The Personhood Movement’s Effect on Assisted Reproductive Technology: Balancing Interests Under a Presumption of Embryonic Personhood

I. Introduction

In November 2017, congressional Republicans unveiled a plan to overhaul the tax code. While the proposal was primarily controversial for its fiscal policy, one section buried almost 100 pages into the bill sparked a different debate. Section 1202 allows parents to open a 529 college savings account in the name of an “unborn child,” defined as “a child in utero”—a human being “at any stage of development, who is carried in the womb.” This portion of the bill is effectively a personhood law—an attempt to classify the fetus as a person with legal rights. The drafters specified that an “unborn child” only includes embryos and fetuses inside a woman’s body; however, most personhood laws sweep more broadly and include extracorporeal embryos as well. Those laws directly implicate assisted reproductive technology (ART), in which embryos are handled as part of treating infertility. How does redefining a legal “person” to include embryos affect an infertile woman’s ability to use ART to conceive a child? The answer is unclear. But the prevalence of personhood laws alongside the increasing popularity of ART requires a serious conversation about how the former will affect the latter.

This Note aims to continue that conversation, exploring the consequences of personhood on ART by analyzing how a court might determine the constitutional boundaries of state personhood laws regulating embryo use. In Part I, I describe the significance of the personhood movement to ART. In Part II, I explain the legal backdrop, examining the embryo’s legal and moral status; the relevance of Roe v. Wade and related cases; and the reproductive liberty framework. Finally, in Part III, I analyze hypothetical state regulations of embryo creation, storage, and discard under a presumption of embryonic personhood. This analysis ultimately asks, if a state passes a law labeling embryos “persons,” can couples using ART to conceive raise a successful constitutional challenge? Using a balancing test,

3. ART can involve multiple parties. For example, a single woman who cannot produce viable eggs may use ART to conceive with several other people: an egg donor, a sperm donor, and perhaps
I demonstrate how a court might weigh the various competing liberty interests.

A. The Personhood Movement from Roe v. Wade to Present

The United States Supreme Court’s decision in Roe v. Wade—which recognizes constitutional protection for a woman’s right to choose abortion—set off a wave of pro-life backlash. In 1974, just one year after Roe was decided, the Senate held its first set of hearings on what would later become known as a “personhood” amendment. A portion of the proposed amendment read, “Neither the United States nor any State shall deprive any human being, from the moment of conception, of life without due process of law; nor deny to any human being, from the moment of conception . . . equal protection of the laws.” The notion that life begins at conception is the core tenet of a larger personhood movement. Adherents believe unborn fetuses,
and typically embryos,9 deserve the same rights as living people.10 The purpose of personhood legislation is thus to broaden the definition of a “person” under federal and state laws to include embryos and fetuses, ultimately guaranteeing them rights.11

The movement has been largely unsuccessful.12 For example, in 2011 a proposed personhood amendment to the Mississippi Constitution surprisingly failed. Several pre-voting polls had suggested an overwhelming majority of the electorate supported the measure.13 Following the initiative’s unexpected failure, analysts sought to determine why 58% of people voted against it.14 One of the most common reasons voters cited was concern about the law’s effect on the availability of in vitro fertilization (IVF) technology, a form of ART.15

Several states have enacted general personhood laws.16 However, Louisiana is the only state in which a personhood law specifically addresses

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9. Fetus and embryo are medically distinct but related terms. Human development between fertilization and birth is often divided into the embryonic and fetal periods. KEITH L. MOORE, THE DEVELOPING HUMAN: CLINICALLY ORIENTED EMBRYOLOGY 1 (10th ed. 2016). While the embryo and the fetus technically represent distinct developmental phases—with the embryonic stage lasting until about the end of the eighth week of pregnancy—the law has not differentiated on this basis. Barbara Gregoratos, Note, Tempest in the Laboratory: Regulation of Medical Research on Spare Embryos from In Vitro Fertilization, 37 HASTINGS L.J. 977, 987 (1986); William A. Sieck, Comment, In Vitro Fertilization and the Right to Procreate: The Right to No, 147 U. PA. L. REV. 435, 439–40 (1998). Some scholars also differentiate between embryos and pre-embryos, suggesting the term pre-embryo be used to describe preimplantation embryos. E.g., Jennifer P. Brown, Comment, “Unwanted, Anonymous, Biological Descendants”: Mandatory Donation Laws and Laws Prohibiting Premenstrual Discard Violate the Constitutional Right to Privacy, 28 U.S.F. L. REV. 183, 183 n.2 (1993). For the purposes of this Note, that distinction is not important, and I use the term embryo holistically.


11. See Forsythe & Arago, supra note 6, at 275 (describing a typical state personhood amendment as “seek[ing] to amend the due process clause and the equal protection clause of its respective state constitution to include a developing human being or unborn child as a ‘person’”).


15. Id. at 585.

embryos created using ART, and the law is narrowly constructed. Chapter 3 of Louisiana’s Civil Code is titled “Human Embryos.” The law provides that embryos created through IVF are “juridical persons” who have “certain rights granted by law.” These rights include the right to doctor–patient confidentiality and rights against being sold, used for research, or destroyed. The law’s constitutionality has never been challenged in court.

Personhood bills are not unique to state legislatures. In addition to the November 2017 tax proposal, as recently as January 2017 Congress was considering a personhood law. United States Representative Jody Hice of Georgia and twenty-nine cosponsors introduced the federal Sanctity of Human Life Act, a bill declaring that human life starts with fertilization. And advocates do not confine their efforts to legislative means. The Department of Health and Human Services released a draft strategic plan for 2018–2022 that describes the department’s mission as “serving and protecting Americans at every stage of life, beginning at conception.” Pro-life groups have used judicial channels to advance these arguments as well. For example, in the embryo custody case McQueen v. Gadberry, one pro-life litigation group argued that frozen embryos should be treated like

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18. Id.
19. Id. §§ 9:121, 124.
20. Id. § 9:124.
23. See supra Part I.
24. Sanctity of Human Life Act, H.R. 586, 115th Cong. (2017-2018). The bill was referred to the Subcommittee on the Constitution and Civil Justice in February 2017 and has been in legislative limbo since. Id.
children and suggested courts apply a best-interests analysis to determine the embryos’ fates.\textsuperscript{27}

Despite consistent failure, the movement has persisted in the last decade,\textsuperscript{28} in part because the embryo’s moral and legal status remains unsettled.\textsuperscript{29} Capitalizing on this ongoing debate, legislators continue to introduce bills intended to expand the legal definition of a “person” to include the unborn. Since 2013, state legislators have proposed over 100 bills to this effect.\textsuperscript{30} There was an influx of personhood bills across the country in 2017,\textsuperscript{31} and 2018 looks to be no exception. For example, on February 20, South Carolina’s Senate Judiciary Committee approved a bill titled “The Personhood Act of South Carolina.”\textsuperscript{32} The bill grants the constitutional rights of due process and equal protection from the moment of fertilization.\textsuperscript{33}

\begin{thebibliography}{99}
\bibitem{28} See Will, supra note 10, at 579 (outlining personhood proponents’ recent legal efforts); see also Robin Abcarian, \textit{A New Push to Define ‘Person,’ and to Outlaw Abortion in the Process}, L.A. TIMES (Sept. 8, 2009), http://articles.latimes.com/2009/sep/28/nation/na-embryos-personhood28 [https://perma.cc/8NVM-CDA]\textsuperscript{P} (“Defeats of personhood measures around the country . . . have not daunted proponents . . . .”)
\bibitem{30} See Legislative Tracker: Personhood, supra note 12 (cataloging state legislation introducing personhood measures).
\bibitem{33} S.C. S. 217.
B. The Tension Between Personhood Laws and ART

Mississippi was not the first state to propose a personhood amendment to its constitution. Neither was it the first state where a personhood amendment failed a citizen vote. However, it was the first state where a personhood proposal created a media frenzy. The widespread news coverage primarily focused on the measure’s unexpected failure in a right-leaning, pro-life state. The Mississippi amendment sparked extensive and pervasive debate over how personhood laws might affect access to ART. Voters wanted to know how reclassifying embryos as persons would affect couples’ access to important reproductive treatments like IVF. The proposal highlighted the stark disagreement between pro-life, religious groups in favor of personhood laws and several prominent medical organizations that adamantly oppose them. The American Society for Reproductive Medicine spoke out against the Mississippi proposal, criticizing it as “a dangerous intrusion of criminal law into the provision of medical care.”

Personhood legislation is largely fueled by anti-abortion sentiments. Fixated on abortion—which involves fetuses and thus embryos already implanted in the womb—the movement’s proponents often fail to consider the repercussions of personhood laws on embryos outside the womb. Redefining “person” to encompass embryos is likely to have a profound effect on couples using ART to conceive children. And legislators will likely continue proposing personhood initiatives considering their popularity.
The Personhood Movement & ART

among conservative groups and the current pro-life administration. The importance of defining the boundaries of personhood laws is thus more important now than ever.

II. ART and Procreative Liberty

To determine how a court might analyze a constitutional challenge to a personhood law, it is important to understand the current legal framework. ART is an increasingly common tool for couples who cannot conceive coitally. The rise in the use of ART correlates directly with a rise in the number of embryos being created and stored in medical facilities around the country. The growing number of extracorporeal embryos poses an issue because their legal status is unclear. This legal gray area, in addition to poorly defined fundamental reproductive freedoms, creates a constitutional landscape that is difficult to navigate.

