The Abortion Question via In Vitro Fertilization: Debating Embryonic Personhood in Alabama

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Introduction

In the decades since *Roe v. Wade* (1973) determined fetal viability to be the beginning of the state's interest in a person's pregnancy, every single state in the US has dealt with legal and legislative questions pertaining to fetal personhood. These questions have to do with when, exactly, a fetus turns from a bundle of unconscious cells to what we recognize as a human being. In other words, they establish how far into a pregnancy the state declares a public interest in the womb, in the form of an obligation to protect the person within that womb. *Roe* offered a federal standard of fetal viability, defined as 24 to 28 weeks or the start of the third trimester, but resistant states have tried over and over again to set their own standard—typically six, twelve, or fifteen weeks. Finally, with the 2022 decision *Dobbs v. Jackson Women's Health Organization*, the US Supreme Court empowered individual states to set their own abortion standards.

Since *Dobbs*, 21 states have either banned or heavily restricted abortion access.¹ In the 29 states where abortion is currently legal, 20 of them utilize the *Roe* standard of viability, while the other nine (and Washington, D.C.) place no limits on when a person may access the procedure.² So, in the majority of the country, abortion is legal but varyingly accessible.³ Not all of these states base their abortion standards on an argument about fetal personhood; however, they all implicitly understand that where they ban abortion, they do so in the interest of a future person whose right to life supersedes their pregnant parent's right to bodily autonomy. Conversely, those states that allow abortion with no gestational limit or with a limit at viability implicitly value the pregnant person's right to bodily autonomy over any assumed rights of the fetus/future person.

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¹ The New York Times, "Tracking Abortion Bans Across the Country," *New York Times*, March 6, 2025, https://www.nytimes.com/interactive/2024/us/abortion-laws-roe-v-wade.html. The states banning or heavily restricting abortion include: Alabama, Arkansas, Idaho, Indiana, Kentucky, Louisiana, Mississippi, Oklahoma, South Dakota, Tennessee, Texas, West Virginia, Florida, Georgia, Iowa, South Carolina, Nebraska, North Carolina, and Utah. Montana and Wyoming have also passed abortion bans, but the bans are currently blocked by other actions. While abortion procedures seem to be technically accessible in Montana, no abortion-providing clinics are currently operating in Wyoming.

² Ibid. The states with no limit include Alaska, Colorado, Maryland, Michigan, Minnesota, New Jersey, New Mexico, Oregon, and Vermont.

³ Ibid. In states with viability limitations, the standard varies from 22 to 24 weeks. Across these states—and the country—other varying factors will determine the accessibility of the procedure, such as the number of available clinics and access to public transportation.

Clearly, the United States is home to a broad range of perspectives and priorities when it comes to fetal personhood. There is no consistent answer to when a fetus becomes a person, nor is there a consistent standard for whether the fetus' assumed desire for life is more or less compelling than the pregnant person's desire to gestate and birth that life. In the time since *Dobbs* overturned federal protection of abortion access, this debate has only become more important, more contested, and less straightforward. Today, we are faced with a new type of fetal personhood, a new argument that has already dramatically affected reproductive rights in at least one state, and will assuredly continue to take root in other like-minded locales. Throughout this paper, I refer to this new type of fetal personhood as "embryonic personhood."

For the sake of clarity, let me briefly try to distinguish between an embryo and a fetus. *Embryo* describes a small number of cells that bear no physical resemblance to a human child, and is a cluster of cells that technically exists for no longer than eight weeks after fertilization.⁴ After those eight weeks, scientists and physicians tend to refer to the developing cells as a *fetus*. Thanks to the use of the sonogram, *fetuses* are more likely to bear physical resemblance to human children,⁵ although the extent to which they *are* children is very much the core of the fetal personhood debate. Up until recently, the debate about fetal personhood regularly distinguished between the embryo and fetus, acknowledging that the first six to eight weeks of fetal development did not constitute a human child. For example, during the decades that *Roe* was in effect, states did not seek to ban abortion entirely, but rather set an alternative standard for when the government could declare interest in the fetus; most often, they tried to establish fetal personhood as early as six weeks, typically based on the idea of a "fetal heartbeat."

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⁴ The Editors of Encyclopaedia Britannica, "Embryo," *Britannica*, last modified March 8, 2024, https://www.britannica.com/science/embryo-human-and-animal.

