphasis added). For instance, in the alimony termination context, some jurisdictions terminate an obligee's alimony if he or she is in a relationship akin to marriage. One court interpreted a relationship "akin to marriage" as one where the obligee and her partner were not separated for "even one night"—clearly not a requirement that the law imposes on married persons. See id. For the case, see McKinney v. Pedery, 776 S.E.2d 566 (S.C. 2015).
- 126. Antognini, Nonmarital Exceptionalism, supra note 18, at 60 (emphasis added).

Graves, of course, does not exhaust the field of the law's treatment of non-marriage.¹²⁷ It does, however, illustrate what scholars have identified as a trend in the law surrounding it: the modeling of non-marriage on ideal marriage and the use of marital ideals as the "yard-stick,"¹²⁸ "metric,"¹²⁹ or template for non-marriage. Most important here, *Graves* illustrates by way of analogy what section III.B now argues is a parallel dynamic: sexual supremacy.

B. Sexual Supremacy and Contemporary ART Law

Just as marital supremacy frustrates the possibility of a world after marriage, sexual supremacy frustrates the possibility of a world after sex. Borrowing from scholars' treatment of marital supremacy, this section turns to the persistence of norms about sexual reproduction in the legal regulation of non-sexual reproduction. It calls this dynamic sexual supremacy and reveals the work that it is doing today in the law's engagement with non-sexual procreation. As this section reveals, the presence of sexual supremacy in the law's contemporary engagement with ART destabilizes predictions about ART enabling the "end of sex" and getting us to a point after sex in reproduction.

Subsection III.B.1 uses surrogacy law and contemporary debates over gamete donation to show that the law models non-sexual reproduction on the ideal sexual *family*, that is, on the family ideally associated with sexual procreation. Subsection III.B.2 uses debates over designer children to show that the law models non-sexual reproduction on the ideal sexual procreative *process*. Both subsections illustrate how ideas and ideals about sexual procreation constitute the

^{127.} An earlier case exemplifying the two aspects of marital supremacy described here is Braschi v. Stahl Associates, a landmark gay rights case. Braschi v. Stahl Assoc. Co., 543 N.E.2d 49 (N.Y. 1989). There, the New York Court of Appeals had to determine whether two men were in a marriage-like relationship for the purpose of receiving certain protections under New York City's law dealing with rent eviction protection. It concluded that because the two men sufficiently acted like a married couple—by, for instance, intermingling finances and being in an exclusive and long-term relationship—they qualified for the protection. See id. at 50-55. In so doing, the court viewed non-marriage through not just a marital frame, but a marital frame that is not required of most marriages, as most marriages do not need to be long-term or financially interdependent in order to receive legal protection. See Ariela R. Dubler, Wifely Behavior: A Legal History of Acting Married, 100 Colum. L. Rev. 957, 1018 (2000) (arguing that Braschi "reinforces . . . the persistent, transhistorical power of marriage as an institution that orders our understanding of all domestic unions, marital and nonmarital"); id. at 1021 (arguing that the Braschi test "reinforces the social norms of traditional, marital behavior" but not necessarily the legal norms of formal marriage).

^{128.} Antognini, The Law of Nonmarriage, supra note 17, at 11.

^{129.} Id. at 59.

"vernacular" ¹³⁰ with which the law so often speaks about alternative reproduction.

1. The Sexual Family: Surrogacy and Gamete Donor Anonymity

Surrogacy law and contemporary legal debates over egg and sperm donor anonymity exemplify sexual supremacy because each molds, or attempts to mold, ART in the shadow of sexual procreation and the sexual family. Before looking more closely at this dynamic, a brief explanation of the "sexual family" and its relationship to sexual supremacy is helpful.

A "foundational institution,"¹³¹ the sexual family is "the appropriate family . . . founded on the heterosexual couple—a reproductive, biological pairing that is designated as divinely ordained in religion, crucial in social policy, and a normative imperative in ideology."¹³² Martha Fineman explains that the sexual family is "tenaciously organized around a sexual affiliation between a man and woman"¹³³ and necessarily involves "a sexual tie" between that family's parents. ¹³⁴ Indeed, the "sexual tie" between two opposite-sex parents constitutes the sexual family's "primary intimate connection."¹³⁵

Fineman's sexual family is the family organized around (hetero)sexual procreation. In this sense, Fineman's sexual family recalls anthropologist's David Schneider's understanding of American kinship as rooted in the "figure" of sexual intercourse—a "figure [that] provides all of the central symbols of American kinship."¹³⁶ "Sexual intercourse (the act of procreation)," Schneider writes, "is the symbol which provides the distinctive features in terms of which . . . the members of the family as relatives and the family as a cultural unit [in the United States] are defined and differentiated."¹³⁷ Sexual intercourse constitutes the "fact of nature on which the cultural construct of the [American] family is based,"¹³⁸ he continues.

^{130.} Murray, Accommodating Nonmarriage, supra note 102, at 665.

^{131.} Fineman, *supra* note 12, at 2 (arguing that "the 'sexual family' has been invested by our culture and society with exclusive legitimacy—it is the foundational institution"); *see also id.* at 145 (arguing that "[t]he pervasiveness of the sexual-family-as-natural imagery qualifies it as a 'metanarrative'—a narrative transcending disciplines and crossing social divisions to define and direct discourses").

^{132.} Id. at 145.

^{133.} Id. at 143.

^{134.} Id. at 2.

^{135.} Id. at 143.

^{136.} Schneider, American Kinship, supra note 1, at 37.

^{137.} Id. at 31.

^{138.} *Id.* at 37. Leon Kass gives this same idea a more normative bent when he states that "[h]uman societies virtually everywhere have structured child-rearing responsibilities and systems of identity . . . on the bases of" sexual reproduction. Leon R. Kass, *The Wisdom of Repugnance: Why We Should Ban the Cloning of Humans*, New Republic 17, 21 (1997). "What would kinship be without [sexual

For Fineman as for Schneider, American kinship—and the law that regulates it—is organized around the fact and act of procreative sex. For instance, the sexual family is marital because historically sex had to be marital in order to be legal. ¹³⁹ Moreover, the sexual family is biological because successful sexual reproduction necessarily results in a child biologically related to the two members who are engaged in it. ¹⁴⁰ Finally, the sexual family is gendered—"[t]he sexual family represents the most gendered of our social institutions," ¹⁴¹ Fineman writes—because sexual reproduction involves a "biological pairing" ¹⁴² of men and women whose gender is presumed to flow naturally and inevitably from their biological sex. ¹⁴³

This Article understands sexual supremacy as the law's privileging of just the kind of family described by Fineman and Schneider: the sexual family, at once biological, gendered, marital, procreative, and, of course, sexual. The sexual family informs the law of surrogacy, which prioritizes sexually-produced kinship and its attendant attributes. The sexual family also animates debates surrounding gamete donor anonymity, an alternative reproductive practice that is permitted in the United States, but whose abolition is supported by a growing number of commentators who criticize it for not looking enough like the sexually-produced family.¹⁴⁴

procreation]?," Kass wonders. *Id.* at 21; see also The President's Council on Bioethics, Human Cloning and Human Dignity: An Ethical Inquiry 101 (2002) ("Societies around the world have structured social and economic responsibilities around the relationship between the generations established through sexual procreation, and have developed modes of child-rearing, family responsibility, and kinship behavior that revolve around the natural facts of begetting."). Gender relations, social kinship and familial relationships, in Kass's view, flow inexorably from "the natural facts of begetting"—that is, from sex. *Id.* at 101. Leon Kass was Chairman of the Council when it issued its 2002 report on human cloning.

- 139. Fineman, supra note 12, at 146 (observing that "marriage is constructed as essential, not only the foundational relationship of the nuclear [sexual] family but the very basis of society itself"); id. (observing that "marriage has historically been so venerated as to become a 'sacred' institution, the archetype of legitimate intimacy"); id. (observing that "[i]n law, marriage traditionally has been designated as the only legitimate sexual relationship").
- 140. Schneider, American Kinship, *supra* note 1, at 39 (observing that in American culture "the child brings together and unifies in one person the different biogenetic substances of both parents").
- 141. Fineman, supra note 12, at 149.
- 142. Id. at 2.
- 143. See Kass, supra note 138, at 23 (stating that "[i]n natural procreation, human beings come together, complementarily male and female, to give existence to another being" (emphasis added)).
- 144. For the presence of sexual supremacy and the sexual family in other contexts relating to the family, see Elizabeth Bartholet, Where do Black Children Belong?: The Politics of Race Matching in Adoption, 139 U. Pa. L. Rev. 1163 (1991); Baker, supra note 124. Professor Bartholet reveals some aspects of the sexual family, like biologism and genetic essentialism, in adoption law, and Professor Baker

a. Surrogacy Law

Surrogacy law embodies sexual supremacy because it privileges and prioritizes biology, gender, and marriage—three features associated with, and integral to, traditional sexual procreation and the sexual family. Consider in this regard surrogacy law's privileging and preservation of biology, perhaps the most obvious feature of sexual procreation and sexually-produced kinship. Some states explicitly condition surrogacy on biology by requiring both of the intended parents to a surrogacy agreement to be biologically related to any child

reveals some aspects of the sexual family in the de facto parent doctrine, which prioritizes understandings of parentage that are sexual in nature as well as "heteronormative, dyadic, and often genetic." Baker, supra note 124, at 168. Baker argues that the de facto parent doctrine makes sex and intimacy relevant to parentage determinations even though sex is no longer necessary to conceive children. $See\ id$.

145. Surrogacy law represents a patchwork of possibilities in the United States. Some states expressly prohibit surrogacy, some expressly allow it, and others leave it unaddressed either in part or in full. For an exhaustive overview, see Report of THE COLUMBIA LAW SCHOOL SEXUALITY & GENDER LAW CLINIC, SURROGACY LAW AND POLICY LAW IN THE U.S.: A NATIONAL CONVERSATION (2016). In addition, significant jurisdictional variety exists within those states that allow surrogacy either by statute or through case law, with some states, like California, permitting both gestational and full surrogacy, and others, like New Hampshire, permitting gestational surrogacy only. See Cal. Fam. Code §§ 7960-7962; N.H. Rev. Stat. § 168-B. Even though legal requirements that prioritize biology, gender, and marriage are the most obvious examples of sexual supremacy in surrogacy law, they are not the only ones. Consider some states' requirement that the intended parents of a surrogacy agreement be unable to achieve successful procreation sexually before turning to surrogacy as a method of kinship creation. A requirement in several states, the 'surrogacy only if sex fails' reflects sexual supremacy by effectively requiring couples to achieve parenthood through sexual procreation before turning to surrogacy, thereby prioritizing sexual over non-sexual reproduction. See, e.g., Utah Code Ann. § 78B-15-801. Two Utah men have recently brought a federal constitutional challenge to the provision of Utah's surrogacy law that requires at least one of the intended parents to a surrogacy agreement to be a "mother," therefore precluding two men from using surrogacy (in Utah) to form a family. Complaint, In Re Gestational Agreement (No. 20160796-SC) (Utah, Jan. 18, 2017). As this section argues below, Utah's commissioning mother provision embodies sexual supremacy by making gender relevant to the surrogacy process. See infra note 158 and accompanying text. But in the very process of challenging one aspect of sexual supremacy, the men reinforce another. In their Complaint, the men argue that a legislative objective of Utah's surrogacy law is "that married couples capable of producing their own genetic children naturally do so" before turning to surrogacy. Complaint supra, at 24 (emphasis added). "As married same-sex male couples cannot naturally have their own children," they continue, "there is a medical necessity as they are 'unable to bear a child' requiring gestational surrogacy." *Id.* (emphasis added). Interestingly, then, even as the men's constitutional challenge attempts to disrupt or dislodge some aspects of sexual supremacy in surrogacy law (the commissioning mother requirement), it not only preserves others but relies on them when making constitutional arguments (the sex before surrogacy requirement).

146. See Schneider, American Kinship, supra note 1, at 39.

that results from that agreement. In Louisiana, North Dakota, and Tennessee, for instance, only opposite-sex couples can create children through gestational surrogacy, and they can only do so by using their own eggs and sperm. 147 Other states require genetic relatedness by at least one of the intended parents. Surrogacy law in Florida, 148 New Hampshire, 149 and Virginia, 150 for example, requires that at least one of the intended parents to a gestational surrogacy agreement be genetically related to the child carried by the surrogate; if neither intended parent is genetically related to that child, then the surrogate is deemed the child's legal mother. 151

The genetic relatedness requirement also emerges in federal immigration law. Under the State Department's interpretation of a certain provision of the Immigration and Nationality Act, a child born abroad to unmarried citizens (or to an unmarried citizen) of the United States acquires United States citizenship at birth if, among other things, the child has a genetic connection to at least one of the parents. Under this provision, if the unmarried intended parents to a child born abroad to a non-domestic surrogate use donor eggs and sperm, then they cannot convey their United States citizenship to that child upon birth. Similarly, if an unmarried woman has children abroad through IVF with donor eggs and sperm, then she cannot convey United States citizenship to them upon birth. Indeed, the United States has recently denied a citizenship application brought by a same-sex male couple on behalf of their children born abroad to a surrogate with donor eggs on the ground that both twins did not share a genetic rela-

- 147. La. Stat. Ann. § 9:2718 (2016) (requiring that the intended couple to a gestational surrogacy agreement "create the child using only their own gametes"); N.D. Cent. Code § 14-18-01 (2009) (recognizing the intended parents of gestational surrogacy agreements only when "the embryo is conceived by using the egg and sperm of the intended parents"); Tenn. Code Ann. § 36-1-102(48) (2016) (contemplating gestational surrogacy when the embryo results from the "wife's egg and husband's sperm" but still providing that the statute "shall [not] be construed to expressly authorize the surrogate birth process").
- 148. Fla. Stat. Ann. § 742.15(3)(e) ("The gestational surrogate agrees to assume parental rights and responsibilities for the child born to her if it is determined that neither member of the commissioning couple is the genetic parent of the child").
- 149. N.H. Rev. Stat. Ann. § 168 B:1 XII (defining "surrogacy" as "any arrangement by which a woman agrees to be impregnated using either the intended father's sperm, the intended mother's egg, or their preembryo").
- 150. Va. Code Ann. $\S 20-158(E)(3) (\bar{20}16)$.
- 151. See supra notes 148-150.
- 152. INA § 301(g), 8 U.S.C. § 1401(g)).
- 153. Joanna L. Grossman, Flag-Waving Gametes: Biology, Not Gestation or Parenting, Determines Whether Children Born Abroad Acquire Citizenship from U.S. Citizen Parents, Verdict (Apr. 3, 2012), https://verdict.justia.com/2012/04/03/flag-waving-gametes [https://perma.unl.edu/X34K-R8E2] (discussing the case of an unmarried American woman who had children in Israel through in vitro fertilization with donor eggs and donor sperm, and the United States' denial of citizenship to her children).

tionship to the citizen parent—as only one of the men was a United States citizen and the couple fertilized the eggs with *each* of their sperm, some of which derived from the non-citizen parent.¹⁵⁴ As with state law, then, federal law's understanding of legal kinship in some contexts effectively 'follows the gametes.'