A. The Increasing Prevalence of ART

Each year, infertility affects millions of people trying to conceive children. In the United States, about 12% of women struggle to get pregnant or carry a pregnancy to term. Now more than ever people are turning to health care professionals to help them start families. Help often comes in the form of assisted reproductive technology (ART), which—according to the Centers for Disease Control and Prevention—includes all fertility treatments involving eggs or embryos. The most commonly used and effective form of ART is IVF.


IVF “offers . . . couple[s] a chance at biological parenthood that [they] may not otherwise” have. To complete the IVF process, the woman undergoing treatment takes hormonal medication that stimulates her ovaries to produce an increased number of eggs. The eggs are then retrieved from the woman’s uterus and inseminated in a laboratory. After successful fertilization, at least one resulting embryo is transferred into the woman’s uterus. Even for couples who only want one child, medical professionals generally recommend implanting more than one embryo to ensure that a pregnancy results. However, the choice requires a balancing act: implanting more than one embryo increases the likelihood of pregnancy, but implanting too many embryos can be dangerous because of the increased risk of complications associated with multiple gestation. Cryopreservation alleviates some of this tension. Couples can create multiple embryos in one IVF cycle, implant only a small number of those, and freeze the excess embryos in storage. Cryopreservation provides for longer term use and decision-making and allows women to undergo multiple implantations without having to submit to a surgical procedure and redo the IVF cycle each time.

47. Id.
48. Id.
49. See generally AM. SOC’Y FOR REPROD. MED. & THE SOC’Y FOR ASSISTED REPROD. TECH., Criteria for Number of Embryos to Transfer: A Committee Opinion, 99 FERTILITY & STERILITY 44, 44–45 (2013) (outlining guidelines recommending implantation of multiple embryos with the goal of “promot[ing] singleton gestations” and “reduc[ing] the incidence of high-order multiple gestations”).
50. Sieck, supra note 9, at 440.
53. Sieck, supra note 9, at 441.
B. *The Embryo’s Legal and Moral Status*

The legal status of embryos is contested.\(^{55}\) There are three predominant views on the embryo’s closely related moral status.\(^{56}\) The traditionally pro-life view conceptualizes the embryo as a human being on par with living people.\(^{57}\) On the other end of the spectrum is the view that the embryo is not entitled to any rights, regardless of its unique potential.\(^{58}\) The third view is that the embryo’s status lies somewhere between these two extremes—that it is not a person in the conventional sense of the word but nonetheless deserves “special respect” because of its potential to become one.\(^{59}\)

Any resolution to the debate over the moral and legal significance of embryos would have important and far-reaching consequences. Fertility clinics in the United States alone are estimated to be part of a $4.5 billion industry,\(^{60}\) and as many as one million embryos are currently frozen in storage.\(^{61}\) The personhood debate aside, legal conflicts already abound. Courts struggle to resolve legal battles over the disposition of embryos when disputes arise. To illustrate, when a couple uses IVF to create embryos but later separates and disagrees about what to do with those embryos, what rules govern the disagreement?\(^{62}\) No clear guidelines exist.

When prospective parents undergo IVF then later disagree about whether to implant the resulting embryos, there are typically two liberty interests at issue. An example demonstrates this intersection of rights. A married couple decides to have children using IVF. The woman undergoes the procedure and creates several embryos,, but the couple divorces before any have been implanted into the woman’s body. Now the fate of the embryos

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56. See Robertson, *In the Beginning*, *supra* note 55, at 444–50 (summarizing the competing theories).

57. *Id.* at 444.

58. *Id.* at 445.

59. *Id.* at 446; Brown, *supra* note 9, at 197–99.


is unclear because the man wants to discard them and the woman wants to use them. Multiple questions arise. Does prohibiting the woman from using the embryos interfere with her right to procreate? Does allowing her to use them infringe the man’s right to avoid procreation and parenthood? And who makes these decisions—particularly if the couple did not sign a contract contemplating these issues beforehand?63

Granting embryos personhood status only complicates these questions by adding a third liberty interest to the debate—the embryo’s.64 Take our example: how do we balance the couple’s procreative rights while also considering the constitutional rights of the embryo-person? What kind of analysis would suffice? And if the embryo’s interests are always best served by allowing implantation (i.e., giving it the opportunity to develop into a child), is there ever a scenario in which implanting to protect its rights is trumped by, for example in our hypothetical situation, the man’s desire to discard?65 These complexities highlight the importance of addressing how personhood laws would affect couples using ART.

C. The Constitutional Backdrop: Roe v. Wade

It is nearly impossible to discuss reproductive rights without an examination of Roe v. Wade. While Roe was not the first Supreme Court decision to articulate a right to privacy or discuss reproductive freedom as part of that right,66 it was the first to analyze reproductive freedom in a medical paradigm.67 Roe is also important to the personhood movement because the decision served as the impetus for a major mobilization of pro-life efforts starting in the 1970s.

1. Roe and its Evolution.—Under Roe v. Wade, women have a right to terminate their pregnancies without governmental intrusion until the point of

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63. Embryo disposition disputes have been thoroughly discussed and debated and are outside the scope of this Note. For an in-depth look at the legal controversies, see generally Sara D. Petersen, Dealing with Cryopreserved Embryos Upon Divorce: A Contractual Approach Aimed at Preserving Party Expectations, 50 UCLA L. REV. 1065 (2003); John A. Robertson, Prior Agreements for Disposition of Frozen Embryos, 51 OHIO ST. L.J. 407 (1990); Cohen & Adashi, supra note 27; Upchurch, supra note 29.

64. See Will, supra note 10, at 575–76 (discussing the lack of legal clarity about a constitutional right to birth control and infertility treatments—an issue Will argues would be exacerbated under a personhood framework).

65. In our example, the woman wants to implant the embryos. What if, like the man, she wants to discard them? We would still want to know if implantation violates the man’s desire to discard, but we would now also want to know if implantation violates the woman’s right to refuse pregnancy.


67. See Reva Siegel, Reasoning from the Body: A Historical Perspective on Abortion Regulation and Questions of Equal Protection, 44 STAN. L. REV. 261, 275 (1992) (“Because Roe relies so heavily upon medical science to define the state’s interest in regulating abortion, medical analysis displaces social analysis . . . ”).
fetal viability.\(^{68}\) Although the case was decided in 1973, its central holding has since been reaffirmed, most recently in 2016.\(^{69}\) Roe placed restrictions on state interference in abortion based on a trimester framework.\(^{70}\) A state’s interest in protecting the potentiality of human life was not considered compelling until the end of the first trimester.\(^{71}\) However, once the second trimester began and the fetus was viable, the state was permitted to regulate abortion procedures to the extent the regulations “reasonably relate[d]” to protecting women’s health.\(^{72}\) Viability was the threshold: once the fetus was viable, a state could step in.\(^{73}\) At that point, a state could even go so far as to prohibit abortion, so long as there was an exception for instances in which abortion was necessary to protect the life and health of the pregnant woman.\(^{74}\) Two decades later, in Planned Parenthood v. Casey,\(^{75}\) the Court reconfigured Roe—affirming its central holding and the viability standard but rejecting the trimester framework.\(^{76}\) Instead, the Court implemented an “undue burden” test.\(^{77}\) As Justice O’Connor explained, state regulations that have “the purpose or effect of placing a substantial obstacle in the path of a woman seeking an abortion of a nonviable fetus” will be considered an “undue burden” on the woman’s right and, thus, unconstitutional.\(^{78}\) Some critics argue that Casey effectively weakened Roe’s constitutional protection of abortion.\(^{79}\) But the Court emphatically stressed the importance of constitutional protection for personal decisions about procreation and family relationships.\(^{80}\) In doing so, the plurality conceptualized these matters as “choices central to personal dignity and autonomy,” which are “central to the

\(^{69}\) Whole Woman’s Health v. Hellerstedt, 136 S. Ct. 2292, 2309 (2016).
\(^{70}\) Roe, 410 U.S. at 163–65.
\(^{71}\) Id. at 163. The rationale was that, at the time, medical research suggested mortality rates up to that point could be lower than mortality rates in normal childbirth. Id.
\(^{72}\) Id.
\(^{73}\) Id.
\(^{74}\) Id. at 163–64.
\(^{76}\) Id. at 846, 876–77.
\(^{77}\) Id. at 874.
\(^{78}\) Id. at 877.
\(^{79}\) See, e.g., Caroline Burnett, Comment, Dismantling Roe Brick by Brick—The Unconstitutional Purpose Behind the Federal Partial-Birth Abortion Act of 2003, 42 U.S.F. L. REV. 227, 236 (2007) (noting that, in part because of Casey’s alterations, Roe represents “the high-water mark for protection of abortion rights”); Radhika Rao, Property, Privacy, and the Human Body, 80 B.U. L. REV. 359, 393 (2000) (“Whether abortion continues to remain a fundamental right . . . is no longer clear after the Supreme Court’s decision in Casey.”); Linda J. Wharton & Kathryn Kolbert, Preserving Roe v. Wade . . . When You Win Only Half the Loaf, 24 STAN. L. & Pol’y REV. 143, 144 (2013) (explaining that, after Casey, public relief that Roe was not overturned and public perception that Casey adequately protects abortion make it difficult for women’s rights advocates to further secure abortion rights).
\(^{80}\) Casey, 505 U.S. at 851.
liberty protected by the Fourteenth Amendment.\textsuperscript{81} Regardless of how \textit{Casey} affects abortion rights, the case signifies the Court’s continued belief in a constitutionally protected right to privacy, particularly with respect to reproductive decisions.\textsuperscript{82}

\textit{Roe}’s holding is based on the premise that embryos and fetuses are not “persons” under the Fourteenth Amendment.\textsuperscript{83} While the Court acknowledged the government’s interest in protecting potential life, it refused to make a judgment about when that potentiality becomes realized: “When those trained in . . . medicine, philosophy, and theology are unable to arrive at any consensus, the judiciary, at this point in the development of man’s knowledge, is not in a position to speculate as to the answer.”\textsuperscript{84} Since \textit{Roe}, no Supreme Court justice has publicly taken the position that fetuses are persons under the Constitution.\textsuperscript{85}

2. \textit{The Relationship between Roe and the Personhood Movement}.—\textit{Roe} motivated a surge in the personhood movement in the 1970s and continues to be its driving force.\textsuperscript{86} The \textit{Roe} Court refused to answer the question of when life begins; however, it highlighted the importance of a definitive answer by acknowledging that, if life did begin at conception and the fetus thus was a person, the plaintiff in \textit{Roe}’s case would “collapse[.]”\textsuperscript{87} If pro-life

\textsuperscript{81} \textit{Id}.