⁵ Karen Barad, "Getting Real: Technoscientific Practices and the Materialization of Reality," in *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Duke University Press, 2007), 189-222.

⁶ Ohio is most famous for this, having proposed a heartbeat bill three times throughout the 2010s. (HB 125, HB 69, and SB 23. SB 23 was eventually passed in 2019 but was overturned by state constitutional amendment in 2023. See Koeninger 2024 in Bibliography.) Importantly, this idea of a "fetal heartbeat" is a misnomer; a heart does not yet exist at six weeks of development, so the electrical pulse being detected is not technically a heartbeat.

This distinction certainly still exists, although not in every state. Currently, in states where abortion is heavily restricted but not entirely banned, the procedure is allowed for at least the first six weeks of pregnancy. In those states, an embryo does not have the rights of a child.⁷ However, as a result of *Dobbs*, several states have banned abortion at *any* stage in pregnancy, except when imminently necessary to save the life of the pregnant person.⁸ These states have implicitly or explicitly decided that the rights of an embryo supersede the rights of the pregnant person, granting these embryos an implicit status of personhood. Today, there appears to be a shrinking distinction between the embryo and the fetus, especially when they both are argued to have the rights of a fully-gestated human.

In the time between *Roe* and *Dobbs*, many scientific developments have enabled a newly rich and complex understanding of human reproduction. Perhaps most impactful to our contemporary knowledge of human reproduction is the development of *in vitro* fertilization (IVF), meaning fertilization of an egg with sperm that is carried out in the lab rather than in the human body. Despite IVF and abortion both being clearly related to reproduction, we might initially balk at the comparison—what does one have to do with the other? IVF is acquired by people who want a child badly enough to pay considerable fees, while an abortion procedure is typically acquired by someone who does *not* want a child. They seem incommensurate, perhaps even diametrically opposed.

However, IVF is a new terrain on which anti-abortion logic has settled itself. In a decision made by the Alabama Supreme Court in February 2024, *in vitro* embryos—again, embryos that were created in a lab, not in a human body—are to be considered human children. This decision and its implications are the central focus of the present paper. As such, two pertinent questions are to be addressed: first, what is it about IVF, especially in its ethical

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⁷ Here I refer to Florida, Georgia, Iowa, and South Carolina, which have the most restrictive policies without entirely banning the procedure. See *NYT*'s "Tracking Abortion Bans."

⁸ These states are Alabama, Arkansas, Idaho, Indiana, Kentucky, Louisiana, Mississippi, Oklahoma, South Dakota, Tennessee, Texas, and West Virginia. See *NYT*'s "Tracking Abortion Bans."

dimensions, that invokes anti-abortion logic and appeals to people defending fetal personhood? Second, what is the end goal of deciding that *in vitro* embryos qualify as human beings?

As will be discussed through an examination of IVF's history, the ethical concerns surrounding IVF are intricately related to those surrounding abortion—they are foundational concerns about a (potential) human's right to life. "Fetal personhood" has its own meaningful history, and it is not this concept that the Alabama case grapples with. After all, there can be no satisfactory equating of an *in vitro* embryo and a fetus that has successfully taken root in a human uterus; as such, I propose that what the Alabama Supreme Court is *really* talking about is embryonic personhood, or the extent to which an embryo is a rights-having individual. Certainly fetal and embryonic personhood are related, even similar concepts, but they are not equivalent.

To the second question at hand, the end goal of asserting embryonic personhood in Alabama is somewhat obscured by the court's decision itself, as well as various outcomes—intended or otherwise—that followed the decision. For example, it may seem that the state's justices wanted to empower future parents, strengthening their rights in IVF scenarios; or it may appear that the justices wanted to further regulate IVF, or make it harder to access, perhaps in the service of an argument that IVF itself is immoral for its manipulation of human eggs and sperm. I do not believe, however, that an analysis of the decision and its surrounding circumstances produces a convincing argument for any of these hypothetical goals. Instead, the goal for the Alabama Supreme Court was to legally and ideologically shore up anti-abortion logic, extending the idea of fetal personhood to what is arguably its furthest conclusion: even when not implanted in a human body, the very mixture of human gametes—sperm and egg—constitutes a human person.