No less than it privileges biology and genetic relatedness, surrogacy law also privileges gender, a second and related aspect of the sexual family. As mentioned above, surrogacy law in some jurisdictions, like Louisiana, implicitly rests on dual-gender parenting by requiring the married intended parents to use their own gametes—a requirement that assumes gender complementarity in parenting and one that married same-sex couples cannot satisfy. Even more, the law in several states requires either that a surrogacy agreement include a commissioning mother in order to be valid or that the commissioning mother use her own eggs, rather than donor eggs, to create the child carried by the surrogate. In other words, surrogacy law sometimes requires the intended family to include a mother and, in many cases, a mother who is genetically related to the child.

Consider here Florida, Texas, and Utah, which all require that at least one of the intended parents to a surrogacy agreement be a woman—thus excluding both single men and male same-sex couples—by providing that there must be a "commissioning mother" to such an agreement for a court to validate it.¹⁵⁷ Currently the subject of a federal constitutional challenge, Utah's commissioning mother requirement was cited by a court as a reason to refuse validation of a surrogacy agreement between a surrogate and two married men—the latter of whom, the court claimed, could not satisfy Utah's "intending mother" requirement. No state has a parallel requirement that a surrogacy agreement involve a "commissioning father." ¹⁵⁸

^{154.} The United States' denial of citizenship to both children is currently the subject of a federal lawsuit, which claims that the denial unconstitutionally treats the two men, who are married, as if they were unmarried. See Complaint at 2–3, Banks v. U.S. Dep't o State, U.S. Dist. No. 2:18-cv-00523 (C.D. Cal. Jan. 22, 2018)

^{155.} La. Stat. Ann. § 9:2718 (2016) (requiring that the intended couple to a gestational surrogacy agreement "create the child using only their own gametes"). NeJaime argues that Louisiana's surrogacy law "entail[s] both a rejection of same-sex family formation and an appeal to dual-gender parenting." NeJaime, The Nature of Parenthood, supra note 2, at 2325.

^{156.} For a list of these states, see NeJaime, $\it The \, Nature \, of \, Parenthood, \, supra \,$ note 2, at 2376–81.

^{157.} See id.

^{158.} Some states, though, as mentioned above, do require that one of the commissioning parents be a man by requiring that the intended parents use their own gametes to create a child through surrogacy. See supra note 147 and accompanying text.

Similarly, consider the laws of numerous states that provide that an intended mother to a gestational surrogacy agreement must use her own egg, rather than a donor egg, in order for the agreement to be valid. 159 In these states, if the intended mother lacks a genetic connection to the child because she uses a donor egg, then the surrogate, rather than the intended mother, is the legal mother upon the child's birth. 160 States with these genetic relatedness requirements have foisted legal parenthood on a surrogate against her will upon the birth of a child, 161 and have refused to recognize gestational surrogacy agreements between surrogate women and same-sex male couples, 162 or single men, 163 on the theory that the children who result from those agreements will be left "motherless." 164 No state has a parallel requirement that an intended father's sperm be used to create a child in order to declare him the child's legal father. To the contrary, states have consistently used legal mechanisms like the paternal presumption in order to extend legal paternity to men who lack a genetic connection to their children. 165

These gender-based requirements hearken back in different ways to the sexual family. The dual-gender requirement hearkens back to the sexual family because that requirement enforces gender complementarity in parenting, a foundational assumption on which the sexual family rests. 166 More subtly, the commissioning mother and genetic mother requirements hearken back to the sexual family because they assume that parentage necessarily includes not just a mother, but a mother who is genetically related to her children—the latter of which recalls a time when children were only the result of sexual procreation. Historically, all children had genetic maternity but not necessarily genetic paternity because all children were the result of sex. 167 The law has internalized this idea—the certainty of ge-

^{159.} For a list of these states, see NeJaime, The Nature of Parenthood, supra note 2, at

^{160.} See id. at 2309 (stating that in most states, "[t]he gestational surrogate, who is not the legal mother when the intended mother is the genetic mother, is the legal mother when the intended mother uses a donor egg").

See id. at 2311.

^{162.} See id. at 2312–14 (discussing these cases).

^{163.} See, e.g., In re M.M.M., 428 S.W.3d 389 (Tex. Ct. App. 2014) (refusing to uphold a surrogacy agreement between a single man and a surrogate).

^{164.} See, e.g., A.G.R. v. D.R.H., No. FD-09-001838-07, 2009 N.J. Super. Unpub. LEXIS 3250 (Super. Ct. Ch. Div. Dec. 23, 2009) (refusing to terminate the rights of a surrogate who entered into a surrogacy contract with two married men on the ground that recognizing the contract would leave the children without a mother). 165. See NeJaime, The Nature of Parenthood, supra note 2, at 2315–16 (discussing

fatherhood's social dimensions).

See Fineman, supra note 12, at 149.

The law has long conceptualized fatherhood in both biological and social terms through mechanisms like the paternal presumption, which in some states conclusively treated the husband of the birth mother as the father of the child. The law

netic maternity over the uncertainty of genetic paternity—by continuing to justify the differential treatment of mothers and fathers across doctrinal domains, ¹⁶⁸ even in an alternative reproductive era where sex is not the only way to create children and where maternity is not always certain based on the act of giving birth. ¹⁶⁹

It could be, then, that some jurisdictions continue to require surrogacy contracts to include mothers who have a genetic link to their children not just because those jurisdictions are implicitly (or explicitly) motivated by sex stereotypes—which they are.¹⁷⁰ Rather, or in addi-

has grounded (and continues to ground) motherhood, however, principally in biology. See NeJaime, The Nature of Parenthood, supra note 2, at 2314.

168. Such domains include, among others, immigration law and adoption law involving unwed fathers. See supra note 84 and accompanying text.

169. Numerous examples of contested maternity exist in the law, particularly in light of advances in reproductive medicine that permit maternity to be split or shared between (and among) multiple players, including an egg donor, a gestational carrier, and an intended mother. Courts have been considering the question of 'who is the mother' in these contested maternity cases for years, starting with the first high profile surrogacy case, Baby M. See In re Baby M., 537 A.2d 1227 (N.J. 1988) (holding that an intended non-genetic mother was not the legal mother of a child born to a surrogate who was genetically related to the child). In the wake of Baby M., courts considered the question of 'who is the mother' in surrogacy cases involving gestational carriers and intended genetic mothers. See, e.g., Johnson v. Calvert, 851 P.2d 776 (Cal. 1993) (holding that an intended genetic mother was the legal mother of a child born through a gestational surrogacy agreement and using intent to resolve the question of legal maternity in the context of gestational surrogacy). More recently, courts have considered the question of 'who is the mother' in cases involving two women in a relationship who engage in collaborative reproduction together. See, e.g., K.M. v. E.G., 117 P.3d 673 (Cal. 2005) (holding that two women were the legal mothers of twins born to the couple, one of whom was the genetic parent and the other of whom was the gestational parent). While the question of contested maternity is beyond the scope of this Article and the subject of future work by its author, suffice it to say that surrogacy law's privileging of motherhood generally, and of genetic motherhood specifically, is based on an erroneous assumption: that maternity, unlike paternity, is invariably certain and assured. While that assumption might make sense in the context of sexual reproduction, which guarantees that the woman carrying and birthing the child is the child's genetic mother, it makes less sense in the context of nonsexual reproduction, which permits the bifurcation of maternity between (and even among) several players. Indeed, if anything, non-sexual reproduction makes maternity even more uncertain and contested than paternity, given that ART permits the distribution of maternity among at the very least three players (egg donor, gestational surrogate, intended mother) but the distribution of paternity between only, at the very least, two players (sperm donor, intended father).

170. See NeJaime, The Nature of Parenthood, supra note 2, at 2329 (arguing that surrogacy law's "construction of parenthood situates women as biologically connected not only to reproduction but also to child-rearing" and that "[w]hile biological fathers can be displaced by men and women who lack biological ties, the law attempts to ensure the biological mother's presence"); id. (characterizing laws that embody "[v]iews that tie motherhood to biology" as "stereotypes" that "negatively affect women" as well as "men by viewing fatherhood as derivative of motherhood and secondary as a parental role").

tion, some jurisdictions require genetic maternity for surrogacy contracts to be valid because they are modeling surrogacy on paradigms of sexual procreation. Those paradigms, which inform the law of surrogacy just as they inform the law of immigration and the law of unwed fathers, have long assumed that genetic maternity, unlike genetic paternity, is definite and assured.¹⁷¹

In addition to biology and gender, surrogacy law in the United States reflects a third core feature of the sexually-conceived family: marriage. Several of the states that recognize some form of surrogacy either by statute or through case law require two intended parents for a surrogacy agreement to be legal; moreover, those two intended parents must be married to each other. The surrogacy laws of Florida, New Hampshire, Nevada, Texas, and Utah contain such a requirement.¹⁷²

As explained earlier, marriage is a feature of the sexual family given that traditionally only married people could have sex and therefore reproduce. States that retain a marriage requirement for surrogacy and for other forms of alternative reproduction, like alternative insemination,¹⁷³ appear to suggest that because "marriage traditionally [was] designated as the only legitimate sexual relationship," states today may designate it as the only legitimate reproductive relationship.¹⁷⁴ If that is right, then states are imposing a marital norm traditionally applied in the sexual procreative context to non-sexual procreation, even though the act that precipitated that norm—procreative intercourse—no longer applies. Indeed, if, as some historians have argued, part of the stated reason for laws requiring sex to be marital was to ensure that the paternity of children was known, then it makes little sense to apply that norm to non-sexual reproduction, including surrogacy, where paternity is always known ex ante—if it even exists at all.175

Professor Douglas NeJaime has recently argued that the three attributes of traditional sexual procreation and the sexual family identified here—marriage, biology, and gender—continue to inform

^{171.} See supra note 84 and accompanying text.

^{172.} For a list of these states, see NeJaime, *The Nature of Parenthood*, *supra* note 2, at 2376-21

^{173.} See, e.g., id. at 2296 (observing that under "the laws of many states, sperm donors are divested of rights and responsibilities only if they donate sperm for use by a married woman"); Courtney G. Joslin, Protecting Children (?): Marriage, Gender, and Assisted Reproductive Technology, 83 S. Cal. L. Rev. 1177, 1187 n.42 (2010) (observing that while "states generally permit [single mother] families to be formed [through alternative insemination]," they "for the most part . . . exclude children born into these families from the relevant parentage provisions").

^{174.} FINEMAN, supra note 12, at 146 (emphasis added).

^{175.} See, e.g., Kelly A. Ryan, Regulating Passion: Sexuality and Patriarchal Rule in Massachusetts, 1700–1830, at 24 (2014).

parentage law in ways "that carry forward legacies of inequality embedded in frameworks forged in earlier eras." ¹⁷⁶ Even as the "law increasingly accommodates [the non-biological] families formed through ART," ¹⁷⁷ NeJaime explains, it simultaneously "approach[es] the parental claims of women and same-sex couples within existing frameworks organized around marital and biological relationships." ¹⁷⁸ In so doing, he says, modern ART law "reproduce[s] some of the very gender- and sexuality-based asymmetries embedded in those frameworks." ¹⁷⁹ Through an exhaustive analysis of the law's treatment of parentage resulting from marriage, alternative insemination, egg and sperm donation, and surrogacy, NeJaime reveals the perseverance of "the gender-differentiated, heterosexual family" ¹⁸⁰ in the so-called "new kinship," ¹⁸¹ and prescribes its reappraisal on normative and constitutional grounds. ¹⁸²

While NeJaime does not explicitly say so, the attributes animating contemporary ART law that he identifies collectively compose the family traditionally associated with sexual intercourse. NeJaime urges us to consider the extent to which ART law, even as it modernizes parentage and facilitates non-traditional family formation, reinforces the heterosexual family by continuing to prioritize marriage, biology, and gender. Agreeing with NeJaime's analysis and recommendation, this Article further argues that we should consider the extent to which ART law, including surrogacy law, reinforces sexual supremacy by privileging reproductive sex and the kind of family that reproductive sex is presumed to create.