\textsuperscript{82} See Erin Daly, \textit{Reconsidering Abortion Law: Liberty, Equality, and the New Rhetoric of Planned Parenthood v. Casey}, 45 Am. U. L. Rev. 77, 81 (1995) (applauding the \textit{Casey} Court for “recogniz[ing] that reproductive rights implicate all aspects of women’s social and economic lives” and noting that state regulation of those aspects affects not just a woman’s right to privacy but her right to liberty as well).

\textsuperscript{83} \textit{Roe}, 410 U.S. at 158; see also \textit{John A. Robertson, Children of Choice: Freedom and the New Reproductive Technologies} 57 (1994) [hereinafter \textit{Children of Choice}] (discussing the two basic premises behind \textit{Roe}, one of which is that—because embryos and fetuses are not persons under the Fourteenth Amendment—they have no constitutional rights).

\textsuperscript{84} \textit{Roe}, 410 U.S. at 159.


\textsuperscript{86} While the personhood movement has been largely unsuccessful, a majority of states have passed fetal homicide laws. See Forsythe & Arago, \textit{supra} note 6, at 283 (“As of 2015, there are thirty-eight states with fetal homicide laws.”). These laws treat the killing of an unborn child (sometimes defined as a human being from the moment of conception) as murder. \textit{Id}.

\textsuperscript{87} \textit{Roe}, 410 U.S. at 156. The Court seemed to take the position that, if a fetus is a person with a right to life guaranteed by the Fourteenth Amendment, it follows that abortion is illegal. In one of the most influential papers published on abortion to date, Judith Jarvis Thompson showed that this conclusion is not necessarily true. See generally \textit{Judith Jarvis Thompson, A Defense of Abortion}, 1 PHILO. & PUB. AFF. 47 (1971). In her essay, Thompson uses colorful hypotheticals to illustrate that, even if a fetus is a person with rights, it does not automatically follow that the fetus’s rights override
advocates see Roe as the only legal obstacle to criminalizing abortion, this concession is critical. It provides those advocates with a weapon that can be used to attack Roe’s essential underpinnings.

Personhood amendments aim to change the Roe framework based on that perceived weakness. If fetuses are “persons,” then the government has a constitutional obligation to protect their rights. The legal argument sidesteps Roe’s nuances. Pro-life advocates believe that, under a personhood regime, abortion would become an encroachment on the rights of fetuses (who would be persons) and could be outlawed altogether. This anti-abortion tactic exploded in popularity after Roe. Between 1973 and 2003, members of Congress proposed a Human Life Amendment—which would amend the federal Constitution to grant fetuses personhood status and require “respect” for fetal life—over 330 times. (Only one of these proposals went to a vote, and it failed.)

D. The Reproductive Rights Framework

The Supreme Court has been shaping the depth and breadth of reproductive rights since the 1940s. Yet—despite decades of legal consideration—procreative freedom remains ill-defined. The lack of clarity is partially a product of an equally nebulous concept of the right to privacy.

the pregnant woman’s rights. Id. at 59. The fetus’s interests (which would include the right to life) would still need to be balanced against the pregnant woman’s interests (which would include her right to be free from the burdens of pregnancy), and Thompson argues there are circumstances in which the woman’s rights should prevail. Michael Stokes Paulsen, The Worst Constitutional Decision of All Time, 78 NOTRE DAME L. REV. 995, 1020 (2003).


89. See Michael D. Rivard, Comment, Toward a General Theory of Constitutional Personhood: A Theory of Constitutional Personhood for Transgenic Humanoid Species, 39 UCLA L. REV. 1425, 1498 (1992) (discussing the “personhood presumption theory,” in which a fetus would be presumed to be a constitutional person). Rivard argues—in the same vein as Judith Jarvis Thompson—that Roe’s determination that fetuses aren’t persons doesn’t necessarily conflict with the personhood presumption theory. Id.

90. Kay Steiger, What Happens if the Mississippi Personhood Amendment Passes?, ATLANTIC (Nov. 8, 2011), https://www.theatlantic.com/politics/archive/2011/11/what-happens-if-the-mississippi-personhood-amendment-passes/248095 [https://perma.cc/NFF4-4KEA]. In Roe, Justice Blackmun concluded that the word “person” as it is used in the Fourteenth Amendment “does not include the unborn.” Roe, 410 U.S. at 158.

91. PAUL SAURETTE & KELLY GORDON, THE CHANGING VOICE OF THE ANTI-ABORTION MOVEMENT: THE RISE OF “PRO-WOMAN” RHETORIC IN CANADA AND THE UNITED STATES 296 (2015). As of January 2018, personhood amendments have failed at the federal level. There is a federal fetal homicide law, which recognizes in utero fetuses as legal victims of a substantial list of violent crimes. Unborn Victims of Violence Act of 2004, 18 § U.S.C. 1841 (2012). However, the law is distinct from the Human Life Amendment in the context of ART because it involves fetuses already in the womb. In addition, the law only applies to third parties; it cannot be used to prosecute “any woman with respect to her unborn child,” including women who undergo abortion. Id. § 1841(c).

92. SAURETTE & GORDON, supra note 91, at 296.
But the confusion about what exactly reproductive rights include has also been exacerbated by rapid advancements in medical technology.

1. The Right to Procreate.—Procreative liberty, at least in its broadest form as the freedom to have or avoid having children, is relatively uncontroversial. Choosing to have children implicates many important values, including self-determination, individual happiness, equality, and the creation of meaningful relationships. Hence, while scholars disagree about the specifics, the right to reproduce is “widely accepted as a basic, human right.”

As early as 1942, the Supreme Court recognized the importance of a right to procreation because it is “fundamental to the very exercise and survival of the race.” Skinner v. Oklahoma involved a constitutional challenge to an Oklahoma law permitting the mandatory sterilization of criminals. Under the law, the state could sterilize a person if he or she had been convicted three or more times of crimes “amounting to felonies involving moral turpitude.” The plaintiff had been convicted once for stealing a chicken and twice for robbery with a firearm. Because procreation is “fundamental” to survival, the Court subjected the law to strict scrutiny. And in a unanimous decision, the Court struck down the law as unconstitutional. The decision was based on an Equal Protection analysis. The law made an exception for white-collar crimes like embezzlement, and the Court found the justification for the distinction among crimes unconvincing and discriminatory. But the analysis was also grounded in a common agreement among the justices that procreation is a fundamental right. Under Skinner, any state action selectively depriving a person of his

95. CHILDREN OF CHOICE, supra note 83, at 29.
98. Id. at 536–37.
99. Id. at 536.
100. Id. at 537.
101. Id. at 541. Justice Douglas emphasized this point: “We are dealing here with legislation which involves one of the basic civil rights of man.” Id.
102. Id. at 538.
103. Id. at 541–42.
104. Id. at 541; see also Sieck, supra note 9, at 449 (summarizing Skinner as “protect[ing] the individual reproductive function against intrusion by the State, absent compelling circumstances”).
or her right to procreate must be justified as the least restrictive means necessary to achieve a compelling state interest.\textsuperscript{105}

Thus, well before \textit{Roe} and the abortion cases, the Supreme Court protected a broad procreative right—the right “to bear and beget a child.”\textsuperscript{106} Building on the analysis from \textit{Skinner}, Justice Douglas articulated an implied constitutional right to privacy in \textit{Griswold v. Connecticut}.\textsuperscript{107} The Court then held that a married couple’s choice to use contraception was encompassed in that protected “zone of privacy.”\textsuperscript{108} Several years later, the right to contraception articulated in \textit{Griswold} was extended to unmarried couples.\textsuperscript{109} The Court stressed that the right to privacy is the right “to be free from unwarranted governmental intrusion into matters so fundamentally affecting a person as the decision” whether to have children.\textsuperscript{110}

While courts have recognized the right to procreate for over a century,\textsuperscript{111} formulations are unclear on what exactly the right protects.\textsuperscript{112} At a minimum, procreative freedom encompasses reproduction with a genetic connection.\textsuperscript{113} However, reproductive technologies—nonexistent at the time of \textit{Skinner} and \textit{Griswold}—raise novel questions about the scope of reproductive liberty.\textsuperscript{114} Does a couple who is unable to reproduce coitally have the same right to procreate as a similarly situated couple who is? What kind of governmental interference in the use of ART is constitutionally permissible?