In order to adequately address these questions and demonstrate the extent to which IVF exists as a useful terrain for anti-abortion advocates to make their argument, this paper contains three related parts. In the first, I explain the traditional IVF procedure as well as its basic history,

and I outline the ethical debate over the extent to which an *in vitro* embryo is a human person. Unsurprisingly, this debate is similar in many ways to the debate over the ethics of abortion. The second part of this paper discusses the Alabama Supreme Court case from February 2024 and its immediate outcomes; in that part, I identify the core logic utilized by the court and present unanswered questions. In the final part, I identify and analyze inconsistencies within the court's logic to reveal that the court's ultimate goal is not to offer a doctrinally consistent outcome for the plaintiffs, but rather to ideologically support an anti-abortion argument.

In Vitro Fertilization: A Brief History

In vitro fertilization is categorized as an assisted reproductive technology (ART). Like other ART procedures, the main purpose of IVF is to enable biological reproduction where previous "natural" attempts have been unsuccessful. That said, IVF is also used to avoid certain genetic disorders, editing the embryo's genetic code to prevent inherited diseases; and IVF is also, if more rarely, used by single parents and queer parents for whom traditional reproduction methods are undesirable. In any given case, IVF may be an umbrella term that encompasses several other types of ART procedures in the course of egg fertilization and embryo implantation. For example, gamete intrafallopian transfer (GIFT), zygote intrafallopian transfer (ZIFT), partial zona dissection (PZD), subzonal insemination (SUZI), and/or intracytoplasmic sperm injection (ICSI) may be utilized to enable a successful IVF process.⁹

For the purposes of this discussion, IVF describes any process in which human gametes—eggs and sperm—are manipulated in some way outside of the body, in a laboratory, and then later inserted into a human with a viable womb, with the hope that they will become successfully implanted in the uterus in the form of a multi-cell embryo. Traditional IVF involves the formation of this embryo outside of the body, in a test tube with an enabling culture, before

⁹ Lauren A. Bishop, Davora Aharon, Catherine Gordon, Erika New, and Alan Decherney, "IVF From Incubation to Injection," Fertility and Sterility 111, no. 2 (2018): 205; Gianpiero D. Palermo, Claire L. O'Neill, Stephen Chow, and Zev Rosenwaks, "The Story of ICSI," Fertility and Sterility 111, no. 2 (2018): 195.

being developed for a few days and then inserted into the patient—or frozen and preserved for future use—when it has reached the eight-cell stage.¹⁰ The use of other methods, such as those above, may be called for in various circumstances, based on the specific case at hand.¹¹

As of 2021, at least one percent of babies born in the US are conceived using some kind of ART, suggesting that the steady scientific development is helping millions of Americans address infertility and other reproductive issues. 12 Today, IVF is the most common ART procedure practiced in the US.¹³ This development, however, has been a long time coming, and represents a significant amount of time, energy, and money funneled into reproductive health over the past century. The development of IVF began at least as far back as 1930, when Gregory Pincus pioneered (unsuccessfully) an *in vitro* fertilization procedure on rabbits. ¹⁴ Undeterred, Pincus went on to work with gynecologist John Rock and his fellow, Miriam Menken; their team published their research on the retrieval and fertilization of eggs in vitro in 1948, not yet progressing to the transfer of those eggs into a human. 15 Over a decade later, M. C. Chang successfully implanted in vitro embryos in a live rabbit, leading to a live birth in 1959. 16 And finally, building upon the decades of research that had been performed before them, Robert Edwards' and Patrick Steptoe's team in the UK was the first to implant and then deliver a human infant in July 1978.¹⁷ Although less discussed in the Western world, a team in Kolkata led by Subhas Mukerji was only a few months behind the UK, and delivered the world's second IVF baby in October 1978.¹⁸

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¹⁰ Peter Singer and Karen Dawson, "IVF Technology and the Argument from Potential," *Philosophy & Public Affairs* 17, no. 2 (1988): 89.

¹¹ Bishop et al., "IVF From Incubation," 207.

¹² Ibid.

¹³ American Society for Reproductive Medicine, "Oversight of Assisted Reproductive Technology," The American Society for Reproductive Medicine, last modified 2021. https://www.asrm.org/globalassets/_asrm/advocacy-and-policy/oversiteofart.pdf

¹⁴ Jean Cohen, Alan Trounson, Karen Dawson, Howard Jones, Johan Hazekamp, Karl-Gösta Nygren, and Lars Hamberger, "The early days of IVF outside the UK," *Human Reproduction Update* 11, no. 5 (2005): 439. ¹⁵ Ibid., 445.