In addition to exhibiting the first aspect of sexual supremacy detailed earlier—the use of norms related to sexual procreation to regulate the practice of non-sexual reproduction—surrogacy law also

^{176.} NeJaime, The Nature of Parenthood, supra note 2, at 2289.

^{177.} Id. at 2260.

^{178.} Id.

^{179.} Id.

^{180.} Id. at 2268.

^{181.} Professor Naomi Cahn uses this term to describe the family created through ART. Naomi Cahn, The New Kinship: Constructing Donor-Conceived Families 129 (2012).

^{182.} See NeJaime. The Nature of Parenthood, supra note 2, at 2347-59.

^{183.} See id. at 2260 (arguing that "the gender-differentiated, heterosexual family continu[es] to structure marital parenthood"); id. at 2290 (arguing that "the law has accommodated same-sex parenting within a framework shaped by the gender-differentiated, heterosexual family—recognizing nonbiological parents in married same-sex couples to the extent they satisfy criteria used to identify legal fathers"); id. at 2325 (observing that surrogacy law continues to prioritize "biological ties that allow for the maintenance of the gender-differentiated, heterosexual family"); id. at 2260 (contending that "gender- and sexuality-based asymmetries remain embedded in the law of parental recognition").

exhibits the second aspect of sexual supremacy: the asymmetrical application of those norms to non-sexual procreation.

For example, some states require that the intended parents to a surrogacy agreement be married. No state, however, requires any person to be married in order to sexually reproduce. Similarly, some states effectively require the intended parents of a surrogacy agreement to engage in dual-gender parenting (or assume that they will) by recognizing surrogacy contracts only when the intended parents to such contracts are of the opposite sex. 184 No state, however, requires existing parents of any kind to engage in dual-gender parenting, and no state requires prospective parents to prove dual-gender parenting prior to engaging in reproductive intercourse. Finally, some states require surrogacy agreements to include a woman or mother—thereby foreclosing single men or male same-sex couples from using surrogacy—on the theory that women engage in mothering, that only women engage in mothering, and that children should not be born into motherless families. 185 No state, however, requires women who have children through sexual procreation to show that they can-or want to—mother a child in any particular way, or even mother at all.

Much in the same way that states require unmarried persons to satisfy marital ideals or scripts from which married persons are largely, if not completely, exempt, ¹⁸⁶ then, states require non-sexual procreators using surrogacy to satisfy procreative ideals or scripts from which sexual procreators are largely, if not completely, exempt. ¹⁸⁷ In both cases, the law regulates non-traditional kinship not just in the shadow of a traditional form, but in the shadow of an ideal traditional form—one from which traditional kinship is largely free.

b. Gamete Donor Anonymity

Unlike many of our peer countries, gamete donor anonymity is legal in the United States, so no egg or sperm donor is required to reveal identifying information to the child that she or he helps create. Even so, there exists here today a "raging debate as to whether donor-con-

^{184.} See supra note 147 and accompanying text.

^{185.} See supra notes 157–158 and accompanying text.

^{186.} See supra notes 120-126 and accompanying text.

^{187.} Professor Baker has identified a similar asymmetry in the de facto parent doctrine, which rewards dual-gender parenting even as "genetic parents are free to gender their parenting or not." Baker, supra note 124, at 169 n.156. Some states, in fact, require a home study before a court will validate a surrogacy agreement. See, e.g., Utah Code Ann. § 78B-15-801. In so doing, these states are imposing all sorts of scripts and ideals on intended parents—scripts and ideals from which children conceived sexually are largely exempt. As one court put it: "Parents are not screened for the procreation of their own children"—not screened, that is, for the sexual procreation of their own children. In re Marriage of Buzzanca, 72 Cal. Rptr. 2d 280, 291 (Ct. App. 1998).

ceived children have a right to know their origins"¹⁸⁸ and, if so, whether the United States should outlaw anonymity by mandating non-anonymity in gamete donation. Conservative commentators argue that anonymous gamete donation facilitates the creation of children who are deprived of their biological kin.¹⁸⁹ Progressive commentators who otherwise support alternative family formation argue that gamete donor anonymity violates donor-conceived children's ostensible "right to know" their genetic progenitors.¹⁹⁰ The hope of all of these commentators is that the United States will follow other countries' lead and abolish the routine practice of anonymous gamete donation,¹⁹¹ notwithstanding the negative effects that such laws would almost certainly have on the reproductive practice of gamete donation.¹⁹²

Today's controversy over gamete donor anonymity exhibits the two aspects of sexual supremacy as understood by this Article: the use of paradigms surrounding sexual procreation and the sexual family to inform the law of ART, and the asymmetric application of those paradigms to ART. As for the first aspect of sexual supremacy, consider the role that biology and genetics play in the debate over gamete donor anonymity. Opponents of anonymous donation routinely organize the donor-conceived family around biology by arguing that anonymous donation deprives donor-conceived children of knowledge about, and access to, their biological kin. In so doing, they route non-sexual reproduction through an essential feature of sexual procreation—biology—and mold the non-sexual family in the image of the sexual family.

The remarks of David Blankenhorn and others who advocate for non-anonymity in gamete donation illustrate this point. An erstwhile opponent of same-sex marriage who now supports that institution but

^{188.} Cohen, supra note 22, at 527.

^{189.} See infra notes 193-197 and accompanying text.

^{190.} See infra note 198 and accompanying text.

^{191.} Countries that have abolished anonymity in gamete donation include Sweden (the first country to do so in 1985), Austria, Germany, Switzerland, the Australian states of Victoria and Western Australia, the Netherlands, Norway, the United Kingdom, and New Zealand. See Cohen, supra note 22, at 500–02.

^{192.} Scholars have discussed the adverse effects that a mandatory non-anonymity regime would have on the practice of gamete donation, including decreased supply and increased cost. See Courtney Megan Cahill, The Oedipus Hex: Regulating Family After Marriage Equality, 49 U.C. Davis L. Rev. 183, 203–05 (2015) (discussing the possibility that mandatory non-anonymity could have a chilling effect on donation and increase the cost of donation); I. Glenn Cohen et al., Sperm Donor Anonymity and Compensation: An Experiment with American Sperm Donors, 1 J.L. & Biosci. 1 (2016) (reporting the results of an empirical study suggesting that mandatory non-anonymity could lead to the decreased supply and increased cost of gametes); Daar, supra note 4, at 171 (discussing Swedish doctors' fears about the effects of mandatory non-anonymity on gamete donation in that country in 1985).

is skeptical about non-biological family formation outside of adoption, ¹⁹³ Blankenhorn invokes biology when asking whether "gay[] and straight people should think twice before denying children born through artificial reproductive technology the right to know and be known by their biological parents?" ¹⁹⁴ Blankenhorn's colleagues at the Institute for American Values echo these sentiments, arguing in publications like *My Daddy's Name Is Donor* ¹⁹⁵ and *Do Mothers Matter*? ¹⁹⁶ that gamete donation and surrogacy deliberately create "motherless" and "fatherless" families as well as children who are bereft of their "mothers" and "fathers." ¹⁹⁷ Commentators who support alternative family formation but oppose anonymous donation similarly prioritize biological connection in family formation. They argue that gamete donation creates "familial" networks and that the law ought to honor those networks by abolishing donor anonymity and enabling connection between donor-conceived children and their biological "kin." ¹⁹⁸

As in surrogacy law, debates over gamete donor anonymity advance sexual supremacy in the law's engagement with ART because they reinforce a key feature of the sexual family and sexual procreation: biology. By assuming that the persons involved in the donor network are "family" and "familial" even though raised in different legal households, 199 and by advocating for what is effectively a mandatory

- 193. David Blankenhorn was also the "star witness" for the proponents of California's law prohibiting same-sex marriage in the 2010 federal trial over that law's constitutionality. Frank Rich, *Two Weddings, a Divorce, and 'Glee,*' N.Y. Times (June 12, 2010), http://www.nytimes.com/2010/06/13/opinion/13rich.html.
- 194. David Blankenhorn, How My View on Gay Marriage Changed, N.Y. Times, (June 22, 2012), https://www.nytimes.com/2012/06/23/opinion/how-my-view-on-gay-mar riage-changed.html; see also David Blankenhorn, The Rights of Children and the Redefinition of Parenthood, (June 2, 2005) (arguing in his speech to the Danish Institute for Human Rights that a child has the fundamental right to know both of his or her biological parents, even when ART is used), http://americanvalues.org/catalog/pdfs/family-humanrights.pdf [https://perma.unl.edu/H43V-KRMX].
- 195. ELIZABETH MARQUARDT, NORVAL D. GLENN & KAREN CLARK, MY DADDY'S NAME IS DONOR: A NEW STUDY OF YOUNG ADULTS CONCEIVED THROUGH SPERM DONATION (2010), http://americanvalues.org/catalog/pdfs/Donor_FINAL.pdf.
- 196. Elizabeth Marquardt, Do Mothers Matter?, ATLANTIC (Feb. 10 2012), http://www.theatlantic.com/health/archive/2012/02/do-mothers-matter/252676/ [https://perma.unl.edu/N5V8-MS7M] [hereinafter Marquardt, Do Mothers Matter?]; Elizabeth Marquardt, Sperm Donor Kids Speak Out: Our Biological Dads Matter to Us, Huffington Post (Jan 19, 2011), http://www.huffingtonpost.com/elizabeth-marquardt/anonymouslyconceived-youn_b_810463.html [https://perma.unl.edu/N4HJ-BVER]; Karen Clark & Elizabeth Marquardt, The Sperm-Donor Kids Are Not Really All Right, Slate (June 14, 2010), http://www.slate.com/articles/double_x/doublex/2010/06/the_spermdonor_kids_are_not_really_all_right.html [https://perma.unl.edu/R56Q-UZR8].
- 197. See Marquardt, Do Mothers Matter?, supra note 196.
- See, e.g., Cahn, supra note 181; Naomi Cahn, The New Kinship, 100 Geo. L.J. 367, 413 (2012).
- 199. See Cahn, supra note 181, at 137 (using the language of family to address individuals conceived from the same gametes but raised in different households).

connection between some of them, arguments favoring the abolition of anonymity in gamete donation presuppose that biology and genetics necessarily create family. Scholars have argued that ART, by allowing for the separation of biology, procreation, and legal parenthood, has pushed law and society to think about the family in ways that supersede the paradigms that have long determined family law's deep structure. OArguments against donor anonymity reinforce that deep structure by crowding out alternative conceptions of family formation and replacing them with the defining characteristics of sexual kinship.

Consider a second example of sexual supremacy in the gamete donor anonymity debate: the argument that the rules of gamete donation ought to approximate the rules of sexual reproduction. This argument has both extreme and less extreme forms. Its more extreme form posits that the law ought to treat sexual and non-sexual procreators equally by applying the rules of sexual reproduction to non-sexual reproduction. On this telling, donors—and, specifically, sperm donors—should not be allowed to waive their identity or their legal obligations to any children that result from their donations to single women since no man can waive his identity or his legal obligations to children resulting from sex, or, more precisely, sex with single women.²⁰¹

The less extreme form of the argument that non-sexual reproduction ought to approximate the norms of sexual reproduction—and the one that predominates contemporary debates over gamete donor anonymity—posits that donor-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually-conceived children ought to enjoy the same transparency with respect to parentage that sexually enjoyed the same transparency with respect to parentage that sexually enjoyed the same transparency with respect to parentage that sexually enjoyed the same transparency with the same

^{200.} See, e.g., NeJaime, The New Parenthood, supra note 25, at 1230.

^{201.} Professor Marsha Garrison is most closely allied with this position; in her view, the rules that govern non-sexual reproduction ought to mimic the rules that govern sexual reproduction. See Marsha Garrison, Law-Making for Baby-Making: An Interpretive Approach for Determination of Legal Parentage, 113 HARV. L. REV. 835 (2000). Garrison would not apply the rules of paternity and non-anonymity to sperm donors who donate to women who are married to men. In that context, the law would treat the husband of the recipient as the second legal parent of the child and the sperm donor as a legal stranger. Garrison would, however, apply the paternity and non-anonymity rules to single women and female same-sex couples who use donated sperm to reproduce. Id. at 896-97 (supporting anonymous donation in cases involving married women and their husbands, so long as their husbands consent); id. at 903 (opposing anonymous donation in cases involving single women). In supporting paternity and non-anonymity for single but not for heterosexual married women, Garrison's proposals track sexual procreation's traditional rules, which mandated that the husbands of women who conceived through adultery were presumed to be the fathers of those childrenand the sexual "sperm donors" legal strangers. On the application of the paternal presumption in the context of same-sex procreation, see Susan Frelich Appleton, Presuming Women: Revisiting the Presumption of Legitimacy in the Same-Sex Couples Era, 86 B.U. L. Rev. 227 (2006).

dren ostensibly enjoy. On this account, egg and sperm donors would not necessarily have legal responsibility over any children that result from their donations. They would, however, be required to reveal certain identifying information, including a name, to those children.²⁰²

Both of these arguments exemplify sexual supremacy because they attempt to shape ART law in the shadow of the sexual family and sexual procreation. In both cases, sexual procreation is the yardstick, model, or metric for non-sexual procreation, and in both cases, what is good for sexual conception is presumed to be good for non-sexual conception. Both arguments prioritize the "heteronormative family structures" that are characteristic of Fineman's sexual family, and both bear out Schneider's claim that reproductive intercourse is the "central symbol" American kinship—one that tends to absorb alternative family forms in its wake.