2. \textit{The Right to Avoid Procreation}.—The right to avoid procreation is also generally well settled.\textsuperscript{115} Its importance is better understood as the right to procreate’s converse: because the right to procreate so heavily implicates

\begin{footnotesize}
\textsuperscript{105} CHILDREN OF CHOICE, supra note 83, at 36–37.
\textsuperscript{107} 381 U.S. 479, 484 (1965).
\textsuperscript{108} Id. at 484–86. It was this concept of a right to privacy that later served as the foundation for Justice Blackmun’s analysis in \textit{Roe}. Roe v. Wade, 410 U.S. 113, 152–53 (1973).
\textsuperscript{109} Eisenstadt, 405 U.S. at 453.
\textsuperscript{110} Id.
\textsuperscript{112} See generally Dillard, supra note 94 (surveying theoretical perspectives justifying procreative rights and the respective scope of the rights each perspective would protect).
\textsuperscript{113} See, e.g., CHILDREN OF CHOICE, supra note 83, at 22–23, 27.
\textsuperscript{114} Id. at 27.
\textsuperscript{115} See id. at 28 (“Legally, the negative freedom to avoid reproduction is widely recognized . . . ”).
\end{footnotesize}
privacy, intimacy, autonomy, and personal choice, the right not to procreate does as well.\textsuperscript{116} Therefore, the right to avoid procreation is equally as sacrosanct. There are multiple stages at which a person could actively avoid reproduction, so the right is generally thought to include several different choices, including the choice to abstain from sex or use contraception to avoid getting pregnant and the choice to terminate an unwanted pregnancy.\textsuperscript{117} The Supreme Court has explicitly acknowledged a right to avoid procreation at these stages.\textsuperscript{118}

Like the right to procreate, the parameters of the right to avoid procreation are unclear.\textsuperscript{119} The Court has not taken up the right in the context of ART and the use of frozen embryos.\textsuperscript{120} However, the Court has emphasized that the choice to avoid procreation is, generally speaking, an essential component of the well established and heavily protected right to privacy.\textsuperscript{121}

The indistinctness of the right to avoid procreation is significant to the legal issues surrounding ART.\textsuperscript{122} Using our example from Part I, suppose a court hears the feuding couple’s case and rules in the woman’s favor, so she is permitted to use the embryos to ultimately have a child. Furthermore, the woman suggests that the man legally relinquish any parenting duties he would otherwise have with respect to that child. Does the man nonetheless have an objection to the court’s ruling? In other words, does his right to avoid procreation include the right to avoid genetic parenthood, even when uncoupled from any other parental rights and duties?

\textsuperscript{116} See Kenneth L. Karst, The Freedom of Intimate Association, 89 YALE L.J. 624, 640 (1980) (arguing that, “[b]ecause the decision to procreate implicates so intensely the values of intimate association,” laws regulating the choice to avoid procreation should be heavily scrutinized).

\textsuperscript{117} CHILDREN OF CHOICE, supra note 83, at 26.

\textsuperscript{118} Griswold v. Connecticut, 381 U.S. 479, 484, 486 (1965) (reading an implicit right to privacy into the Constitution and finding marital decisions such as whether or not to have a child within the “zone of privacy”); Roe v. Wade, 410 U.S. 113, 153 (1973) (holding that the constitutional right to privacy “encompasses a woman’s decision . . . to terminate her pregnancy”). The right to privacy enumerated in \textit{Griswold} was extended to unmarried couples in Eisenstadt v. Baird, 405 U.S. 438, 453 (1972) (“If under \textit{Griswold} the distribution of contraceptives to married persons cannot be prohibited, a ban on distribution to unmarried persons would be equally impermissible.”). A number of lower courts have also extrapolated the right to avoid procreation from \textit{Roe}. E.g., J.B. v. M.B., 783 A.2d 707, 710 (N.J. 2001), modified and aff’d, 170 N.J. 9 (2001) (citing \textit{Roe} among Supreme Court cases spelling out a right not to procreate); Davis v. Davis, 842 S.W.2d 588, 601 (Tenn. 1992) (citing \textit{Roe} to support the proposition that the right to “procreational autonomy” is two-pronged: it includes the right to procreate and the right not to procreate).


\textsuperscript{120} See Davis, 842 S.W.2d at 601 (“The United States Supreme Court has never addressed the issue of procreation in the context of \textit{in vitro} fertilization.”).

\textsuperscript{121} Carey v. Population Servs. Int’l, 431 U.S. 678, 685 (1977) (“The decision whether or not to beget or bear a child is at the very heart of this cluster of constitutionally protected choices.”).

\textsuperscript{122} See Cohen, supra note 119, at 1136 (noting that “modern reproductive technologies have increasingly problematized” the issue of what constitutes a legal right to avoid procreation).
Arguably, because the Court’s formulation of procreative freedom is so broad, the Constitution protects this right to avoid reproduction tout court (without childrearing obligations). Becoming a genetic parent involves such intense psychological burdens that a person should be able to have the ultimate say over whether his or her gametes are used to create biological offspring. Although courts have only recently taken up the issue, this argument has at least once been persuasive. In Davis v. Davis, the Supreme Court of Tennessee took an interests-balancing approach to an embryo disposition dispute and ultimately concluded that—in the absence of an agreement between the parties—"ordinarily, the party wishing to avoid procreation should prevail." But cases like Davis involve contract disputes, and one trend among courts has been to honor agreements between the parties. These decisions may therefore speak less to courts’ willingness to protect the right to avoid procreation and more to courts’ unwillingness to void contracts involving such a weighty, personal choice when the parties previously agreed on the outcome in case of a disagreement.

Many scholars believe it is more likely the Supreme Court would decline to extend its formulation of procreative liberty to protect against reproduction tout court. Professor Glenn Cohen argues there is likely no constitutionally protected "naked" right to avoid genetic parenthood separate from other parenthood obligations. Not only are there no direct historical arguments considering ART’s relative newness, but Cohen contends that the abortion and contraception cases—which represent the core of privacy jurisprudence—provide no basis for which people could argue they have a

123. CHILDREN OF CHOICE, supra note 83, at 27. The phrase “reproduction tout court” refers to a situation in which a person’s gamete is used to conceive a child but that person is completely removed from the parenting of that child. Id.
124. Robertson, In the Beginning, supra note 55, at 499.
125. See Ellen Waldman, The Parent Trap: Uncovering the Myth of “Coerced Parenthood” in Frozen Embryo Disputes, 53 AM. U. L. REV. 1021, 1027 (2004) ("The five state supreme courts that have ruled on frozen embryo disputes have signaled that the right to avoid procreation requires greater legal protection than does the right to procreate."); Strasser, supra note 45, at 125 (noting that, despite varying analysis approaches, state courts addressing the issue have all reached the same result—"delaying or precluding implantation, meaning that difficult issues . . . were not decided").
126. 842 S.W.2d 588 (Tenn. 1992).
127. Id. at 604.
129. Robertson, In the Beginning, supra note 55, at 500.
130. Cohen, supra note 119, at 1148.
131. Arguably, the relative newness of ART should not automatically exclude it from constitutional protection. See, e.g., Radhika Rao, Equal Liberty: Assisted Reproductive Technology and Reproductive Equality, 76 GEO. WASH. L. REV. 1457, 1462 (2008) (arguing that the fact that ART is a recent development should not be conclusive on the issue of whether or not there is a fundamental right to use ART). The Supreme Court has extended constitutional protection to other modern technologies without controversy. Id. at 1462–63. For example, the First Amendment protects free speech communicated over the Internet, and the Fourth Amendment’s prohibition on unreasonable searches extends to the use of infrared thermal sensors to scan private homes. Id.
right against genetic parenthood. Professor John Robertson agrees. Griswold, Roe, and related cases establish a right to avoid reproduction when attached to the burdens of gestation and childrearing. Considering the importance of that attachment, Robertson doubts the Court would expand the right to include avoiding reproduction tout court solely in consideration of its possible psychological burdens.

3. Reproductive Rights and ART.—Many commentators have argued that, under a broad umbrella right to procreate, noncoital reproduction should be protected just as fiercely as coital reproduction. The foundations and importance of the right are the same in both situations. Reproduction is pivotal to “personal identity, meaning, and dignity,” and an infertile couple is presumptively no less unfit to parent than a fertile couple. State restrictions on noncoital reproduction—the use of ART to have children—should thus be subject to the same scrutiny applied to laws regulating coital reproduction.

The argument that access to ART should be included in the right to procreate is consistent with the theory behind the right’s existence. The right to procreate is grounded in autonomy and freedom of personal choice. The logical conclusion is that this right extends beyond natural childbearing.