¹⁶ Ibid., 446.

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¹⁷ Ibid., 447.

¹⁸ Sarah Ferber, Nicola J. Marks, and Vera Mackie, *IVF and Assisted Reproduction: A Global History* (Palgrave Macmillan 2020), 1.

Here in the US, Howard Jones and his colleagues at the Eastern Virginia Medical School—including his wife, Georgeanne—were fervently catching up. After several years of egg retrieval and various experiments, the team reached success when Georganne Jones, a reproductive endocrinologist, suggested the use of HMGs, or hormones that stimulate ovulation and accelerate development of ovarian cells. ¹⁹ On the 13th attempt with this method, a pregnancy was achieved, and the first baby to be conceived in the US through IVF was born in December 1981. ²⁰ Since then, the use of IVF has only grown around the world; as of 2020, "an estimated ten million people have been born following the use of IVF and assisted reproduction." ²¹

And so, this procedure seems quite commonplace in today's mainstream understanding of biology and medicine—at least, it is not scientifically mind-boggling. Although certainly inaccessible to many, and critiqued by certain communities for various reasons, IVF has received relatively little social or political attention since its controversial beginnings. In exploring published work about IVF since its first human successes in the late 1970s, there appears to be a meaningful gap from the late-1990s through the mid-2010s, where only a handful of political, social, or biomedical thinkers were debating the implications of the procedure. This suggests that for approximately 15-20 years, at least mainstream society and academia were not overly concerned with what the practice of IVF meant, what its social-political implications were, or the extent to which it should be regulated by the government.

Preceding this gap, we find a wealth of literature about what IVF should do or does, from intricate and detailed reports written for the scientific community to broader and more socially oriented comments written by religious and ethical theorists. Clearly, the procedure itself is not up for debate in the way it was forty-five years ago when it was a novel concept, when the idea of "test-tube babies" captured global attention. And yet, there is today a revitalized debate

¹⁹ Cohen et al., "The early days," 449.

²⁰ Ibid.

²¹ Ferber et al., *IVF and Assisted Reproduction*, 2.

over—and even potential opposition to—IVF procedures. So, we are inclined to ask: Why? What is there to debate nearly fifty years later, when society and science has progressed so much? Although not a simple question, the answer is found in a theoretical consideration of some of the ethical concerns around IVF, which will be followed by a practical consideration of the contemporary threat to IVF in Alabama.

Debating the Ethics

Since IVF was first introduced—since even before it *worked*—many individuals and groups have criticized the practice as unethical. The reasons for concern are perhaps obvious; if one believes that human embryos have some kind of intrinsic value, using them for laboratory research—even if the goal is to create a child—seems questionable at best and categorically immoral at worst.²² These concerns were meaningful enough to prevent state-funded research into IVF in the US until 1979. In 1975, several years before the first IVF baby was born to the world, the Ethics Advisory Board of the Department of Health, Education, and Welfare established "an effective moratorium on the federal funding of *in vitro* fertilization" in the US.²³ Although there were hypothetical exceptions to this ban, the Advisory Board required that research not pose more than "minimal risk" to any embryonic subject.²⁴ And still, when the Ethics Advisory Board lifted that moratorium in 1979, there were only "certain circumstances" that allowed the use of public funds.²⁵

Ethical concerns were not offered by just potential funders—they came also from the public. In 1980, American physicians studying IVF established a practice in Virginia; by the end

²² Other ethical concerns certainly exist, relating to protecting the heteronormative family structure and the traceability of familial heritage, as well as whether it is the place of medical science to help people overcome infertility (see "Conversation with Dr. Leon Kass" 1978). For the purposes of this discussion, and because it is the basis of the Alabama Supreme Court decision, I will focus on those arguments having to do with the embryo's relative personhood.

²³ "Conversation with Dr. Leon Kass: The Ethical Dimensions of in Vitro Fertilization," Washington, D.C., American Enterprise Institute for Public Policy Research (1978), 1.