In addition to exemplifying the first aspect of sexual supremacy as explained by this Article—the use of sexual procreative paradigms to regulate alternative procreation—many of the arguments considered by this subsection also exemplify its second aspect: the asymmetric

^{202.} Professor Naomi Cahn is the most prominent legal scholar associated with this argument, which animates many of her proposals in favor of mandatory non-anonymity in gamete donation. See, e.g., Cahn, supra note 198, at 413 (arguing that "federal and state law should provide for limited disclosure of the donor's identity once offspring turn eighteen" and that such laws should "preempt private agreements . . . to the contrary"); Cahn, supra note 181, at 129 (same); Naomi Cahn, Necessary Subjects: The Need for a Mandatory National Donor Registry, 12 DEPAUL J. HEALTH CARE & L. 203 (2008) (advocating federal legislation that would abolish gamete donor anonymity and establish a national mandatory donor registry and presenting the need for such a registry, including accidental incest prevention). Unlike Professor Garrison, Professor Cahn has never argued that non-sexual reproduction ought to track the law of sexual reproduction. She has, however, suggested that gamete donation ought to track the norms of sexual reproduction regarding transparency in parentage. For example, in a recent article, Professor Cahn argues that states should abolish anonymity in gamete donation and signal to donor-conceived children the origins of their conception by marking their birth certificates "donor conceived." Cahn, supra note 29, at 1100. Noting that the biological non-paternity rate in sexual conception cases is about 5% whereas "in 100% of donor conception cases, the children have an unknown biological parent," Cahn, supra note 29, at 1117, Professor Cahn contends that the law ought to make it possible for donor-conceived children to know the identity of their biological male progenitor—presumably to bring the non-paternity rate in donor conception cases (which she says is "100%") more in line with the non-paternity rate in sexual conception cases (which she approximates is "5%"). Professor Cahn's proposal uses sexual conception as the metric or baseline for donor conception because it assumes that donor-conceived children deserve the same privilege or "right to know" their genetic progenitors that sexually-conceived children enjoy.

Catherine Donovan, Genetics, Fathers and Families: Exploring the Implications of Changing the Law in Favour of Identifying Sperm Donors, 15 Soc. & Legal Stud. 494, 495 (2006).

^{204.} Schneider, American Kinship, supra note 1, at 53.

application of ideals about sexual reproduction to non-sexual reproduction. Consider the argument that anonymous donation deprives donor-conceived children of identifying information about their biological progenitors. That argument rests on comparisons between sexual conception and ART, but unsatisfyingly accounts for the fact that sexually-conceived children are never guaranteed such information, as a not insignificant number of sexually-conceived children lack accurate information about their biological paternity, either because their parents lied to them about it or were themselves mistaken about it.²⁰⁵ As such, that argument exemplifies the second aspect of sexual supremacy as understood by this Article because it advocates regulating ART in the shadow not just of sexual procreation, but of ideal sexual procreation. In doing so, it recalls marital supremacy in nonmarriage regulation and sexual supremacy in surrogacy regulation. As in those settings, proposed regulations of non-traditional kinship (gamete donation) route it through paradigms and ideals about traditional kinship (sexual conception)—paradigms and ideals from which traditional kinship is actually exempt.

^{205.} See, e.g., Erin Murphy, Relative Doubt: Familial Searches of DNA Databases, 109 Mich. L. Rev. 291, 315 n.106 (2010) (citing the most accurate misattributed paternity estimate as between 2-5% of the population); Martha M. Ertman, Love's PROMISES: HOW FORMAL & INFORMAL CONTRACTS SHAPE ALL KINDS OF FAMILIES 61 (2015) (stating that "[w]hile urban legend holds that as many as 10 percent of children are products of the mother's extramarital affair, a 2006 study suggests that mandatory genetic tests would unpleasantly surprise around 2 percent of husbands"); Steve Olson, Who's Your Daddy?: The Unintended Consequences of Genetic Screening for Disease, Atlantic (July 1, 2007), http://www.theatlantic .com/magazine/archive/2007/07/who-s-your-daddy/305969/ [https://perma.unl .edu/5B6U-E29A]. Professor Garrison recognizes this asymmetry, observing that "contemporary family law strongly encourages unmarried women to establish the paternity of their [sexually conceived] children, but does not mandate it." Garrison, supra note 201, at 911. Professor Cahn does as well, noting that "in some unknown percentage of [sexual conception] cases, children believe that a man is their father but he is not actually biologically related to them." Cahn, supra note 29, at 1116. Both scholars respond to those inconsistencies by arguing that the state ought to-and may-regulate ART not according to the norms of sexual reproduction as they actually exist, but according to the norms of sexual reproduction as they ideally exist. Professor Garrison states that "[alternative insemination] offers a context in which dual parenting could far more reliably be enforced [than in sexual conception]." Garrison, *supra* note 201, at 912 (emphasis added). Professor Cahn maintains that parental transparency is an ideal that the law should strive for in all reproduction, but one that the law may asymmetrically apply to ART given that sexual conception, unlike ART, involves "[the creation of children] through intimate acts." Cahn, supra note 29, at 1117. I have elsewhere critiqued Cahn's argument for assuming without explanation that ART is nonintimate, that sexual conception is intimate, and that differential regulation of ART and sexual procreation is constitutionally permissible. See Cahill, Reproduction Reconceived, supra note 2, at 655–85.

2. The Sexual Procreative Process: Designer Children

The previous subsection focused on the family associated with sexual procreation and on the way in which the law routes ART through certain ideals about that family. This subsection now turns to the process associated with sexual procreation and to the way in which the law routes ART through certain ideals about that process.

Consider in this regard the longstanding criticism of alternative reproduction as a process that incentivizes parents to "design" their children in ethically unpalatable ways. The "designer baby" criticism of ART has been leveled at sperm and egg donor selection, ²⁰⁶ pre-implantation genetic diagnosis, ²⁰⁷ and human reproductive cloning. ²⁰⁸ It has more recently been invoked to express opposition to—and to justify the prohibition of—germline modification of human embryos through technologies and procedures like CRISPR/Cas9 and mitochondrial donation, both of which have garnered considerable media attention in the last year and both of which have been the recent target of designer baby criticism. ²⁰⁹ The United States continues to ban

- 206. See, e.g., Sandel, supra note 27, at 69–75; Julie Bindel, Designer Babies? It Looks Like Racism and Eugenics to Me, Guardian (Oct. 3, 2014), https://www.theguardian.com/commentisfree/2014/oct/03/sperm-donot-lawsuit-racism-eugenics-lesbi an-couple-black-donor [https://perma.unl.edu/G3RW-NNY5]; JuJu Chang & Deborah Apton, Designing Babies? Embryos from 'Ph.D. Sperm' and 'Attractive Eggs' For Sale, ABC News (Feb. 22, 2007), http://abcnews.go.com/Business/Life Stages/story?id=2895615 [https://perma.unl.edu/F4RG-LS59]; Katharine Lowry, The Designer Babies Are Growing Up: At Home with the First children of the 'Genius' Sperm Bank, L.A. Times (Nov. 1, 1987), http://articles.latimes.com/1987-11-01/magazine/tm-17535_1_sperm-bank [https://perma.unl.edu/X368-NBRY]; David Plotz, The "Genius Babies," and How They Grew, Slate (Feb. 8, 2001), http://www.slate.com/articles/life/seed/2001/02/the_genius_babies_and_how_they _grew.html [https://perma.unl.edu/V3B8-KN5N].
- 207. See, e.g., Susannah Baruch, Preimplantation Genetic Diagnosis and Parental Preferences: Beyond Deadly Disease, 8 Hous. J. Health L. & Pol'y 245 (2008); Michael Gortakowski, A Parent's Choice v. Governmental Regulations: A Bioethical Analysis in an Era of Preimplantation Genetic Diagnosis, 29 Buff. Pub. Int. L.J. 85 (2011); Bratislav Stankovic, "It's a Designer Baby!": Opinions on Regulation of Preimplantation Genetic Diagnosis, 2005 UCLA J.L. & Tech. 3; Benjamin B. Williams, Note, Screening for Children: Choice and Chance in the "Wild West" of Reproductive Medicine, 79 Geo. Wash. L. Rev. 1305 (2011).
- 208. See, e.g., Roger Highfield, New Cloning Method 'Used to Make Designer Babies,' Telegraph (Apr. 14, 2008), http://www.telegraph.co.uk/news/science/science-news/3339460/New-cloning-method-used-to-make-designer-babies.html.
- 209. CRISPR/Cas9 is a gene editing technology that allows geneticists to "cut" strands of DNA at a specific site in the genome in order to delete (and correct) disease-causing mutations that are heritable by future generations. See Greely, supra note 7, at 180–84. CRISPR/Cas9 stands, respectively, for "Clustered Regularly Interspaced Short Palindromic Repeats" (CRISPR) and the enzyme used in that process. Id. at 180. Already used by Chinese scientists to alter disease-related genes in both non-viable human embryos and adult humans, CRISPR/Cas9 made headlines last summer when Nature reported that researchers in the United States had used it to correct a disease-causing mutation in viable human em-

both the public funding of, and clinical research involving, these two technologies,²¹⁰ notwithstanding their potential to enable family for-

bryos in a way that minimized threats to embryonic development that were previously a source of scientific and medical concern. Heidi Ledford, CRISPR Fixes Disease Gene in Viable Human Embryos, Nature (Aug. 2, 2017), https://www.nature.com/news/crispr-fixes-disease-gene-in-viable-human-embryos-1.22382 [https://perma.unl.edu/6FFU-HMK6]; see also Ewen Callaway, Second Chinese Team Reports Gene Editing in Human Embryos, Nature (Apr. 8, 2016), https:// www.nature.com/news/second-chinese-team-reports-gene-editing-in-human-embryos-1.19718 [https://perma.unl.edu/F3WN-CJKN] (summarizing reports of Chinese scientists editing genes of human embryos to make them more resistant to HIV infection using CRISPR). Mitochondrial donation is a form of germline modification that eliminates heritable mitochondrial disorders through the use of egg donor mitochondria. Greely, supra note 7, at 160-61. Popularly known as "threeparent IVF," mitochondrial donation recently made headlines when it was reported in 2016 that a U.S. fertility clinic with offices in Mexico had used it there to create the first "three-parent" baby. See Sara Reardon, Genetic Details of Controversial 'Three-Parent Baby' Revealed, Nature (Apr. 3, 2017), https://www.nature.com/news/genetic-details-of-controversial-three-parent-baby-revealed-1.21761 [https://perma.unl.edu/P9XK-PM4B]. For an explanation of the procedure by the doctor who developed it, see J. Zhang et al., First Live Birth Using Human Oocytes Reconstituted by Spindle Nuclear Transfer for Mitochondrial DNA Mutation Causing Leigh Syndrome, 106 Fertility and Sterility 375 (Oct. 19, 2016). On the designer baby critique of both CRISPR/Cas9 and mitochondrial donation, see Michael le Page, Will CRISPR Gene-Editing Technology Lead to Designer Babies?, New Scientist (Dec. 2, 2015), https://www.newscientist.com/ article/mg22830500-500-will-crispr-gene-editing-technology-lead-to-designer-babies/ [https://perma.unl.edu/XU75-CMJT]; Ellie Zolfagharaifard, Richard Gray & Ben Spencer, Scientists Genetically Modify Human Embryos for the First Time: Controversial Technique Could Lead to Designer Babies, Daily Mail (Apr. 22, 2015), http://www.dailymail.co.uk/sciencetech/article-3051365; Rebecca Dimond, Social and Ethical Issues in Mitochondrial Donation, 115 Brit. Med. Bull. 173 (Sept. 3, 2015) (discussing slippery slope and designer baby fears in the context of mitochondrial donation).

210. Federal law does not ban human embryo research in the United States—even as some states do-but federal law does ban the federal funding of such research. Specifically, the Dickey-Wicker Amendment prohibits the U.S. Department of Health and Human Services from funding any research relating to human embryos, including research involving somatic and germline editing in human embryos; these prohibitions apply to research involving mitochondrial donation since mitochondrial donation involves germline modification and necessitates pre-clinical research on human embryos. See A.L. Bredenoord & I. Hyun, The Road to Mitochondrial Gene Transfer: Follow the Middle Lane, 23 MOLECULAR Therapy 975 (2015), http://www.cell.com/molecular-therapy-family/moleculartherapy/fulltext/S1525-0016(16)30121-6; Sara Reardon, NIH Reiterates Ban on Editing Human Embryo DNA, NATURE (Apr. 29, 2015), https://www.nature.com/ news/nih-reiterates-ban-on-editing-human-embryo-dna-1.17452 [https://perma .unl.edu/CJ62-AMLS] (stating that "the Dickey-Wicker amendment specifically bans the government from funding work that destroys human embryos or creates them for the purpose of research," and that the "law's wording would probably prohibit funding for work in a non-viable human embryo"). Because of the Dickey-Wicker Amendment, research for genetic modification today may be privately but not publicly funded. As some commentators have noted, the public "funding ban could . . . create a disincentive for private organizations to conduct

mation for those who risk communicating diseases to their kin and even though some countries, like the United Kingdom, have recently lifted their bans against them to allow for limited applications in cases involving deleterious mutations heritable by future generations.²¹¹

Various arguments have been advanced against these and other reproductive technologies, and the designer baby critique underlies most of them.²¹² Some argue that genetic modification compromises human autonomy and interferes with children's right to an open future because it subjects them to a master plan that designs and pre-

embryo-based research, as such organizations may rely on public grants to conduct research." Tandice Ossareh, Note, Would You Like Blue Eyes With That? A Fundamental Right to Genetic Modification of Embryos, 117 Colum. L. Rev. 729, 745 (2017). Even assuming that private funding of research involving genetically modified human embryos allows the processes used therein (CRISPR/Cas9, mitochondrial donation) to move to clinical trials, federal law could still frustrate those trials' success. The U.S. Food and Drug Administration (FDA) has regulatory jurisdiction over such trials since the FDA has jurisdiction to regulate tissue transplantation, including the IVF procedure made necessary by genetic modification, and to approve any application by a fertility specialist involving the transfer and gestation of an edited human embryo. An omnibus spending bill provision passed in December 2015, following a hearing on "the science and ethics of engineered human DNA," prevents the FDA from using any of its resources to even consider an application to proceed with clinical trials involving germline modification, thus effectively making clinical uses of germline modification, including mitochondrial transfer, effectively impossible in the United States. See Consolidated Appropriations Act, 2016, Pub. L. No. 114-113 § 749, 129 Stat. 2242, 2283 (2015). În 2017, the FDA sent a cease and desist letter to the U.S. doctor who successfully created a child through mitochondrial donation, informing him that he was in violation of federal law even though he performed the actual procedure at one of his satellite offices in Mexico. See Letter from Mary A. Malarkey, Director, Office of Compliance and Biologics Quality Center for Biologics Evaluation and Research, to Dr. John Zhang, PhD, MD (Aug. 4, 2017), https://www.fda.gov/ downloads/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/ ComplianceActivities/Enforcement/UntitledLetters/UCM570225.pdf [https://per ma.unl.edu/8YAL-X2SM].