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133. Robertson, In the Beginning, supra note 55, at 500.
134. Id.
135. Id.
136. See, e.g., Judith F. Daar, Assisted Reproductive Technologies and the Pregnancy Process: Developing an Equality Model to Protect Reproductive Liberties, 25 AM. J.L. & MED. 455, 462 (1999) (“If the law recognizes that parties to an in vivo conception are within the realm of reproductive liberties, it should follow that parties to an in vitro conception, who intend to procreate, also implicate the realm of reproductive liberties.”); CHILDREN OF CHOICE, supra note 83, at 32 (noting that the moral right, and interest, in reproduction is present in both cases).
137. CHILDREN OF CHOICE, supra note 83, at 30.
139. Id.
140. See, e.g., ROBERT DWORIN, LIFE’S DOMINION: AN ARGUMENT ABOUT ABORTION, EUTHANASIA, AND INDIVIDUAL FREEDOM 157–59 (1993) (arguing that a moral right to procreate is grounded in autonomy rights); CHILDREN OF CHOICE, supra note 83, at 24 (“Procreative liberty... is central to personal identity, to dignity, and to the meaning of one’s life.”); Michelle Elizabeth Holland, Comment, Forbidding Gestational Surrogacy: Impeding the Fundamental Right to Procreate, 117 U.C. DAVIS J. URF. L. & POL’Y 1, 12–13 (2013) (explaining that the right to bear children is part of the right to privacy because it is an important, intimate matter).
141. Several courts agree. E.g., Lifchez v. Hartigan, 735 F. Supp. 1361, 1377 (N.D. Ill. 1990) (“It takes no great leap of logic to see that within the cluster of constitutionally protected choices that includes the right to have access to contraceptives, there must be included within that cluster the right to submit to a medical procedure that may bring about, rather than prevent, pregnancy.”); J.R. v. Utah, 261 F. Supp. 2d 1268, 1275–78 (D. Utah 2002) (interpreting the right to procreate as encompassing a couple’s choice to use gestational surrogacy).
choice being made), not the means (the mechanism by which the choice is executed); people should be able to determine for themselves whether they want children because having children is one of the most significant and deeply personal choices a person makes in his or her lifetime.142 If a woman can choose to use medical assistance to avoid having children,143 she can surely choose to use medical assistance to conceive them. And while the choice to use ART is not an express right, implied rights deserve no less protection just because they are not explicit in the Constitution.144 Reproductive rights are encompassed in the more expansive right to privacy, which is now heavily ingrained in the constitutional jurisprudence.

While the specifics of procreative liberty are still debated, it remains clear that the Supreme Court recognizes the rights to procreate and avoid procreation. How a couple chooses to use embryos created using their gametes is intimately connected to that couple’s ability to exercise those rights. But the issue is more complicated than whether a right to procreate includes a right to use ART. Even if we assume it does, some state regulation is permissible. Procreative liberty is typically understood to include negative rights—that is, rights against state interference in reproductive decision-making.145 These rights provide the framework for an analysis of the question this Note seeks to answer. In a jurisdiction with personhood laws, what state regulations of ART-related embryo use are constitutionally acceptable? The narrower question becomes: which state interferences are so burdensome that they are unconstitutional? I discuss possible answers to these questions in Part III.

III. Constitutional Limits on State Regulation of a Couple’s Embryo Use

My analysis in Part II concludes with an important premise: couples have a right to reproduce and—if they can’t do so coitally—to choose to use ART free from burdensome state interference. It follows that infertile couples have a presumptive right to discretion over the use of embryos created with their gametes.146 Few state statutes explicitly address the status of the embryo

143. She can, via contraceptive medication. See supra notes 107–109 and accompanying text.
145. John A. Robertson, Procreative Liberty in the Era of Genomics, 29 Am. J.L. & Med. 439, 448 (2003). If procreative liberty were a positive right, a person could demand the state provide the means and resources necessary to procreate (or avoid procreation). Id.
146. Whether this same presumption should be granted to people seeking to use someone else’s gametes is a question beyond the scope of this Note.
in the ART context. But if Roe continues to withstand attack, anti-abortion activists and sympathetic state legislators will likely explore other avenues by which to pursue their goals. Tactics may include trying to push statutes like the Louisiana law through other state legislatures. A handful of pro-life groups have already made efforts to curtail the use of embryos beyond implantation.

In Part III I use the legal framework described in Part II to analyze how a court might address the constitutionality of a personhood law as it applies to couples making choices about embryos created using their gametes. Part III does not address a couple’s choice to donate their embryos to research because donation is not a procreative use. However, many pro-life groups adamantly oppose embryonic research. Signiﬁcant legislation and litigation target criminalizing stem cell research. The Dickey–Wicker Amendment, passed by Congress in 1996, prohibits federal grant funding for embryo research. The amendment’s legislative history shows it was proposed “to uphold the sanctity and intrinsic value of life.” Additionally, a number of states have passed laws banning embryonic research, several of which have been struck down. For example, in Lifchez v. Hartigan, the


148. See, e.g., Cohen & Adashi, supra note 27, at 15 (noting that one right-to-life group’s amicus brief in a recent embryo disposition dispute case argues that embryos must be treated like children under state law).


court held a New Mexico statute prohibiting fetal research unconstitutional. However, because donating embryos does not implicate a reproductive interest, further discussion of the issue falls outside the scope of this Note.

A. Roe’s Application Is Limited

Even with Roe intact, states may to some degree regulate embryo use. The Roe decision is important to understanding the personhood movement’s history and purpose. Roe and Casey also provide a helpful framework for understanding how the Supreme Court conceptualizes the rights to privacy and autonomy in the procreation context. But while Roe and the subsequent abortion cases carve out broad constitutional protection for reproductive decision-making, the Roe decision is grounded, in large part, on the “unique relationship between a pregnant woman and the fetus she is carrying.” Because Roe deals exclusively with a woman’s right to embryos inside her body, many scholars oppose using abortion jurisprudence to guide constitutional considerations of ART, which involves extracorporeal embryos.

The significance of the inside–outside distinction is debated. Some scholars argue that, although IVF involves medical intrusion into a woman’s body in a way that is different from abortion procedures and pregnancy, IVF nonetheless intrudes—and that intrusion implicates bodily integrity and Roe principles. But this argument misunderstands the Supreme Court’s concern with protecting a woman’s bodily integrity. The phrase “bodily integrity” was first used regarding reproductive rights in Casey, which held that “compelled continuation of a pregnancy infringes upon a woman’s right to

155. Id. at 1377.
156. See infra subpart II(C).
158. Robertson, In the Beginning, supra note 56, at 499; see also Ziegler, supra note 6, at 1317 (explaining that abortion rights are grounded in a woman’s experience with the burdens of unwanted pregnancy).
159. See, e.g., CHILDREN OF CHOICE, supra note 83, at 108 ("The constitutionality of laws that prevent the discard or destruction of IVF embryos is independent of the right to abortion established in Roe, . . ."); Rao, supra note 131, at 1464 ("[I]t is clear that the Constitution does not guarantee reproductive autonomy . . . disentangled from concerns about bodily integrity and equality. The contraception and abortion cases provide only a limited right to prevent conception or to interrupt pregnancy."); Ziegler, supra note 6, at 1317 ("Understood in its historical context, abortion jurisprudence should not provide guidance for courts balancing rights to seek or avoid procreation in ART cases."). But see Daar, supra note 136, at 466–69 (extrapolating from abortion law to discuss reproductive liberty in the context of ART).
bodily integrity by imposing substantial physical intrusions and significant risks of physical harm.161

A woman has a right to abortion because she has a right to choose to avoid the physical and psychological effects of pregnancy (and thus not have them forced on her). Similarly, women have a right against abortion because forcing a woman to undergo an abortion involves bodily intrusion against her will. By contrast, a woman who undergoes IVF voluntarily chooses to have her body “intruded” to serve her own procreative interests. The majority view is that the physical disconnect between the embryo and a woman before implantation means that a woman’s right to bodily integrity is not implicated; thus, Roe is not controlling.162 and the constitutionality of laws regulating embryo use falls outside Roe’s scope.163

Louisiana’s statute serves as one example of how Roe and personhood laws interact. While the statute defines embryos as juridical persons,164 it avoids direct conflict with Roe by defining “personhood” as extending only to extracorporeal IVF embryos. Therefore, the statute does not abrogate or challenge current abortion law on its face. Instead, it establishes and protects embryo rights at the expense of gamete providers’ reproductive choices.165

B. Courts Would Likely Use a Balancing Test to Assess the Constitutionality of a Personhood Law Interfering with Embryo Use

The potential legal ramifications of granting embryos personhood status are significant.166 The remaining portion of Part III discusses how a court might weigh competing interests in an embryo use case if the court were to presume the validity of a state’s determination that embryos are persons. Courts would likely undertake an analysis similar to that used in other

162. E.g., Brown, supra note 9, at 223; Robertson, In the Beginning, supra note 55, at 493.
163. See CHILDREN OF CHOICE, supra note 83, at 108 (“Roe and Casey protect a woman’s interest in not having embryos placed in her body and in terminating implantation . . . Under Roe-Casey the state would be free to treat external embryos as persons . . . as long as it did not trench on a woman’s bodily integrity or other procreative rights.”).
164. See LA. STAT. ANN. § 9:121 (West 2012) (“A ‘human embryo’ for the purposes of this Chapter is an in vitro fertilized human ovum, with certain rights granted by law, composed of one or more living human cells and human genetic material so unified and organized that it will develop in utero into an unborn child.”).
165. See Sarah A. Weber, Comment, Dismantling the Dictated Moral Code: Modifying Louisiana’s In Vitro Fertilization Statutes to Protect Patients’ Procreative Liberty, 51 LOY. L. REV. 549, 550 (2005) (“Louisiana law places the protection of preembryos above progenitors’ procreative liberty, granting preembryos the status of juridical persons while stripping progenitors of their decision-making authority over their preembryos.”).
166. See Forsythe & Arago, supra note 6, at 306 (listing IVF among scientific and medical procedures affected by personhood legislation). For an analysis of these ramifications through an international lens, see generally Lauren B. Paulk, Embryonic Personhood: Implications for Assisted Reproductive Technology in International Human Rights Law, 22 AM. U. J. GENDER SOC. POL’Y & L. 781 (2014).
procreative liberty cases.\textsuperscript{167} Therefore, under a personhood regime, state laws regulating the use of embryos would be subject to a balancing test. The state will assert its interest in protecting the life of the embryo, which must be balanced against a couple’s constitutional procreative liberties.