²⁴ Heather D. Boonstra, "Human Embryo and Fetal Research: Medical Support and Political Controversy," *Guttmacher Policy Review* 4, no. 1 (2001). https://www.guttmacher.org/gpr/2001/02/human-embryo-and-fetal-research-medical-support-and-political-controversy#:~:text=The%201974%20National%20Research%20Act,Human%20Services%2C%20or%20DHHS.

²⁵ "Conversation with Dr. Leon Kass." 1.

of 1981, they had successfully brought seven "test-tube babies" into the world. While establishing their operation in Norfolk, Howard Jones and his colleagues met "considerable public opposition," mostly "expressed in an organized way by the right to life movement." Claiming that the procedures performed by Jones and his team "were causing abortions," individuals and groups took out "adverse editorials in the local newspapers, [and] many letters to the editor expressing disapproval." In a fashion similar to anti-abortion protestors who today stand outside of health clinics preaching their perspectives, those opposed to IVF research were known to "march...on the streets with placards so that the patients in some circumstances had in effect to cross the picket line in order to receive their treatment."

The question might be asked: how does the performance of an IVF procedure cause an abortion? The logic goes that, because it is likely that more embryos will be inserted into the patient than will become effectively implanted in the uterus, any *un*successfully implanted embryos have been killed/aborted. Furthermore, as we will see with the 2024 Alabama Supreme Court case, couples are likely to have leftover embryos, and the argument goes that the destruction of and/or experimentation on those embryos is unethical for the same reason that it would be unethical to destroy and/or experiment upon a human child. Thus, the question of whether IVF is "ethical" is inextricably related to the question of abortion.

As such, the ethical opposition to IVF follows similar arguments as those against abortion. Fundamentally, these arguments have to do with the ethical claim that a human being has a right to life—in the American justice system, causing the death of another human being is a serious crime. And so, boiled down, the claim made by those opposed to IVF and abortion is that an embryo or fetus either *is* a human child, or has the *potential* to become a human child, and therefore has the same right to life as fully-gestated humans do. This is often referred to as fetal

²⁶ Cohen et al., "The early days," 449.

²⁷ Ibid., 448.

²⁸ Ibid.

²⁹ Ibid.

personhood, or the rights of personhood—and specifically the right to life—granted to a not-yet-born child.³⁰

Since it is the claim defended by the Alabama Supreme Court, I will save the argument about embryonic personhood for a moment, and first comment on the idea of potential. In good faith, I would summarize the argument for potential as being based on a foundational assumption that every human being is special, unique, and ultimately important—more important than non-human animals, certainly. Given this assumption, the birth of a new human being is desirable in all contexts, as their new existence adds some kind of benefit to the world. Because of this benefit, the potential of a human being should always be protected and enabled to come to fruition; in this case, a human embryo should be fully gestated and birthed.

This argument—if it were carried out with consistency—may be minimally defensible in the case of abortion. However, there is almost no real defense for this claim in the case of IVF. As demonstrated above, the IVF procedure is performed in a laboratory by scientists—the embryo itself does not exist unless a technician removes eggs from an ovary, places them in a culture, fertilizes them with sperm, and leaves them to grow into eight cells. At this point, an embryo certainly exists in its most basic form, but it exists in the lab. To date, no embryo has been successfully developed nor a fetus birthed without first being implanted in a human uterus at the eight-cell stage.³¹

Plainly put, the environment in which this *in vitro* embryo exists is not the environment in which human life can actually develop. In order to become anything human-like, this embryo must be—by human effort—transplanted from its lab storage mechanism into a human being. In other words, for an IVF embryo to have any "potential" at all, it must be inserted into a human uterus.³² Therefore, to argue that an embryo is a potential human life means one must also

³⁰ See, for example, C'Zar Bernstein's legal argument for fetal personhood (2022), as well as Lisa Needham's refutation of fetal personhood (2022), in the attached bibliography.

³¹ Singer and Dawson, "IVF Technology," 90.

³² This argument is very intricately and effectively made by bioethicists Peter Singer and Karen Dawson (1988).

recognize an equal potential within an *un*fertilized egg, or the unutilized sperm waiting within human testes. An embryo outside of a human body is no more a potential life than the egg which will be shed during the human menstrual cycle. Both require human interference before the potential for life truly exists.