- 211. In February 2015, the House of Commons and the House of Lords passed legislation allowing for clinical trials of mitochondrial donation, which constitutes modification of the germline because it results in genetic changes that are passed onto successive generations. The UK legislation permits mitochondrial donation under the oversight of the Human Fertilisation and Embryology Authority (HFEA), the governmental body charged with regulating alternative reproductive technologies in the United Kingdom. See The Human Fertilisation and Embryology (Mitochondrial Donations) Regulations 2015, S 2015/572, http://www.legislation.gov.uk/uksi/2015/572/contents/made [http://perma.unl.edu/YW4Q-CY8N] (UK legislation via the National Archives (UK); I. Glenn Cohen et al., Transatlantic Lessons in Regulation of Mitochondrial Replacement Therapy, 348 Sci. 178 (2015).
- 212. The following arguments represent the constellation of objections to these procedures that are based in one way or another on designer baby concerns. Other arguments to these procedures exist—including, most notably, arguments relating to their safety—but this Article is primarily concerned with the designer baby critique given that it will linger even if, or when, scientists perfect gene editing in a way that alleviates safety concerns.

determines their life path.²¹³ Others maintain that genetic modification amounts to private or consumer-driven eugenics because it shapes children in ways that reflect and reproduce dominant cultural preferences and perpetuates inequalities between designed children and their non-designed counterparts.²¹⁴ Still others suggest that genetic modification—and, for some critics, most forms of alternative reproduction—undermines the "ethic of giftedness" that parents ought to cultivate toward their children because it encourages parents to view their children as products to be curated rather than gifts to be unconditionally embraced.²¹⁵ On any of these accounts, genetic modification, whether to cure or to enhance, warrants concern as well as prohibition even if scientists could guarantee its medical safety for both the designed child and her descendants.

The most prominent exponent of the designer baby criticism that continues to play a central role in arguments against certain ARTs is Professor Michael Sandel,²¹⁶ who has argued that reproductive choice and enhancements of many kinds, from the market for eggs and sperm to genetic modification of germline cells, "represent a kind of hyperagency, a Promethean aspiration to remake nature, including human nature, to serve our purposes and satisfy our desires."²¹⁷

- 213. For a nice summary of these arguments, see David B. Resnik & Daniel B. Vorhaus, Genetic Modification and Genetic Determinism, 1 Phil. Ethics Humanit. Med. 9 (2006), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC15249 70/. Autonomy-based arguments against genetic modification are most often associated with Hans Jonas, Leon Kass, and Francis Fukuyama. See generally Francis Fukuyama, Our Posthuman Future (2003); Hans Jonas, The Imperative of Responsibility: In Search of an Ethics for the Technological Age (1985); Leon Kass, Toward a More Natural Science (1985).
- 214. See, e.g., Sandel, supra note 27, at 68 (noting that "[c]ritics of genetic engineering argue that human cloning, enhancement, and the quest for designer children are nothing more than 'privatized' or 'free-market' eugenics"); id. at 70 (arguing that "there is something wrong with the ambition, be it individual or collective, to determine the genetic characteristics of our progeny by deliberate design"); David King, Editing the Human Genome Brings Us One Step Closer to Consumer Eugenics, Guardian (Aug. 4, 2017), https://www.theguardian.com/commentisfree/2017/aug/04/editing-human-genome-consumer-eugenics-designer-babies [https://perma.unl.edu/4XQG-8R2H]. For a critique of the eugenics critique of ART, see Daar, supra note 4, at 29 (arguing that "[c]asting the pursuit of reproductive control during the American eugenics movement and the ART era as, respectively, nefarious and technical defies both history and current practices").
- 215. See Sandel, supra note 27, at 26–27; The President's Council on Bioethics, Human Cloning and Human Dignity, supra note 138, at 138.
- 216. See The National Academies of Sciences, Engineering, and Medicine Committee on Human Gene Editing, Human Genome Editing: Science, Ethics, Governance 157 (2017) (stating that "[t]he concern of the Bush-era commission that germline enhancement might encourage people to view children as something to be designed and manipulated has long been a concern of some social scientists and humanists" and identifying this position principally with Professor Sandel).
- 217. SANDEL, *supra* note 27, at 26–27.

"[P]rocreative practices that enable parents to pick and choose the kind of children they will have,"²¹⁸ Sandel writes, "miss[], and may even destroy... an appreciation of the gifted character of human powers and achievements."²¹⁹ By "gifted character" and "ethic of giftedness," Sandel intends "the mystery of birth"²²⁰ over the "mastery"²²¹ and deliberateness of reproductive design, "unpredictable[ness]"²²² over foreseeability, "contingency"²²³ over certainty. Sandel's designer baby critique of genetic modification—most certainly to enhance, but also to cure disease²²⁴—has surfaced in numerous other writings addressing the ethical dimensions of alternative reproduction, including the President's Council on Bioethics report on human cloning,²²⁵ Leon

^{218.} Id. at 70

^{219.} Id. at 27

^{220.} Id. at 46

^{221.} Id. at 83.

^{222.} Id. at 45.

^{223.} *Id.* at 91; *see also id.* at 82–83 ("Whatever its effect on the autonomy of the child, the drive to banish contingency and to master the mystery of birth diminishes the designing parent and corrupts parenting as a social practice governed by norms of unconditional love.").

^{224.} Sandel appears to object to all efforts to genetically manipulate the human genome, whether for therapeutic or non-therapeutic reasons. See id. at 99 (arguing that "the genetic revolution came, so to speak, to cure disease, but stayed to tempt us with the prospect of enhancing our performance, designing our children, and perfecting our nature" and also suggesting that "that may have the story backward"). Other opponents of germline modification more explicitly stake their opposition on slippery slope fears, arguing that "permitting even unambiguously therapeutic interventions could start us down a path towards non-therapeutic genetic enhancement." Edward Lanphier et al., Don't Edit the Human Germ Line, 519 Nature 410, 411 (Mar. 12, 2015), https://www.nature.com/news/don-t-edit-the-human-germ-line-1.17111 [https://perma.unl.edu/D7KN-87LC]; see also The National Academies on Sciences, Engineering, and Medicine Committee of Human Gene Editing, Human Genome Editing, supra note 216, at 128–30 (discussing slippery slope objections to human genome editing).

^{225.} The Council unanimously held that federal law ought to prohibit reproductive cloning; a minority of the Council, including Sandel, recommended that federal law ought to permit, but regulate, cloning for therapeutic research purposes. See THE PRESIDENT'S COUNCIL ON BIOETHICS, HUMAN CLONING AND HUMAN DIGNITY, supra note 138, at 199-204. Today, federal law does not ban cloning (whether for research or reproductive purposes) but does prohibit the use of federal funding in cloning research under the Dickey-Wicker Amendment. See H.R. 2880, 104th Cong. § 509(a) (1996); see also Russell A. Spivak et al., Germline Gene Editing and Congressional Reaction in Context: Learning from Almost 50 Years of Congressional Reactions to Biomedical Breakthroughs, 30 J.L. & Health 20 (2017) (discussing the amendment). The giftedness argument associated most closely with Sandel appears throughout Human Cloning and Human Dignity. See THE PRESIDENT'S COUNCIL ON BIOETHICS, HUMAN CLONING AND HUMAN DIGNITY, supra note 138, at 7 (arguing that "[w]e treat [our children] rightly when we treat them as gifts rather than as products"); id. at 97 (stating that cloning would "be an experiment in human procreation—substituting asexual for sexual reproduction and treating children not as gifts but as our self-designed products"); id. at 99-100 (stating that unlike a child that is sexually created, in procreation "as-

Kass's seminal article on human cloning,²²⁶ and more recent scholarly and popular criticism of human genome editing²²⁷ and mitochondrial donation.²²⁸

The designer baby critique of various forms of alternative reproduction is itself vulnerable to different criticisms,²²⁹ but this Article focuses on just one of them: the fact that designer baby anxiety reflects and reinforces sexual supremacy, privileging as it does an ideal vision of sexual procreation over non-sexual procreation.

At times this privileging is explicit, as when commentators argue that non-sexual reproduction is morally objectionable because it designs and manipulates reproduction and therefore lacks the presumed attributes of sexual procreation, "an activity that is at once natural, private, mysterious, unmediated, unpredictable, and undesigned."230 "Procreation is not making but the outgrowth of doing," the President's Council on Bioethics writes.²³¹ "A man and woman give themselves in love to each other, setting their projects aside in order to do just that."²³² Leon Kass puts this in even more explicit terms in *The Wisdom of Repugnance*, where he argues that "the severing of procreation from sex, love, and intimacy is inherently dehumanizing, no matter how good the product."²³³ "Human societies virtually everywhere

- sisted by human ingenuity (as with IVF) . . . it may become harder to see the child solely as a gift bestowed upon the parents' mutual self-giving and not to some degree as a product of their parental wills"); id. at 106 (stating that "[r]eproduction with the aid of . . . technologies [like IVF] still implicitly expresses a willingness to accept as a gift the product of a process we do not control," unlike human reproductive cloning, which "begins with a very specific final product in mind and would be tailored to produce that product").
- 226. See Kass, supra note 138, at 22 (arguing that the clone's "makers subvert the cloned child's independence, beginning with that aspect that comes from knowing that one was an unbidden surprise, a gift, to the world, rather than the designed result of someone's artful project").
- 227. For these arguments and their sources, see The National Academies of Sciences, Engineering, and Medicine Committee on Human Gene Editing, Human Genome Editing, *supra* note 216, at 124–30, 156–59.
- 228. Olga Khazan, We're Already Designing Babies, ATLANTIC (July 3, 2014), https://www.theatlantic.com/health/archive/2014/07/were-already-designing-babies/373896/ [https://perma.unl.edu/3FJH-SY9A] (summarizing letters to the FDA denouncing mitochondrial donation for being "in the same sci-fi realm as 'designer babies'").
- 229. For these criticisms, see Allen Buchanan, Better than Human: The Promise and Perils of Enhancing Ourselves 148–91 (2011); Resnik & Vorhaus, *supra* note 213, at 6–9.
- 230. The President's Council on Bioethics, Human Cloning and Human Dignity, supra note 138, at 9.
- 231. Id. at 99.
- 232. Id
- 233. Kass, *supra* note 138, at 22. Kass's critique applies primarily to cloning, the immediate subject of his article, but is applicable as well to other forms of alternative reproduction. He says: "Human cloning would also represent a giant step toward turning begetting into manufacture (literally, something 'handmade'), a

have structured child-rearing responsibilities and systems of identity and relationship on the bas[is] of [the] deep natural facts of begetting,"²³⁴ Kass writes—on the basis, in other words, of sexual coitus. On this view, non-sexual reproduction is inferior to sexual reproduction because it designs children in ways that depart from a vision of sexual procreation as "unpredictable," "undesigned," and "unmediated."²³⁵ In so doing, non-sexual reproduction destabilizes identity, kinship, and even culture itself.²³⁶

At other times, designer baby arguments are a subtler and more thinly-veiled valorization of sexual procreation. Consider once again Sandel's "ethic of giftedness" argument against designer children and alternative reproduction. While Sandel does not explicitly say so, "giftedness" appears to be a feature of—and even a synecdoche for—sexual procreation, as it is in certain religious traditions. Pope Francis's 2016 apostolic exhortation, Amoris Laetitia, makes an obvious connection between sexual procreation and giftedness when it urges that "[a] child deserves to be born of [conjugal] love, and not by any other means, for 'he or she is not something owed to one, but is a gift,' which is 'the fruit of the specific act of the conjugal love of the parents.'"237 Other Catholic writings similarly establish a connection between sexual procreation and giftedness, with some asserting that a child is a "gift" that has "the right . . . to be the fruit of " sexual rather than manipulated conception, 238 and others expressing that "only the reciprocal gift of the married love of a man and a woman, expressed and realized in the conjugal act . . . , is a worthy context for the coming forth of a new human life."239 Giftedness is associated with, and at

process already begun with in vitro fertilization and genetic testing of embryos." *Id.* at 23 (emphasis added).

^{234.} Id. at 21.