Courts may be reluctant to apply strict scrutiny despite the right to privacy’s fundamental status. Unlike in abortion cases—where women risk being forced to undergo the physical burdens of pregnancy—bodily intrusion is not at issue in embryo use cases. (Even in abortion cases, \textit{Casey} rejects strict scrutiny in its purest form: the infringement on a woman’s right to choose abortion must be \textit{substantial} to constitute an undue burden.) Additionally, the conflict between ART and embryonic personhood is new; it poses novel questions at a time when reproductive technology is quickly evolving. Courts may want to avoid applying strict scrutiny to protect a couple’s presumptive right to use their gametes as they see fit until laws and social policy have caught up to medical technology.\textsuperscript{168} More realistically, courts would conduct a balancing test via a fact-intensive, situation-specific inquiry.

This nuanced balancing test would require courts to weigh a host of considerations. The state’s interest will almost always be the same. Under a personhood law, the state is seeking to protect the life and rights of the embryo-person. But a couple’s situation in one case may vary greatly from a couple’s situation in another case, and courts will have to consider a multitude of factors. These factors might include the couple’s interest in achieving or avoiding parenthood, available alternatives that are less violative of the embryo’s rights, economic and physical costs, and whether the state could achieve its goal by less restrictive means. In the following subsections, I analyze how courts might apply a balancing test to various hypothetical scenarios in which a state’s personhood laws conflict with a couple’s ability to procreate using ART.

The purpose of this Note is to discuss how a constitutional challenge to a personhood law might be assessed in court assuming the legitimacy of the state’s interest in protecting embryos as persons. The purpose is \textit{not} to assess whether the state is entitled to that assumption in the first place or whether personhood laws are constitutional. The constitutionality of laws regulating embryo use has been debated extensively,\textsuperscript{169} as has the effect of personhood

\textsuperscript{167} See Robertson, \textit{In the Beginning}, supra note 55, at 487–88 (arguing that, even in a framework where \textit{Roe} no longer exists, “many states no doubt would continue the previous balance between the woman and embryo”).

\textsuperscript{168} Washington v. Glucksberg, 521 U.S. 702, 720 (1997) (“[W]e have always been reluctant to expand the concept of substantive due process because guideposts for responsible decisionmaking in this unchartered area are scarce and open-ended.” (internal quotations omitted)).

\textsuperscript{169} See generally June Carbone & Naomi Cahn, \textit{Embryo Fundamentalism}, 18 WM. & MARY BILL RTS. J. 1015 (2010) (discussing “embryo fundamentalism”—the belief that embryos are human beings from the moment of conception—and its potential constitutional impact); June
sentiments on ART.\textsuperscript{170} This Note takes the next step. We know what issues personhood laws raise. Part III analyzes how a court might address those issues in a framework under which embryonic personhood is legally legitimized.

1. State Laws Regulating Embryo Creation.—To address concerns about the number of embryos frozen in storage and discarded each year, a state might pass a law limiting the number of embryos a couple can create when the woman undergoes one IVF cycle.\textsuperscript{171} The law might be part of a broader personhood scheme. For example, if the state considers the embryo a person, the law limiting creation could work in conjunction with a law requiring that all embryos created in a laboratory setting be implanted.

Italian law is illustrative. In 2004, Italy passed a law extensively regulating ART.\textsuperscript{172} The regulations (Law 40) impose many and significant restrictions on doctors and people seeking to use ART. These regulations include limiting the number of embryos that can be created at one time, requiring implantation of all embryos created, and prohibiting cryopreservation of spare embryos.\textsuperscript{173} If right-to-life groups in the United States continue to propose legal protections for embryos via the personhood movement, they may succeed in persuading state legislatures to pass laws similar to Law 40.\textsuperscript{174}

However, because these regulations could compromise the safety, effectiveness, and costs of IVF, they may interfere with a couple’s ability to

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\textsuperscript{170} See generally Manian, supra note 12 (discussing personhood in a paradigm emphasizing women’s health); Paulk, supra note 166 (analyzing the legality of personhood from an international perspective); Strasser, supra note 45 (discussing ways in which personhood laws could affect ART).

\textsuperscript{171} Because the industry is so deregulated, it is difficult to know how many embryos are destroyed each year. However, because of the enormous number of excess embryos created, the number is likely significant. One study of IVF clinics around the country found that 97% of them created more embryos than were transferred in a given IVF cycle. Gurmankin et al., supra note 62, at 6.

\textsuperscript{172} See generally Andrea Boggio, Italy Enacts New Law on Medically Assisted Reproduction, 20 HUM. REPROD. 1153 (2005).


have a family—and, thus, their right to procreate.\textsuperscript{175} Robertson has argued that Italy’s law likely violates reproductive rights.\textsuperscript{176} By limiting the number of embryos that can be created during one cycle and requiring those embryos to be implanted, Law 40 forces women into a risky predicament. To avoid trying IVF multiple times, they are encouraged to create and implant several embryos at once—which increases the risk of complications.\textsuperscript{177} But to avoid those complications and comply with the mandatory implantation rule, a woman must implant only one or two embryos, which reduces her chances of becoming pregnant.\textsuperscript{178} Women not subject to a statutory scheme like Italy’s don’t face this dilemma because they can create, implant, store, and later discard as many embryos as they desire.

Robertson’s concerns are not just theoretical. Originally, Italian courts applied Law 40 to require women to implant even grossly abnormal embryos, which resulted in some women terminating their pregnancies.\textsuperscript{179} In 2009, the Constitutional Court of Italy reformed the law to better protect women’s health. But the limits on creation remain and often require Italian women to undergo multiple IVF cycles, which can be expensive and physically demanding.\textsuperscript{180}

A limitation on embryo creation thus appears to burden couples using IVF. The key question is whether the burden is substantial enough to invalidate the law as unconstitutional. Depending on how harsh the limit is, it may rob couples of their flexibility in assessing and hedging risk. A couple may want to create more embryos than the limit allows so they can implant multiple embryos or freeze extras for later use—or both.

The severity of the burdens imposed by the law would depend on any related regulations. For example, if a state’s statutory scheme both limits the number of embryos a couple can create and prohibits embryo cryopreservation and discard, the limit’s effects are exacerbated. Under those conditions, a couple may only be able to create two or three embryos per the law. But, because they cannot freeze or discard the extras, they must decide whether to implant all of them at once or implant one and risk having to undergo IVF again if the one implanted embryo does not result in a successful pregnancy. If they only implant one, the excess embryos will have to be donated. The couple may feel obligated to implant all of the embryos despite

\textsuperscript{175} Id. at 118.
\textsuperscript{176} Robertson, Constitutional Issues, supra note 30, at 36. For a discussion on why an American law modeled after Italy’s Law 40 may pass constitutional muster, see Rao, supra note 132, at 1473–74.
\textsuperscript{177} John A. Robertson, Protecting Embryos and Burdening Women: Assisted Reproduction in Italy, 19 HUM. REPROD. 1693, 1693 (2004).
\textsuperscript{178} Id.
\textsuperscript{180} Id.
the health risks, perhaps because the woman is older or the couple knows they will not be able to afford IVF again.\textsuperscript{181} A scheme this punishing may require—and fail—strict scrutiny. Courts may be more receptive to a scheme that allows for consideration of patients’ unique situations (compared to a limitation based solely on the moral status of the embryo with no regard for a couple’s health-related circumstances).\textsuperscript{182}

What if the state took a less aggressive yet still uniform, circumstance-neutral approach? For example, suppose that under this state law a couple is only allowed to create three embryos each time the woman undergoes IVF; however, she may freeze excess embryos.\textsuperscript{183} A couple living in our hypothetical state has undergone IVF multiple times over the course of several years, creating three embryos and implanting all three each time—but with no success. She has been unable to carry any of the resulting pregnancies to term. Based on her unique situation, her doctor might recommend implanting more than three embryos were it not against the law. The woman may (acting on behalf of the couple) challenge the law as an unconstitutional encroachment on her right to procreate.

Using a balancing test to weigh the competing interests, the court would likely hold that, as applied, the law is constitutional. The woman’s right to procreate is weighed against the state’s interest in protecting embryos as persons.\textsuperscript{184} In her favor is the fact that the law is directly interfering with her ability to have children. But it is possible for her to navigate around her predicament. Because the state has no mandatory implantation laws, she can undergo multiple IVF cycles, aggregate her embryos by cryopreserving those that result from the first rounds, then later implant multiple embryos at one time. However, undergoing several cycles—in addition to those she has already undergone—is expensive, time-consuming, and mentally and physically taxing.

\textsuperscript{181} Women over forty years old are less likely to have success with ART than younger women. \textit{IVF Success in Older Women}, USC FERTILITY (Feb. 16, 2009), http://uscfertility.org/ivf-success-older-women [https://perma.cc/6BK3-JGA6].

\textsuperscript{182} See Carbone & Cahn, supra note 171, at 1051 (noting that the abortion cases suggest courts are willing to give state legislatures a “high degree of deference” and theorizing that courts may extend that deference to legislative determinations of the embryo’s legal status).