Then what about the argument that an embryo *is* a human life? To consider such an argument, we are led to ask what a human life is—what is it about our existence that makes us alive? Certainly we must be careful answering such a question, as it threatens to disqualify many people from the category and/or include technology that was never biologically gestated and birthed by a human. For example, if we say that we know we are alive because we can feel pain, are people with nerve disorders more—or less—human than those without? Or if we say that we know we are alive because we can converse with each other, does that mean the artificial intelligence capable of conversation qualifies as living as well?

The truth is that I cannot provide a simple answer as to what a human life is, or when it begins. I do not believe that there is a secular, scientific, and consistent way to do so, especially when judging the value of that life—whether that life can be justly extinguished. This is precisely the problem with the argument that embryos are living humans: "human life" does not have a meaningfully consistent definition. All I can offer is the opposing argument on either side, within the context of IVF. This explanation is borrowed from Peter Singer's influential discussion of the "practical ethics" surrounding taking a human life.³³

On the pro side, the defense of an embryo's personhood is founded in religious philosophy. Today, the main theoretical—and political—opposition to IVF comes from Catholic, Orthodox, and Protestant concerns.³⁴ Although certainly influenced by religious beliefs, there are some arguments in this vein that could be read secularly; for example, opponents of

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³³ Peter Singer, "Taking Life: The Embryo and the Fetus," in *Practical Ethics* (Cambridge University Press, 1993).

³⁴ Kjell Asplund, "Use of *in vitro* fertilization—ethical issues," *Upsala Journal of Medical Sciences* 125, no. 2 (2020): 193.

IVF—particularly the loss and destruction of embryos inherent within IVF—argue that even from within the womb, embryos may feel pain, and hurting them would be wrong in the same way that hurting a human child would be wrong.³⁵ Additionally, they hold that human lives are unique and valuable, so destroying that uniqueness is a moral wrong as well.³⁶ As we will see in the case of Alabama's recent Supreme Court ruling, these defenders of embryonic personhood also claim that embryos are not merely entitled to a human right to life, but are akin to children in their need to be actively protected by the state; there is a social and political responsibility, according to the Alabama justices, to enable their development and birth in the same way a child must be enabled to survive.³⁷

Regardless of one's personal perspective, these arguments have a certain level of logical merit. Humans can feel pain, and pain—particularly when one did not consent to feeling it—is generally seen as harmful and something we want to avoid. Humans, at least or especially in the liberal West, celebrate individualism as a social good. And most humans can probably generally agree that children require more protection and/or enabling processes than fully-developed adults. So at a basic level, these arguments are not wholly illogical or easily dismissed.

At the same time, there are counterpoints. Those who defend the idea that embryos are *not* yet living humans often base their arguments on a handful of different but related ideas, many of which speak directly to the arguments presented above. In the first case, the argument goes that a human being's life might be distinguishable and valuable based on at least three factors: consciousness, rationality, and ability to feel pain. If these are the concerns for the embryo, we need not be worried—we regularly kill and eat animals of greater consciousness,

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³⁵ This argument is less popular today than in the 1980s, but it is still regularly espoused by anti-abortion proponents. For example, see the Wisniewski (2011) article in Bibliography.

³⁶ Paul Ramsey, "The Morality of Abortion," in *Life or Death: Ethics and Options*, edited by D. H. Labby (London 1968).

³⁷ James LePage and Emily LePage, and William Tripp Fonde and Caroline Fonde v. The Center for Reproductive Medicine, P.C., and Mobile Infirmary Association d/ba Mobile Infirmary Medical Center, SC-2022-0515; Felicia Burdick-Aysenne and Scott Aysenne v. The Center for Reproductive Medicine, P.C., and Mobile Infirmary Association d/b/a Mobile Infirmary Medical Center, SC-2022-0579. These appeals are consolidated into one decision. For the rest of the paper, the case will be shortened to: LePage v. Center for Reproductive Medicine.

rationality, and ability to feel pain than that belonging to the human embryo.³⁸ How can an embryo qualify as a valuable human life if it has a lesser extent of these qualities than our food? As such, we can readily destroy or experiment on embryos without moral inconsistency. Yes, the *potential* for the embryo may be superior to that of non-human animals, but that is not the claim being made when IVF opponents claim embryos *are* living humans.