^{235.} The President's Council on Bioethics, Human Cloning and Human Dignity, supra note 138, at 9.

^{236.} Kass, supra note 138, at 23.

^{237.} Pope Francis, Post-Synodal Apostolic Exhortation, Amoris Laetitia 63 (2016), https://w2.vatican.va/content/dam/francesco/pdf/apost_exhortations/documents/papa-francesco_esortazione-ap_20160319_amoris-laetitia_en.pdf [https://perma.unl.edu/CF8F-XEVG]. The Amoris Laetitia elsewhere decries alternative reproduction for its "ability to manipulate the reproductive act, making it independent of the sexual relationship between a man and a woman," and for not receiving human creation "as a gift." Id. at 45.

^{238.} Congregation for the Doctrine of the Faith, Instruction on Respect for Human Life in its Origin and on the Dignity of Procreation, http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_19870222 _respect-for-human-life_en.html [https://perma.unl.edu/68V3-Z6QU].

^{239.} Pontifical Academy for Life, Final Communique on "The Dignity of Human Procreation and Reproductive Technologies. Anthropological and Ethical Aspects" (2004), http://www.vatican.va/roman_curia/pontifical_academies/acd life/documents/rc_pont-acd_life_doc_20040316_x-gen-assembly-final_en.html [https://perma.unl.edu/Y89W-S35K].

times a symbol of, sexual procreation in all of these writings, which, like Sandel, decry ART and its impulse to design life.

In ways both explicit and implicit, then, the designer baby criticism of alternative reproduction reflects the first aspect of sexual supremacy as understood by this Article because it privileges and prioritizes the "mysterious" and "unpredictable" process of sexual procreation over the "designed" and "manipulated" process of non-sexual reproduction. Just as marriage is the baseline for non-marriage, and just as the sexual family is the metric or yardstick for the non-sexual family, so too is the sexual procreative process the metric or yardstick for the non-sexual procreative process. On this view, the more that non-sexual procreation looks like sexual procreation or imitates "the uncontrolled beginnings of human procreation," 44 the more likely it can be accommodated by law and culture.

In addition, the designer baby criticism of alternative reproduction and its attendant technology reflects the second aspect of sexual supremacy as understood by this Article because it asymmetrically applies the ideals associated with sexual procreation to non-sexual reproduction. Sexually-conceived children are regulated, controlled, manipulated, and designed all the time both before and after birth in ways that render them similar to, or at least not entirely dissimilar from, the designer babies that fuel so much criticism of alternative reproduction. And yet, designer baby critics rarely direct their same critique of ART to sexual reproduction, rooted as that critique is in a binaristic understanding of ART as designed and predictable, and sexual procreation as undesigned and unpredictable.

Consider the selection and design process that takes place before sexual reproduction. Charles Darwin famously argued that animals and humans make choices, both conscious and unconscious, about with whom to mate and reproduce based on secondary sex characteris-

^{240.} Sandel, supra note 27, at 46.

^{241.} Id. at 45.

^{242.} Id. at 75.

^{243.} Id. at 61.

^{244.} The President's Council on Bioethics, Human Cloning and Human Dignity, supra note 138, at 106.

^{245.} The President's Council on Bioethics ultimately rejected human cloning but not IVF (at least entirely) precisely because, in its view, IVF adequately preserved "the basic structure of sexual reproduction." "The end served by IVF is still the same as natural reproduction," the Council writes, and "[r]eproduction with the aid of such techniques still implicitly expresses a willingness to accept as a gift the product of a process we do not control." The President's Council on Bioethics, Human Cloning and Human Dignity, supra note 138, at 16. Unlike cloning, it notes, IVF bears enough of the attributes of sexual procreation to warrant recognition—it is "still unpredictable, and the genetic endowment of the child remains uncontrolled and undesigned." Id.

tics like ornamental feathers and facial hair. 246 He called this process sexual selection, and argued in *The Descent of Man, and Selection in Relation to Sex* that it was a "process by which the members of one sex—often female—choose their mates on the basis of their own innate preferences."

A full-length treatment of Darwin's evolutionary theory of sexual selection and its relationship to natural selection is well beyond the scope of this Article. Suffice it to say, though, that Darwin argued, and many biologists now agree, ²⁴⁸ that sexual reproduction involves less of the mystery and unpredictability so often attributed to it (by designer baby critics, among others) and more of the choice, deliberation, and design so often associated with alternative reproduction. ²⁴⁹

Indeed, we do not even need Darwin's theory of sexual selection (or recent scientific proof of its accuracy) to know that humans engage in designer reproduction all the time when they reproduce sexually. As Steven Pinker observes in his critique of what he calls the "designer baby myth": "Anyone who has been turned down for a date has been a victim of the human drive to exert control over half the genes of one's future children."250 Professor Nita Farahany made a similar point at a 2014 Aspen Ideas Festival panel on "Should We Design Our Babies," noting that "[w]ho we choose as a potential mate—that's selection bias,"251 as did a recent Guardian piece addressing the eugenics criticism of alternative reproduction and its alleged facilitation of an ethically problematic "gayby boom." 252 "If a straight woman in America wants to choose a husband based on his race, height, or intelligence, she can. It's called dating," the author observes.²⁵³ She continues: "But if my future wife and I use the same criteria to select a white sperm donor so my baby resembles me - I'm white - it's called eugenics."254 Simply put, design is a feature of all reproduction, yet one that commentators critical of designer reproduction selectively associate with the non-sexual reproductive process.

^{246.} See Charles Darwin, The Descent of Man, and Selection in Relation to Sex 245–311 (1871); Richard O. Prum, The Evolution of Beauty: How Darwin's Forgotten Theory of Mate Choice Shapes the Animal World—and Us 23–24 (2017) (describing Darwin's theory).

^{247.} PRUM, supra note 246, at 22 (describing Darwin's theory).

^{248.} See generally Prum, supra note 246; Evelleen Richards, Darwin and the Making of Sexual Selection (2017).

^{249.} See Prum, supra note 246, at 5-6 (arguing that birds make "social and sexual choices" that drive both reproduction and "avian evolution").

Stephen [sic] Pinker, The Designer Baby Myth, Guardian (June 4, 2003), https://www.theguardian.com/education/2003/jun/05/research.highereducation [https://perma.unl.edu/Z85U-SZVF].

^{251.} Khazan, supra note 228 (summarizing Farahany's remarks).

^{252.} See supra note 70 and accompanying text.

^{253.} Id.

^{254.} Id.

Consider also the design of children that takes place after reproduction. Parents design and curate their children's lives all the time and with increasing frequency and intensity among certain socioeconomic cohorts²⁵⁵—and no commentator suspicious of designer reproduction has advocated for the regulation of that species of parental oversight.²⁵⁶ To be sure, some critics of designer babies recognize the designer impulse in many parents and denounce it for the same reasons that they denounce reproductive design. Sandel, for instance, acknowledges that "[i]mproving children through genetic engineering is similar in spirit to the heavily managed, high-pressure child-rearing practices that have become common these days," continuing that "this similarity does not vindicate genetic enhancement" but rather "highlights a problem with the trend toward hyperparenting."257 He stops short, however, in advocating for limitations of hyperparenting, choosing instead to curtail parental design only when it occurs both before birth and non-sexually. In this sense, non-sexual reproduction functions as a sounding board for Sandel's vision of ideal reproduction and ideal parenting alike.²⁵⁸

Designer baby criticisms of alternative reproduction and its attendant technology therefore use sexual procreation as a baseline for non-sexual reproductive regulation, but sexual procreation as it is ideally imagined rather than sexual procreation as it actually exists. As such, these criticisms are of a piece with non-marriage regulation, which subjects non-marriage to marital ideals that even married persons need not satisfy. They also recall the ART regulations, actual and proposed, considered so far by this Article. Those regulations, including enacted surrogacy regulations and proposed regulations of gamete donation, subject non-sexual reproduction to ideals about the traditional sexual family, but largely exempt the traditional sexual family from those same ideals.

^{255.} See Gaia Bernstein & Zvi Triger, Over-Parenting, 44 U.C. Davis L. Rev. 1221 (2011).

^{256.} On this point, see June Carbone, *Peer Commentary:* In Vitro *Gametogenesis: Just Another Way to Have a Baby*, 3 J.L. Biosci. 673, 678 (2016) (remarking that objections to gene editing on "designer parenting"/eugenic grounds fail to account for the fact that "these risks are [not] fundamentally different from existing practices, such as intensive preschools or IQ testing, that may also produce and identify higher quality children"); Ossareh, *supra* note 210, at 762 (arguing that "moral considerations may not be part of the calculation of the state's interest in a child's well-being" when parents "pressure children into difficult, even dangerous situations" outside the ART context).

^{257.} Sandel, supra note 27, at 52.

^{258.} The law often uses marginal kinship in this way—that is, as a sounding board for its scripts and ideals about all kinship. See generally Cahill, Regulating at the Margins, supra note 103.

IV. AFTER SEX RECONSIDERED

Part III detailed the extent to which ideal sexual procreation remains the organizing symbol for much of the law's engagement with non-sexual reproduction,²⁵⁹ just as ideal marriage remains the organizing symbol for much of the law's engagement with non-marriage.²⁶⁰ That it should do so should come as little surprise, as essential family forms tend to persist in the law even as they are contested, challenged, and updated. Indeed, sexual procreation has long constituted the paradigm for its non-sexual counterpart, and so its perseverance in contemporary ART regulation is in one sense altogether predictable.²⁶¹

^{259.} Schneider, American Kinship, supra note 1, at 53.

^{260.} To be sure, in some important ways the law has abandoned sexual procreative paradigms in its approach to alternative reproduction. A few states recognize "tripartite" or multiple parentage for ART children, see generally Carbone & Cahn, supra note 23, and all states technically allow alternative insemination by single women. Both of these things-poly-parenting and single parenting-challenge and disrupt the norm fundamentally associated with the family that results from sexual procreation. Even so, family law remains wedded to a paradigm of two when it comes to parenting, prioritizing dyadic parenthood in statutes addressing the parentage of children born to single women through alternative insemination and in cases addressing the legal rights of individuals raising children created through alternative reproduction. For instance, the law in many states is unclear on the legal status of children born through alternative insemination to unmarried and unpartnered women, who might very well share legal rights and responsibilities over those children with the sperm donor, whether anonymous or known. See NeJaime, The Nature of Parenthood, supra note 2, at 2296 (observing that under "the laws of many states, sperm donors are divested of rights and responsibilities only if they donate sperm for use by a married woman"); id. at 2296 n.179 (remarking that in "only about fifteen states" the law "explicitly provid[es] that a man who donates sperm to a woman who is not his wife is not the child's legal father"); Richard F. Storrow, Rescuing Children from the Marriage Movement: The Case Against Marital Status Discrimination in Adoption and Assisted Reproduction, 39 U.C. Davis L. Rev. 305 (2006). In addition, as shown above, law and culture exhibit lingering concerns over parentage that exceeds the paradigm of two-concerns that have surfaced in recent debates over mitochondrial DNA transfer and its facilitation of a "three parent" baby. See supra note 209 and accompanying text. As with the examples considered in the previous Part, the law's tentative embrace of single and polyadic parenthood in the ART context suggests that sexual procreation and its associated family remain powerful models for legal engagements with non-sexual reproduction.

^{261.} Consider in this regard Professor Gaia Bernstein's account of the medical profession's early attempts to preserve the presumed intimacy of sexual procreation in its clinical approach to non-sexual procreation. Bernstein explains that some doctors would have the recipient-wife's husband administer the syringe during the alternative insemination procedure in order to give the appearance that insemination was occurring sexually. Bernstein, *supra* note 30, at 1050. Her account suggests that the law's contemporary reliance on models relating to sexual procreation when regulating non-sexual procreation is just the most recent manifestation of cultural anxiety over reproductive mechanisms that "sever the tie

Nevertheless, the persistence of sexual procreation in the law's approach to non-sexual procreation unsettles and complicates many of the claims summarized in Part II—claims like "ART represents the banishment of sex from reproduction,"²⁶² ART "disaggregat[es] sex from reproduction,"²⁶³ and most of all, ARTs will soon facilitate the "end of sex" and get us to a point after sex in intentional reproduction.²⁶⁴ Scholars like Greely are surely correct that the extraordinary advances in reproductive medicine that have taken place in the last two decades could help establish the conditions for the decline of sexual procreation as the dominant vehicle for intentional human reproduction. The law, however, is likely to be more resistant, holding onto norms relating to sexual procreation and the sexually-produced family in its engagement with non-sexual reproduction.

Even more, the persistence of sexual procreation in the law's approach to non-sexual procreation constrains the radical potential of the technologies that could purportedly get us to a world after sex. Consider in vitro gametogenesis, which involves the manufacture of sex cells (egg and sperm cells) from something like skin cells. As mentioned earlier, in vitro gametogenesis could allow a same-sex male or female couple to create a child genetically related to both members, a single individual to effectively clone herself with gametes generated from her own cells, or even three or more people to combine their gametes to create a child.²⁶⁵ As such, it could enable the end of sex not just as a reproductive activity but also as a marker of gender in reproduction because it could obviate the need for one person who is "XX" and another who is "XY" to create—and join—gametes. Considering that reproductive difference remains a constitutionally permissible basis for the differential treatment of men and women across multiple legal domains, 266 the possibility that in vitro gametogenesis could make gender less relevant in the reproductive process—and therefore in the law more generally—is nothing short of astonishing.