\textsuperscript{183} Because so few state personhood laws currently exist, it’s difficult to know what kind of scheme a state legislative body might realistically create. It is plausible, however, that a state may choose to limit creation while still permitting cryopreservation—particularly if the law is preemptively designed to withstand a constitutional challenge or is based on the rationale that frozen eggs are more likely to be later implanted.

\textsuperscript{184} This case illustrates how a strict creation-limit law could conflict with the state’s greater purpose in protecting embryonic personhood when applied rigidly. In this hypothetical situation, the law ironically prohibits a woman who wants to have children from using her embryos to do so successfully. While a more flexible law—for example, one that includes an exception to the limit for couples who commit to implanting all the embryos they create—seems more rational, the strict limit is not inconceivable, as illustrated by Italy’s Law 40.
But the court would likely defer to the state’s legislature because of the law’s relative flexibility. In this case, the law limits the number of embryos that can be created in one IVF cycle but permits cryopreservation of any excess embryos.\textsuperscript{185} It thus avoids creating the potential health risks posed by Italy’s more rigid Law 40. And, again, this type of case does not involve the question of bodily intrusion implicated in the abortion cases. Both Supreme Court and state court decisions suggest a greater reluctance to protect procreational rights when a woman’s bodily integrity is not directly involved.\textsuperscript{186} While the court may begin its analysis with a thumb on the scale for the woman—who has a presumptive right to choose how to use her embryos—it would likely ultimately conclude that the law’s narrow scope is proportionate to the state’s goal of protecting embryonic persons.

The court might also be influenced by the gravity of creating precedent. If the court holds that embryo creation limitations are unconstitutional because a woman who has already undergone one round of IVF may have to undergo another, the decision would open a Pandora’s box. IVF is expensive.\textsuperscript{187} What about the many infertile couples who cannot afford to undergo the first cycle?\textsuperscript{188} Would they then have a constitutional right to ART at a subsidized cost? No, because procreative liberty is interpreted as a negative right. However, courts may nonetheless be reluctant to facilitate the creation of this slippery slope, even at the expense of couples disadvantaged by embryo creation limitation laws. As one consideration in an interests-balancing approach, this factor weighs heavily in favor of the state.

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\textsuperscript{185}. Carbone & Cahn, supra note 171, at 1051.

\textsuperscript{186}. See supra section II(D)(2) (noting that, in embryo disposition dispute cases, courts are reluctant to decide in favor of the parties wanting to implant despite their right to procreate). I do not mean to suggest that the important decision to undergo IVF to have a child does not involve a woman’s bodily integrity in a colloquial sense. To the contrary, it is a deeply personal choice that will greatly affect the woman physically. When I use the phrase “bodily integrity,” I mean it as a legal concept. In \textit{Casey}, the Court explained \textit{Roe}’s rule of “bodily integrity, akin to cases recognizing limits on governmental power to mandate medical treatment or to bar its rejection.” Planned Parenthood v. Casey, 505 U.S. 833, 835 (1992). In reproductive rights cases, bodily integrity is directly tied to a person’s right to protection against any government-mandated physical intrusion. See Sonia M. Suter, The “Repugnance” Lens of Gonzales v. Carhart and Other Theories of Reproductive Rights: Evaluating Advanced Reproductive Technologies, 76 GEO. WASH. L. REV. 1514, 1547 (2008) (discussing bodily integrity as part of a greater privacy right “against the state’s interference with our ability to prevent unwanted bodily intrusions . . . ”); Robertson, \textit{In the Beginning}, supra note 56, at 493 (explaining that laws prohibiting the creation or discard of extracorporeal embryos would not implicate bodily integrity under \textit{Roe} because they do not interfere with a woman’s right to avoid or terminate pregnancy).


\textsuperscript{188}. Lower-income women have greater rates of infertility than their wealthier counterparts but are significantly less likely to be able to afford the high costs of IVF. \textit{CHILDREN OF CHOICE}, supra note 83, at 226.
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Finally, the state can point to egg freezing as a viable alternative for the couple. In an egg freezing procedure, the woman undergoing treatment is given hormonal medications to stimulate egg production. The eggs are then retrieved from her uterus and stored for later fertilization. For many years, egg freezing was possible but not a legitimate alternative to embryo freezing because a woman’s chances of conceiving with IVF were significantly greater when newly created (rather than frozen) eggs were fertilized.

In 2013 the American Society of Reproductive Medicine (ASRM) removed the procedure’s “experimental” label, citing a dramatic improvement in success rates. But the ASRM also explained that women should proceed with caution—particularly considering that a woman’s age at the time of retrieval may impact the success of the freezing. Just because egg freezing has proven effective in small-sample, short-term studies does not make it a perfect substitute. The ASRM has warned there is not yet sufficient data on the “safety, efficacy, ethics, emotional risks, and cost-effectiveness” of egg freezing to condone using it routinely as a substitute for embryo freezing. Nonetheless, the existence of an alternative—one that does not interfere with the rights of an embryo-person—would likely help persuade the court that the law is constitutional as applied.

2. State Laws Regulating Embryo Cryopreservation.—Couples using IVF typically create more embryos than they implant. The extra embryos are often frozen, which makes them available for later use. Cryopreservation of excess embryos improves a woman’s chances of achieving pregnancy and possibly eliminates the physical, emotional, and financial costs of additional IVF treatment cycles. Pro-life groups object to cryopreservation on the grounds that it stymies embryos’ potential; encourages their destruction; and may lead to embryo research,

189. See Schaefer, supra note 171, at 91 (noting that commentators have suggested looking to egg freezing as one way to mitigate the social and ethical issues of IVF).
191. Robertson, Egg Freezing, supra note 171, at 114.
194. Id. at 42.
196. Id.
197. TEXTBOOK OF ASSISTED REPRODUCTIVE TECHNIQUES 304 (David K. Gardner et al. eds., 4th ed. 2012); Brown, supra note 9, at 188–89; Robertson, Decisional Authority, supra note 139, at 287.
experimentation, and other manipulation. Robertson has argued that people who consider embryos persons should oppose limits on embryo storage. Allowing couples to store frozen embryos increases the likelihood that those embryos will eventually be implanted and allowed to fully develop. But pro-life groups and personhood advocates have not adopted this view.

There is virtually no regulation of IVF-created embryos in the United States. Only Louisiana has laws defining the legal status of the cryopreserved embryo, and only a few cases have directly addressed the issue. In Davis v. Davis, the Supreme Court of Tennessee held that frozen embryos are neither persons nor property but rather “occupy an interim category that entitles them to special respect because of their potential for human life.” Grounded in personhood or “special respect,” states may begin regulating cryopreservation as it becomes increasingly more common. Most IVF programs already set a limit on the length of time embryos may be kept in storage, requiring that—after that limit has passed—the embryos be either discarded or implanted. But personhood advocates may not want to leave timing and parameters to the market. Rather, a state may want to exercise greater control over these time limits by shortening them, conditioning them (for example, prohibiting embryo use for research upon expiration of the time limit), or monitoring compliance.

Whether these regulations are constitutional will depend on the extent to which they burden a couple’s procreative liberties. A more restrictive law is demonstrative. Suppose a state passes a law prohibiting cryopreservation as part of a greater regulatory scheme in which embryos cannot be discarded.


199. Id. June Coleman has argued that, because cryopreservation actually promotes procreation, it should be a constitutionally protected interest based on the abortion and contraception cases. Coleman, supra note 169, at 1364.

200. Id. Robertson, Decisional Authority, supra note 138, at 495.

201. 842 S.W.2d 588 (Tenn. 1992).

202. LA. STAT. ANN. § 9:129 (2012) (“An in vitro fertilized human ovum that fails to develop further over a thirty-six hour period except when the embryo is in a state of cryopreservation, is considered non-viable and is not considered a juridical person.”). Essentially, an embryo created through IVF is a juridical person unless it fails to develop over a thirty-six-hour period. Id. But that exception does not apply to embryos frozen in storage. Id.; see also Davis, supra note 169, at 515 (noting that a frozen embryo is considered viable under Louisiana law).

203. 842 S.W.2d at 588 (Tenn. 1992).

204. Id. at 597. The Davis court noted that if embryos were granted the legal status of a “person” vested with their own interests, this would effectively outlaw IVF programs in the state. Id. at 595.

205. Robertson, In the Beginning, supra note 55, at 494.

206. Id.
Compared to the embryo creation example, this law is more burdensome: a woman who undergoes IVF has to either implant every embryo she creates—which could jeopardize her health—or donate her embryos. A woman who creates multiple embryos is left with several potentially difficult choices. She first has to decide if she wants to risk her health by implanting all of the embryos—with the alternative being mandatory adoption. Then, if she implants all of the embryos and they each develop fully, she must decide whether to abort or carry the several fetuses to term.

For analysis purposes, imagine a theoretical case. A woman has undergone IVF, resulting in five embryos. She and her partner do not want to implant all five because of the health risks stemming from multiple gestation; however, under the law, they cannot discard or cryopreserve any of the embryos. They have only one alternative—donate any embryos they choose not to implant. The woman challenges the law’s constitutionality, alleging a violation of her reproductive freedom.

After balancing the competing interests, the court would likely find the law unconstitutional, even considering the state’s strong interest in protecting embryos as persons. By prohibiting couples from cryopreserving and discarding embryos, the state seeks to maximize an embryo’s potential to develop into a human being. And the court may find the law banning cryopreservation, on its own, permissible. However, a ban on embryo storage alongside a ban on discard would be more difficult for the state to justify, especially considering research shows cryopreservation increases the effectiveness of IVF. The woman could point to less burdensome alternatives by which the state could achieve its aim of protecting embryonic personhood. For example, the state could limit the length of time an embryo can be kept in storage, allowing a woman to choose not to implant all of the embryos created at one time and thereby avoid the health risks associated with multiple gestation.