The second argument fears that human embryos can feel pain, and will be in pain when destroyed. However, this argument implicitly allows for the destruction of an embryo that can*not* feel pain; therefore, a fetus that cannot feel pain has no right to life. Science provides a more-or-less straightforward answer: "until 18 weeks gestation, the cerebral cortex is not sufficiently developed for synaptic connections... [Prior to that cerebral development,] there is no good basis for believing that the fetus needs protection from harmful research, because the fetus cannot be harmed." Relatedly, some argue that the embryo or fetus has no right to life before it can survive independently of its human body host. This argument is based on Judith Jarvis Thomson's hypothetical about waking up in a hospital beside a world-famous violinist, who will die unless you remain attached to them, giving them your vital fluids for nine months. He violinist does not automatically have a right to life at your expense; you have no moral obligation to save their life. In the same way, no one has an obligation to gestate an embryo.

Finally, there are important inconsistencies with the argument in defense of embryonic personhood. At least three issues are apparent: the meaning of uniqueness, questionable individuality, and a false equivalence of potential with actual. In the first case, we must ask why the uniqueness of a life automatically leads to a *right* to life. Peter Singer points out: "A canine fetus is also, no doubt, genetically unique. Does this mean that it is as wrong to abort a dog as a human? When identical twins are conceived, the genetic information is repeated... [Should it

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³⁸ Singer, "Taking Life," 153.

³⁹ Ibid., 164-5.

⁴⁰ Judith Jarvis Thomson, "A Defense of Abortion," *Philosophy & Public Affairs* 1, no. 1 (1971): 49, http://www.jstor.org/stable/2265091.

therefore be] permissible to abort one of a pair of identical twins?"⁴¹ Clearly, uniqueness does not really indicate a consistently applied right to life. Similarly, embryonic personhood is defended via the idea that embryos are individuals who will grow into adults. But this is not the embryo's case at the biological level—up to two weeks after fertilization, an embryo can spontaneously split into additional genetically identical embryos. So while in cryogenic storage—and for at least two weeks after implantation—the embryo's claim to individuality cannot be proven.⁴²

The last obvious point of inconsistency is that arguments holding that embryos *are* people make a false equivalency between the embryo's potential and its actual state. There is no doubt that an implanted embryo is a potential human being, and I have acknowledged that an *in vitro* embryo is as much a potential human being as an egg or sperm. But the claim that an in vitro embryo is a human being is much harder to maintain. This claim insists that rights granted to a human being living outside of the womb must also be granted to a collection of cells sitting within a test tube. The equivalency does not follow a secular logic, and is inconsistent with other ways humans view potential. Put plainly, "there is no rule that says that the potential X has the same value as an X, or has all the rights of an X. There are many examples that show just the contrary. To pull out a sprouting acorn is not the same as cutting down a venerable oak."43 Put in human biology terms, we do not hold people liable for menstruating, thus destroying a viable egg that could have been fertilized; nor do we label masturbatory sperm emissions as a destruction of a human life simply because that sperm *could have* fertilized an egg.

By way of concluding this section, I want to also mention that the debate over embryonic personhood precedes—but does not always bear on—the liberal-feminist argument that the government may not tell citizens what to do with their own bodies. According to this standard, an embryo, regardless of whether or not it is a person, does not have a greater say over its

⁴¹ Singer, "Taking Life," 155. ⁴² Ibid., 157.

⁴³ Ibid., 153.

existence than the person whose body it is using to grow. This argument has many forms and subparts that I will not go into here, but the ultimate conclusion is that the state has no right to tell a person that they must be pregnant if that pregnant person does not wish to be. This argument's function in the abortion debate is hotly contested, but the extent to which it will or can be put to use in the IVF debate remains to be seen.

IVF Under Threat

Now that the general contours of the debate over embryonic personhood have been established, I must turn to the contemporary reality of the United States, particularly the state of Alabama. The Alabama Supreme Court has determined that—at least for the purposes of wrongful death suits and compensation—an embryo *in vitro* is a human child. Think of it this way: to the Supreme Court of Alabama, a medical facility that fails to securely store a frozen embryo, thereby leading to its destruction, is just as liable for a minor's death as a negligent power company that fails to insulate lines near family homes, killing a kindergartener who touches the line while playing in their backyard. They are, as a result of the Alabama Supreme Court's recent ruling, equivalent.