A legal regime committed to sexual procreative paradigms in its regulation of non-sexual reproduction, however, will likely frustrate the radical potential of *in vitro* gametogenesis. Part III showed that the law of surrogacy often molds the family created through surrogacy in the image of the sexual family, stymieing the development of alternative family forms that could otherwise flourish under more permissive surrogacy laws. The law could have a similar approach to newer

between sex and procreation" and threaten "the institute of the nuclear family." Id .

^{262.} Hanson, supra note 11, at 37.

^{263.} Daar, supra note 4, at 2.

^{264.} Greely, supra note 7, at 1.

^{265.} See supra notes 55-57 and accompanying text.

^{266.} See supra notes 83-86 and accompanying text.

reproductive technologies like *in vitro* gametogenesis, which, like surrogacy, threatens to disrupt the nuclear family form associated with sexual reproduction by enabling same-sex, single, and polyadic parenting. If that is right, then the law's commitment to sexual procreative paradigms in alternative reproduction regulation could inhibit the very technology thought to permit sex's dethroning in intentional human reproduction.

Numerous other examples exist of this phenomenon—of the law's commitment to sexual procreative ideals in ART regulation frustrating the technological development and radical potential of ARTs. Mitochondrial DNA transfer holds the potential to transform reproduction by allowing women to have children free of debilitating (and often fatal) disease, but the law's commitment to a sexual paradigm of "two" in reproduction could hinder the development of that technology, given its association with unnatural "three-parent babies."267 Similarly, genomic profiling and editing hold the potential to transform reproduction by allowing individuals and couples to screen out and even alter embryos that are genetically predisposed to developing deleterious conditions. And yet, law and culture's discomfort with overly controlled, designed, and curated reproduction—their discomfort with prospective parents "playing God," 268 tinkering with nature, and resisting the "ethic of giftedness" 269 so closely allied with sexual procreation—will likely hinder the development of those ARTs, especially if the law continues to prohibit clinical uses of them on designer baby grounds.

The point here is that an account of the end of sex in intentional human reproduction that focuses solely on the technology that could facilitate it underestimates the extent to which the law remains wedded to ideals about sexual procreation in its engagement with nonsexual reproduction—making the end of sex as both the reproductive norm and reproductive form improbable, at least in the near term. Moreover, accounts of alternative reproduction that posit a clear distinction between sexual and non-sexual reproduction, or that assume that ART disaggregates and liberates sex from reproduction, fail to appreciate the many points of overlap between those two forms of family formation—if not in fact, then certainly in law. As it has in the past, sexual procreation is likely to remain the baseline for ART regulation as well as the model for the way in which we think about reproduction and the family, necessitating something other than technological ingenuity to imagine a reproductive and familial world after sex.

^{267.} See supra note 209 and accompanying text.

^{268.} Sandel, supra note 27, at 76.

^{269.} Id. at 45.

V. AFTER SEX REIMAGINED

So far, this Article has offered a thicker descriptive account of the regulatory relationship between sexual and non-sexual reproduction than that which appears in the literature addressing it. Its goal in so doing has been twofold: (1) to unsettle the claim that sex could soon end in intentional reproduction as well as the related point that non-sexual reproduction removes sex from the reproductive equation; and (2) to suggest that the influence of sexual procreation on the regulation of non-sexual reproduction could not only undercut procreative and familial flourishing but also undermine the far-reaching potential of the technologies that will purportedly lead to the end of sex in family formation.

Taking now a more prescriptive turn, this final substantive Part begins to imagine a reproductive and familial world after sex. It focuses not on the technology that could get us there, as others have, but on the law—specifically, on constitutional law. Sexual supremacy might constrain the development of ART, but constitutional norms relating to procreation and the family ought to constrain sexual supremacy.

This Part discusses some of those norms, including those that suggest: (1) that the state may not privilege traditional sexual procreation when regulating intimate and family life, including procreation; and (2) that the state may not treat non-sexual procreation as a non-fundamental liberty interest by subjecting it to norms and ideals from which sexual procreation is largely exempt. Both of these constitutional norms cabin—or ought to cabin—sexual supremacy's reach, making it possible to imagine the end of sex's dominance in American kinship.

A. Sexual Supremacy Unconstitutionally Privileges Heterosexual Procreation

Sexual supremacy in ART regulation involves the official endorsement of sexual procreation and the sexually-produced family. As such, it is in tension with the decline of sexual supremacy in the regulation of sexual relationships and marriage. The demise of sexual supremacy in contemporary constitutional law begins with *Lawrence v. Texas*, ²⁷⁰ a case that is less about the state's privileging of sexual procreation (at least directly) and more about the state's privileging of procreative

^{270. 539} U.S. 558 (2003). Earlier cases protecting non-procreative sex of course began this demise—see, e.g., Griswold v. Connecticut, 381 U.S. 479 (1965) (holding that the Fourteenth Amendment's Due Process Clause protects a right to marital privacy which includes a married couple's decision to use birth control)—but this Article centers on sexual supremacy in the twenty-first century.

sex—the flipside or other face of sexual supremacy as understood by this $Article.^{271}$

Lawrence struck down Texas's law criminalizing sex between individuals of the same sex and expanded the constitutional right of sexual autonomy to include non-procreative sex. Lawrence also suggested that it was unconstitutional for the state to privilege a particular idea (and ideal) of sex through the operation of the criminal law, cautioning that the Constitution prohibits the state from "defin[ing] the meaning of [a sexual relationship] or [setting] its boundaries."²⁷² Rejecting the Supreme Court's earlier contention in Bowers v. Hardwick that constitutional protection for sex was contingent on whether sex satisfied the state's preferred vision of that act—coital and procreative²⁷³—Lawrence declared that "Bowers was not correct when it was decided, and it is not correct today."²⁷⁴

Where Lawrence rejected sexual supremacy as the privileging of procreative sex in sexual regulation, more recent Supreme Court jurisprudence has rejected sexual supremacy as the privileging of sexual procreation in marriage regulation. Of particular importance in this regard is Obergefell v. Hodges, the Court's 2015 marriage equality decision finding that the Fourteenth Amendment's Due Process and Equal Protection Clauses protect a right to marry for same-sex couples. For decades, states justified exclusionary marriage laws on the basis of sexual procreation, contending that such laws promoted an interest in traditional sexual reproduction. Amicus briefs filed in the dozens of marriage equality cases across the United States—including in Obergefell—echoed this position, arguing that exclusionary marriage laws furthered the state's interest in championing both heterosexual procreation and its social expression in the form of the traditional nuclear family. 277

A marriage brief filed by Sherif Girgis, Robert George, and Ryan Anderson, longstanding (and ongoing) opponents of same-sex marriage and same-sex parenthood, here illustrates.²⁷⁸ Defending the

^{271.} That is, before *Lawrence v. Texas*, states could legitimately privilege procreative sex. The question after *Lawrence* is whether the state can legitimately privilege sexual procreation.

^{272.} Lawrence, 539 U.S. at 567.

Bowers v. Hardwick, 478 U.S. 186 (1986), overruled by Lawrence v. Texas, 539 U.S. 558 (2003).

^{274.} Lawrence, 539 U.S. at 578.

^{275. 135} S. Ct. 2584 (2015).

^{276.} For a more complete analysis of sexual procreation's role in sustaining exclusionary marriage laws, see Cahill, Reproduction Reconceived, supra note 2, at 671–81.

^{277.} See Douglas NeJaime, Marriage, Biology, and Gender, 98 IOWA L. REV. BULL. 83 (2013).

^{278.} Brief of Robert P. George, et al. as Amici Curiae in Support of Hollingsworth and Bipartisan Legal Advisory Group Addressing the Merits and Supporting Reversal, Hollingsworth v. Perry, 570 U.S. 693 (2013), United States v. Windsor, 570

governments' non-recognition of same-sex marriage solely on the basis of the physical act of heterosexual procreation, Girgis, George, and Anderson wrote:

First, marriage unites persons in their *bodies* as well as their minds. The bodily union of two people is much like the bodily union of organs in an individual. Just as one's organs form a unity by coordinating for the biological good of the whole (one's survival), so the bodies of a man and a woman form a unity by coordination (coitus) for a biological good (reproduction) of their union as a whole. In choosing such biological coordination, spouses unite bodily, and do not merely touch or interlock, in a way that has generative significance. This generative kind of act physically embodies their specific, marital commitment. Non-marital bonds are, by contrast, unions of hearts and minds, but not bodies

Second, marriage is oriented to procreation, family life, and thus a comprehensive range of goods. Why? The kind of act that makes marital love is also the one that makes new life: new participants in *every* type of good.²⁷⁹

The Girgis-George-Anderson position, which was endorsed by states in the form of the procreation rationale for same-sex marriage prohibitions, posits that traditional coitus is a necessary condition of the constitutional right to marry, just as traditional coitus before Lawrence was a necessary condition of the constitutional right to sex. It relies not just on the belief that male/female biological difference shapes the social relations of parenthood, 280 as Professor NeJaime has noted, but that male/female sexual procreation specifically shapes those relations—indeed, shapes "every type of good" imaginable.281 NeJaime has identified many instances where courts "collapse" the "biological aspects of reproduction [into] . . . the social aspects of parenting" when considering the legal rights of people using ART to procreate.²⁸² The Girgis-George-Anderson brief elides or collapses not just the biological and the social but the *sexual* and the social. It contends not just that dual gender biology matters for parenting but that sexual procreation specifically matters for parenting.

In rejecting the notion that the constitutional right to marry is conditioned not just on the ability to procreate but on the ability to procreate sexually, the *Obergefell* Court finally rejected the role of sexual supremacy in marriage regulation. Significantly, *Obergefell* not only

- 279. Brief of Robert P. George, et al., supra note 278, at 8.
- 280. NeJaime, supra note 277, at 93.
- 281. Brief of Robert P. George, et al., supra note 278, at 8 (emphasis added).
- 282. NeJaime, The Nature of Parenthood, supra note 2, at 2295.

U.S. 744 (2013) (Nos. 12-144, 12-307), 2013 WL 390984. Ryan Anderson filed a brief in *Masterpiece Cakeshop*, the case recently decided by the Supreme Court that pits equality against the free speech and free exercise of religion rights of a commercial vendor. Anderson there makes many of these same arguments with respect to "conjugal" marriage, albeit in the First Amendment context. *See* Brief of Ryan T. Anderson, et al. as Amicus Curiae in Support of Petitioners at 8, 13, Masterpiece Cakeshop, Ltd. v. Colorado Civil Rights Commission, 2016 WL 1645027 (Colo. 2016) (No. 16-111), 2017 WL 4004529.

repudiated the procreation rationale for same-sex marriage prohibitions²⁸³ but also recognized that same-sex couples throughout the United States could procreate and were procreating with each other to create "biological" children—presumably through alternative reproductive technologies that make biological parenthood for same-sex couples possible.²⁸⁴ In so doing, *Obergefell* made clear that sexual supremacy—understood as the official valorization of traditional sexual procreation and the sexually-produced family—was no longer a sustainable basis for large swaths of intimate life.²⁸⁵

Even more, *Obergefell* could be read to stand for the proposition that the Constitution rejects sexual supremacy not just in the law of marriage but also in the law of procreation. While obviously a case about marriage equality between same-sex and opposite-sex couples, *Obergefell* is also—between the lines or beneath the surface—a case about procreation equality between sexual and non-sexual procreation. Several times throughout its opinion the majority refers to marriage and procreation as "related rights" that compose a "unified whole,"286 linking not marriage and procreation as acts (as some states had hoped) but marriage and procreation as vigorously protected rights. In so doing, the Court at the very least suggests that it is no more constitutional for the state to endorse a particular vision of sexual procreation through its regulation of procreation through its regulation of marriage.

The Supreme Court's banishment of various forms of sexual supremacy in sexual, marital, and even, perhaps, procreative regulation destabilizes much of the regulation, actual and proposed, discussed in Part III of this Article. Part III showed that the law regulates the family created through ART in the shadow of the sexual family, much as the law regulates non-marriage in the shadow of marriage. Ideals about sexual procreation and the sexually-produced family influence surrogacy regulations, privileging as they do core features of traditional sexual procreation, like biology, marriage, and gender. Ideals about sexual procreation and the sexually-produced family influence the "raging" contemporary debate over anonymous egg and sperm donation,²⁸⁷ whose abolition commentators support on the ground that anonymous donation departs too dramatically from the norms surrounding the sexual, biological family. Finally, ideals

^{283.} Obergefell v. Hodges, 135 S. Ct. 2584, 2601 (2015).

^{284.} Id. at 2600.

^{285.} Chief Justice Roberts hewed to sexual supremacy in his vision of marriage that emerges from his *Obergefell* dissent. *See id.* at 2613 (Roberts, C.J., dissenting) (stating that marriage exclusions are constitutional because of procreation, and "[p]rocreation occurs through sexual relations between a man and a woman").

^{286.} *Id.* at 2600.

^{287.} Cohen, supra note 22, at 527.

about sexual procreation influence much of the debate over developments in reproductive medicine that have the capacity to revolutionize reproduction, parenthood, and even gender. Those developments include gene editing and mitochondrial DNA transfer, each of which ostensibly designs children in ways that undermine the presumed qualities of sexual procreation and its celebrated ethic of giftedness.

Many of these concerns animated the criminalization of same-sex intimacy and the prohibition of same-sex marriage not too long ago, and they have drifted and shifted, virus-like, into the alternative reproduction setting, where they have taken root to resist the expansion of non-sexual reproduction beyond sexual procreative paradigms. Their continued presence in that context raises constitutional concern in light of the explicit rejection of sexual supremacy in domains, like sex and marriage, which are co-extensive with procreation and family formation. If sexual supremacy is an inadequate basis for the regulation of an institution like marriage, then it is hard to imagine that sexual supremacy would remain an adequate basis for the legal regulation of procreation—something much more private, prior, and rudimentary.