Courts would likely permit some form of cryopreservation regulation. There are public concerns about the current deregulated system, including the risk of commercial exploitation of gamete and embryo donors, ensuring safe use of the technology, and consanguinity among individuals created using IVF. But states could pass laws addressing these concerns without infringing the rights of couples using ART to have children. For example, a law mandating that fertility clinic employees have a certain level and quality

208. Davis, supra note 171, at 533.
209. Robertson, Decisional Authority, supra note 139, at 300.
210. Davis, supra note 169, at 534.
of medical training would surely survive a constitutional challenge—even if, for example, it would increase the cost of IVF to patients.

3. *State Laws Regulating Embryo Discard.*—There are several instances in which a couple may want to discard embryos—for example, if a woman undergoes IVF but the couple later decides they do not want children, one of them dies and the other chooses not to go forward with implantation, or they get divorced.211 Thus far, only one state has passed legislation directly regulating embryo discard.212 However, other states may follow suit.

If a state recognizes embryos as “persons,” a prohibition on discard would best serve the personhood movement’s goals if passed in conjunction with a law that also requires the use (or implantation) of embryos. Banning a couple from discarding an embryo does little to protect and better that embryo’s “life” if it is stored indefinitely.213 Mandatory donation laws would prevent the parents of an embryo from destroying it and require it to be implanted or donated.214 Louisiana’s regulatory scheme regarding ART includes a provision that can fairly be characterized as a mandatory donation law under certain circumstances.215 The law explicitly prohibits discarding or destroying embryos.216 And in cases where the IVF patients “fail to express their identity,” the law requires that all spare embryos be made available to others for “adoptive implantation.”217 The permissibility of Louisiana’s law banning embryo destruction has never been litigated, although some commentators have suggested it would not withstand a constitutional challenge.218

212. LA. STAT. ANN. § 9:129 (2012) (“A viable in vitro fertilized human ovum is a juridical person which shall not be intentionally destroyed by any natural or other juridical person or through the actions of any other such person.”).
213. However, personhood advocates think indefinitely storing embryos is preferable to discarding them because storage doesn’t affirmatively harm the embryos the way discarding (i.e., destroying) them does.
214. Schaefer, supra note 169, at 89 n.18. For a brief discussion of mandatory disposal laws, which are beyond the scope of this Note, see Heidi Forster, *The Legal and Ethical Debate Surrounding the Storage and Destruction of Frozen Human Embryos: A Reaction to the Mass Disposal in Britain and the Lack of Law in the United States,* 76 WASH. U. L.Q. 759, 761–62 (1998) (discussing Britain’s law requiring embryos to be destroyed within five years of creation if there is no instruction otherwise from the donor parents).
215. See LA. STAT. ANN. § 9:121–33 (dictating circumstances in which unclaimed embryos must be made available for “adoptive implantation”).
216. Id. § 9:129.
217. Id. § 9:126.
If a couple chose to challenge a law like Louisiana’s, a court would likely rule in favor of the state. More specifically, if we presume the legitimacy of the state’s assertion of embryonic personhood, the psychological burdens a couple might experience from knowing they will eventually have a biological child would likely be outweighed by the embryo’s rights as a person. As an example, a couple creates embryos using IVF but later decides not to implant them. They are having significant financial problems and don’t feel they can take on the additional costs and psychological burdens of parenthood. While they would like to cryopreserve the embryos in hopes that their circumstances will change, they cannot afford to store the embryos and have therefore decided to discard them. They sue Louisiana to challenge the law prohibiting discard, alleging a violation of their reproductive rights.

There are two predominant interests the court must balance. On the couple’s side, the law infringes their procreative freedom. They are no longer the sole decision makers with respect to their gametes. In fact, if they cannot implant or store the embryos, they risk the embryos being implanted in another woman—in which case the couple would become genetic parents. On the state’s side, the law is meant to protect the embryos’ legal rights. The court’s decision may thus hinge upon whether or not an individual right against reproduction *tout court* exists. If so, then the law would likely violate a couple’s right to avoid procreation.

The consensus among scholars is that the right does not exist. Hence, a claim of protection against reproduction *tout court* would, standing alone, likely not be sufficient to overcome a state’s interest in protecting embryos. Of course, a court would not need to affirmatively recognize a constitutional right to reproduction *tout court* (which it may be reluctant to do) to find the statute impermissible. And there are serious policy considerations that weigh in favor of striking down mandatory donation laws: the potential negative psychological effects on both the genetic parents and the resulting child; complicated litigation involving custody and parentage disputes; a lack of demand for embryos; and the possibility that embryo donation could commercialize humans and lead to “baby selling.” But considering only the parties’ competing interests, the court would likely uphold the law as

692 (2009) (“Because these statutes effectively deny the IVF couple the decision-making control over their ‘property,’ they are of questionable constitutionality . . . .”).

219. See Robertson, *In the Beginning*, supra note 55, at 500 (“If the Court found that no fundamental right to avoid genetic offspring *tout court* existed, then the state’s interest in protecting embryos by requiring donation of unwanted extras would easily meet the rational basis test by which such a statute would be judged.”).

220. See supra section II(D)(2).

221. Id.

222. Id.

constitutional. The couple’s potential psychological burden would probably not be intrusive enough to overcome the embryos’ much more physical liberty interest.

In addition to arguing the law violates their right to avoid procreation, the couple could also assert that the law violates their converse right to procreate. If the couple cannot discard excess embryos, they may feel obligated to forego IVF altogether—possibly because they do not want to donate their embryos and may not be able to afford storing them indefinitely. The couple may choose not to use ART (and, thus, choose not to have children) at all, despite the fact that the woman would like to be treated for infertility. They might argue that, by prohibiting them from discarding embryos, Louisiana is requiring them to either implant all embryos they create (which can have dangerous health consequences), donate the embryos (which they may not want to do), or pay to store them indefinitely (which they may not be able to afford). They would then argue that Louisiana substantially burdens them by effectively disallowing them from using IVF to conceive, which prevents them from exercising their procreative right to choose to have children.

However, under a personhood regime, the court would likely not consider this burden substantial enough. The law does not ban IVF outright. In the case of this couple, it just requires them to assess the costs and risks before making a difficult decision (whether or not to implant all the embryos they create) based on their personal circumstances. And if the state has a compelling interest in protecting the life of the embryo, the difficulty of the couple’s choice probably does not create a substantial enough burden to overcome the interests served by the prohibition on discard.

Banning the discard of embryos creates other legal issues. If couples are prohibited from discarding their excess embryos but do not want them donated to another couple, their only option under the law may be to keep the embryos frozen indefinitely. This raises the question of who is required to bear the costs of maintaining the embryos. If that responsibility falls on the couple, courts may need to weigh the law’s financial burden against the couple’s reproductive choices. Other dilemmas would likely arise. For

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224. CHILDREN OF CHOICE, supra note 83, at 109.

225. Lawrence Tribe is one of several scholars who has cautioned against assuming that the Supreme Court’s recognition of a right to choose abortion necessitates recognition of a right to destroy a frozen embryo. Tribe, supra note 157, at 1930 (“To say that recognizing a right of reproductive freedom is tantamount to conferring an affirmative right to kill a fetus is to forget, among other things, that embryos can now be frozen; it would be quite a leap beyond Roe and Casey to posit that such an embryo’s genetic mother has a right to ensure its destruction.”).

226. This example illustrates how personhood laws may not effectively achieve their ultimate aim—to circumvent Roe in service of protecting life defined as beginning from the moment of conception. The prohibition on embryo discard does not vitiate Roe. As a result, the couple cannot destroy the embryos by discarding them. But they can still implant the embryos and abort any resulting pregnancy. Weber, supra note 165, at 590.
example, if a couple can no longer make payments to a storage facility, what are the facility’s responsibilities with respect to the embryos—particularly if they are legal “persons”? The law’s practical implications are especially onerous if the facility could then sue the couple for a breach of contract. As exemplified by these hypothetical scenarios, the constitutionality of laws regulating embryo use under a personhood regime would be determined on a sliding scale, and each law would need to be assessed individually and contextually.

IV. Conclusion

In 2008, Colorado residents voted on an amendment to define a “person” under Colorado’s constitution as a human being from the moment of conception. If approved, the amendment would have extended rights to every fertilized egg. Most importantly, in the eyes of its proponents, it would have tentatively laid the groundwork for criminalizing abortion. The amendment failed, with an astonishing 73% of the electorate voting against it. Polling revealed that many voters cast their votes against the amendment—not based on their views on abortion or the moral status of embryos—but because they worried about the law’s impact on the availability and use of IVF.

Despite public acknowledgment of the potential conflicts personhood laws create for nontraditional conception, bills that propose to protect embryos as people but fail to properly address the repercussions on ART continue to surface. Legislative clarity on the legal status of the embryo and judicial clarity on the scope of procreative freedom are both needed. In the meantime, it’s important to continue discussing and debating the intersection of pro-life views and technological advancements in infertility treatments. Particularly if the judicial system accepts the premise that embryos are juridical persons, couples using ART to conceive children will need guidance on how their rights may be affected.

Greer Gaddie

228. Id.
230. Id.