B. Sexual Supremacy Incorrectly Assumes That Non-Sexual Procreation Is a Non-Fundamental Right

Sexual supremacy involves two interrelated aspects: the regulation of non-sexual reproduction according to paradigms about sexual procreation and the sexually-produced family, and the asymmetrical or selective application of those paradigms to non-sexual reproduction. The first aspect of sexual supremacy is unconstitutional for the reasons discussed in section V.A. The second aspect of sexual supremacy is unconstitutional for a different reason: because it assumes without adequate explanation that non-sexual reproduction is a non-fundamental liberty interest.

Examples abound of the uneven application of ideals about sexual procreation to non-sexual procreation, and Part III showcased many of them. Surrogacy laws apply norms associated with ideal sexual procreation—marriage, dual-gender parenting, and mothering—to non-sexual procreation, and only to non-sexual procreation. Proposals to eliminate egg and sperm donor anonymity apply norms associated with ideal sexual procreation—biological affinity, transparency—to non-sexual procreation, and only to non-sexual procreation. Designer baby criticisms of ART apply norms associated with ideal sexual procreation—chance, unpredictability, giftedness—to non-sexual procreation, and only to non-sexual procreation. Each of these examples follows a predictable pattern: the fashioning of non-traditional procreation in the shadow of sexual procreation not as it actually exists, but as it ideally exists. It is a pattern that characterizes the law's ap-

proach to non-traditional kinship generally—witness non-marriage regulation, as discussed earlier²⁸⁸—and it rests on an assumption that non-traditional kinship receives less constitutional protection than its traditional counterpart.

Most often, this assumption is implicit in the context of proposed and actual regulations of ART. For example, Sandel acknowledges that many parents engage in designer parenting, but then supports regulating that practice only when it occurs in the ART setting, thus implying that the state may selectively target ART for designer baby reasons.²⁸⁹ Sometimes, though, the assumption that ART implicates less robust constitutional interests is explicit. For example, Professor Naomi Cahn supports mandatory identification of paternity in the context of alternative insemination but not in the context of sexual reproduction on the express ground that sexual and non-sexual reproduction "are, in fact, different, and different enough to satisfy any level of constitutional scrutiny."290 Sandel, Cahn, and other scholars are not alone in their rejection of ART as a fundamental right, as some courts have also rejected the notion that certain ARTs implicate the fundamental right to procreate.²⁹¹ New York's Task Force on Life and Law recently did the same, concluding in its 2017 surrogacy report that "individuals do not have a fundamental right to surrogacy." 292

The notion that procreation is vigorously protected under the Constitution only when it occurs sexually is in tension with emerging jurisprudence on the constitutional status of ART. Most significant in

292. New York State Task Force on Life and Law, Revisiting Surrogate Parenting: Analysis and Recommendations for Public Policy on Gestational Surrogacy 51 (Dec. 19, 2017).

^{288.} See generally Cahill, Regulating at the Margins, supra note 103 (exploring this phenomenon in domestic partnership and de facto parent regulation); Baker, supra note 124 (exploring this phenomenon in de facto parent regulation); Huntington, supra note 124 (exploring this phenomenon in family law generally).

^{289.} Sandel, supra note 27, at 52.

^{290.} Cahn, supra note 29, at 1106.

^{291.} See, e.g., In re Parentage of a Child by T.J.S. & A.L.S., 419 N.J. Super. Ct. App. Div. 46, 57 (2011) (concluding that a non-biological intended mother to a surrogacy agreement lacks a "fundamental right" to be the legal parent of a child gestated by a third-party and created with a donor egg "because of the absence of any biological or gestational connection to the child"). But see D.M.T. v. T.M.H., 129 So. 3d 320, 338 (Fla. 2013) (suggesting that non-sexual reproduction might be integral to the right to procreate in light of "advances in science and technology [that] now provide innumerable ways for traditional and non-traditional couples alike to conceive a child"). Scholars have long debated whether the Constitution protects a fundamental right to procreate that includes non-sexual reproduction. See, e.g., John A. Robertson, Assisting Reproduction, Choosing Genes, and the Scope of Reproductive Freedom, 76 Geo. Wash. L. Rev. 1490 (2008) (finding a fundamental right to reproduce non-sexually); Radhika Rao, Equal Liberty: Assisted Reproductive Technology and Reproductive Equality, 76 Geo. Wash. L. Rev. 1457 (2008) (arguing that the Constitution does not protect a fundamental right to procreate, let alone a fundamental right to procreate non-sexually).

this regard is the Supreme Court's recent marriage jurisprudence, which points strongly in the direction of finding that non-sexual procreation is a fundamental right. As noted in section V.A, *Obergefell v. Hodges* places marriage and procreation on the same constitutional plane by referring to them more than once as "related rights" that compose a "unified whole."²⁹³ *Obergefell* also rejects states' attempts to define marriage in narrow terms as the right to same-sex marriage.²⁹⁴ It follows that if marriage and procreation are "related rights," and if it is unconstitutional to define marriage in narrow terms, then it is also unconstitutional to define procreation in narrow terms.²⁹⁵ In addition, *Obergefell* implicitly rejects the contention that sex is necessary for the right to procreate by repudiating the procreation rationale for marriage laws and by overruling *Baker v. Nelson*,²⁹⁶ both of which, I have elsewhere argued, conditioned the right to marry on sexual procreation specifically.²⁹⁷

Other courts have similarly suggested that non-sexual procreation might be a fundamental liberty interest under state constitutions. For instance, in its landmark "two mom" case, the Florida Supreme Court observed that "advances in science and technology now provide innumerable ways for traditional and non-traditional couples alike to conceive a child" and thereby "exercise their inalienable rights to enjoy and defend life," which are guaranteed by the Florida Constitution. 298 The lower court in that case made a similar observation when it reasoned that "[t]o suggest that procreative rights do not encompass the use of medical technology ignores the fact that the right not to procreate through the use of contraception and the right to terminate a pregnancy necessarily require access to medical technology and assistance." 299 In so doing, the lower court rejected the dissenting judge's contention that *Skinner v. Oklahoma*, the Supreme Court case that established a right to procreate, 300 was limited to "natural pro-

^{293. 135} S. Ct. 2584, 2600 (2015).

^{294.} Id. at 2602.

^{295.} NeJaime argues that Obergefell could eventually lead courts to "extend due process protection" to non-biological parents who maintain "social bonds" with children created through alternative reproduction. NeJaime, The Nature of Parenthood, supra note 2, at 2358–59.

^{296. 191} N.W.2d 185 (Minn. 1971) (rejecting a federal constitutional challenge to Minnesota's opposite-sex marriage requirement in part because of procreation, overruled by Obergefell v. Hodges, 135 S. Ct. 2584 (2015)).

^{297.} See Cahill, Reproduction Reconceived, supra note 2, at 677-79.

^{298.} D.M.T. v. T.M.H., 129 So. 3d 320, 338 (Fla. 2013).

 $^{299. \ \ \}text{T.M.H. v. D.M.T., } 79 \ \text{So. 3d} \ 787, \\ 799 \ (\text{Fla. Dist. Ct. App. 2011}).$

^{300.} Skinner struck down Oklahoma's mandatory sterilization law under the federal Equal Protection Clause and suggested that procreation was a fundamental right. Skinner v. Oklahoma, 316 U.S. 535 (1942). The dissent in T.M.H. cited Skinner for the proposition that the right to procreate protected only sexual procreation. See T.M.H., 79 So. 3d at 818 (Lawson, J., dissenting).

creation (which involves both private, intimate, sexual contact between consenting adults and the control of one's own body)."301

This emerging jurisprudence on the right to procreate and its outer limits could render vulnerable the selective burdening of non-sexual reproduction with ideals and norms about procreation and parenting more generally—the second aspect of sexual supremacy discussed by this Article. By way of example, consider once again the procreation rationale for exclusionary marriage laws. As some courts have recognized, that rationale reflected a normative ideal about all marriage that states were selectively applying to same-sex couples.³⁰² In response to the argument that the procreation rationale unfairly targeted same-sex couples with the ideal of procreative marriage, courts maintained that states could do so because same-sex marriage, unlike opposite-sex marriage, was not a fundamental right.³⁰³ As Justice Scalia quipped during oral argument in Hollingsworth v. Perry in reference to Justice Kagan's point that procreation was an underinclusive rationale for marriage exclusions: "I suppose we could have a questionnaire at the marriage desk when people come in to get the marriage license – you know, 'Are you fertile or are you not fertile?' I suppose this Court would find that to be an unconstitutional invasion of privacy, don't you think?"304 In this sense, same-sex couples (exercising a non-fundamental right) were burdened with a marital ideal from which married persons were actually exempt, much in the same way that non-sexual procreators (exercising a purportedly non-fundamental right) are burdened with procreative ideals from which sexual procreators are exempt.

The selective burdening of same-sex relationships with the states' normative ideal about procreative marriage changed, of course, once the *Obergefell* Court found that same-sex marriage was a fundamental right. In a world where same-sex marriage is not a fundamental right, it is permissible to use same-sex couples as a vehicle to communicate the states' ideal about all marriage. In a world where same-sex marriage is fundamentally protected, however, the gross underin-

^{301.} See T.M.H., 79 So. 3d at 818 (Lawson, J., dissenting).

^{302.} See, e.g., Goodridge v. Dep't of Pub. Health, 798 N.E.2d 941, 1002 (Mass. 2003) (Cordy, J., dissenting) ("As long as marriage is limited to opposite-sex couples who can at least theoretically procreate, society is able to communicate a consistent message to its citizens that marriage is a (normatively) necessary part of their procreative endeavor " (emphasis added)).

^{303.} Standhardt v. Superior Court ex rel. County of Maricopa, 77 P.3d 451 (Ariz. Ct. App. 2003).

^{304.} Transcript of Oral Argument at 25, Hollingsworth v. Perry, 570 U.S. 693 (2013) (No. 12-144).

clusivity of the states' normative aspirations for all marriage cannot pass constitutional muster. 305

So too here. The more likely it is that non-sexual procreation is a fundamental right, the less likely it is that the selective burdening of non-sexual procreation with the states' ideals about all procreation passes constitutional muster. The dissenting judge in the Florida case mentioned above suggested as much when faulting the majority for allegedly inventing a fundamental right to assisted reproduction that would cast into doubt a range of state surrogacy requirements, including the marriage requirement in Florida and elsewhere. "I do not see how any of the restrictions on the use of assisted reproductive technology, enacted by other states, could survive a constitutional challenge if procreation using assisted reproductive technology is recognized as a fundamental right," he observed. "Depending on how a fundamental right to assisted reproduction is framed and what it includes, he might be right."

The larger point here is that regulating non-sexual reproduction in the shadow of ideals about sexual reproduction is in tension with non-sexual reproduction's fundamental right status, which cannot tolerate the underinclusivity associated with sexual supremacy. The law eventually rejected the procreation rationale as orthogonal to marriage's deep purpose, and it ought to do the same with the similarly asymmetric norms so often applied to non-sexual reproduction.

VI. CONCLUSION

Even as society transitions to a point where sexual procreation is not the only, nor even in time the dominant, method of family formation, sexual procreation is likely to remain the vehicle through which the law's ideas and ideals about reproduction, parenting, and the family are routed. Professor Clare Huntington has argued that "the marital family serves as a . . . synecdoche for all families, not only marginalizing non-marital families but also actively undermining their already tenuous bonds."³⁰⁷ A similar dynamic marks the law's engagement with non-sexual reproduction.

In that context, sexual procreation and the sexual family often serve as "synecdoches" for all reproduction and for all families, marginalizing and undermining non-traditional family formation and non-normative family arrangements. Sometimes, the ideal sexual procreative family—biological, gendered, and marital—is the synecdoche

^{305.} Obergefell v. Hodges, 135 S. Ct. 2584, 2601 (2015) (rejecting procreation on underinclusiveness grounds).

T.M.H. v. D.M.T., 79 So. 3d 787, 823 (Fla. Dist. Ct. App. 2011) (Lawson, J., dissenting).

^{307.} Huntington, supra note 103, at 167.

for the family that results from non-sexual procreation. Other times, the ideal sexual procreative process—mysterious, unpredictable, undesigned—is the synecdoche for the non-sexual procreative process. Either way, the law is more willing to accommodate and recognize non-sexual procreation the more that it looks like ideal sexual procreation and the family that results therefrom, a phenomenon that this Article calls sexual supremacy.

Sexual supremacy's shaping of contemporary ART law and policy is not surprising. The law has "carr[ied] forward"308 the past in the law of marriage and parenthood, and there is no reason to think that the law of procreation would be any different. Sexual supremacy's shaping of contemporary ART law and policy is, however, deserving of criticism. Sexual supremacy inhibits technology and its radical potential, making the end of sexual procreation's dominance as both norm and form difficult to envision. Its power over ART regulation ultimately makes technology alone insufficient to guarantee a world after sex in reproduction, necessitating something beyond innovation to displace sex as the "central symbol" 309 of American family law and American family life. One possibility suggested by this Article is existing and emerging constitutional law relating to intimate and family life. That law not only increasingly favors familial and procreative flourishing apart from sex, but also destabilizes sexual supremacy's normative foundations—in sex, marriage, and procreation alike.

^{308.} NeJaime, *The Nature of Parenthood, supra* note 2, at 2289 ("Parentage law continues to draw distinctions that carry forward legacies of inequality embedded in frameworks forged in earlier eras.").

^{309.} Schneider, American Kinship, supra note 1, at 37.