This determination was reached in February 2024, after the Alabama Supreme Court heard two cases brought by three sets of parents who had leftover embryos being kept at the Mobile Infirmary Medical Center. Between 2013 and 2016, each of the three couples were treated at the Center, had successful births, and left embryos in storage at the Center's "cryogenic nursery." In December 2020, an unrelated patient at the Center was able to access that nursery and pick up several embryos; the freezing temperature burned the patient's hand, and as a result they dropped the embryos, destroying them. 45

Following the destruction of their embryos, the three sets of involved parents utilized Alabama's Wrongful Death of a Minor Act (Ala. Code § 6-5-391) to claim that the Center and its

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⁴⁴ LePage v. Center for Reproductive Medicine (SC-2022-0515; SC-2022-0579), 3-4.

⁴⁵ Ibid., 5.

parent association failed in their duty to protect the unborn lives entrusted to them. Although not the first time that the Wrongful Death of a Minor Act has been applied in Alabama to unborn lives, this case is the first time that the Act has been applied to what the court calls "extrauterine children," or embryos that exist *in vitro* rather than in a human womb. 46 In the early 2010s, the Alabama Supreme Court used the Wrongful Death of a Minor Act to find in favor of pregnant women whose fetuses died in the womb before reaching viability.

In the 2011 case of Mack v. Carmack (79 So. 3d 597), April Mack was in a car accident that killed her fetus, and the Alabama Supreme Court ruled that the driver who caused the accident could be held liable under the Wrongful Death of a Minor Act. Within that decision, the court takes pains to thoroughly defend the idea that a non-viable fetus is still protected by Alabama law, arguing that viability itself is an "arbitrary and illogical" standard. ⁴⁷ The following year, Amy Hamilton successfully appealed her similar case to the Alabama Supreme Court (Hamilton v. Scott 97 So. 3d 728). After doctors were unable to keep up their recommended schedule for Hamilton's appointments and her fetus was stillborn, Hamilton sued under the Wrongful Death of a Minor Act, and the trial court concluded that a non-viable fetus was not protected under the law. In accordance with their *Mack* decision, however, the Alabama Supreme Court reversed the trial court's decision (in part) and concluded that Hamilton could recover damages for the wrongful death of her fetus, regardless of viability.⁴⁸

With these decisions in mind, the question for the Alabama Supreme Court in the 2024 case is whether this refutation of viability can be meaningfully applied in the case of *in vitro* embryos. As they have already determined that Alabama has a duty to protect children, and fetuses can be classified as children, they must ask: does an embryo in a laboratory have a right to the same protection as an embryo gestating within a human womb? The answer for the

⁴⁶ Ibid., 7.

⁴⁷ Mack v. Carmack (79 So. 3d 597), 12. ⁴⁸ Hamilton v. Scott (97 So. 3d 728), 7.

Alabama Supreme Court is unequivocally in the affirmative.

To reach this conclusion, the Court references precedents in which the Wrongful Death of a Minor Act has been utilized to affirm liability claims made by parents of unborn children, such as the *Mack* and *Hamilton* cases described above. Most importantly, they establish that an *in vitro* embryo is not definitionally different from an embryo in a human womb. As such, the majority of their argument has to do with precedents in which the definition of "child" includes the unborn. For example, they cite a 2003 edition of Merriam-Webster's Collegiate Dictionary, a 1989 edition of the Oxford English Dictionary, and a 2002 edition of Webster's Third New International Dictionary, all of which have been used by the Court before. ⁴⁹ And in defending the idea that the original 1872 Wrongful Death of a Minor Act was always meant to apply to unborn children, they cite an 1864 edition of Webster's early dictionary. ⁵⁰

Not only does the Alabama Supreme Court believe that the life of a human being begins at fertilization, but they further argue that the entire state of Alabama believes this as well; as the defendants have not presented an alternative definition, the Court says that there is "overwhelming consensus in this State that an unborn child is just as much a 'child' under the law as he or she is a 'child' in everyday conversation." Finally, they point to the Alabama Constitution and a 2022 update to Article I, § 36.06(b), which "affirms that it is the public policy of this state to ensure the protection of the rights of the unborn child in all manners and measures lawful and appropriate." Applied to the present case, the Court claims that this update to the Alabama Constitution requires them to "construe ambiguous statutes in a way that 'protects...the right of the unborn child' equally with the rights of born children."

To summarize, the Alabama Supreme Court has determined that—at *least* within the

⁴⁹ LePage v. Center for Reproductive Medicine (SC-2022-0515; SC-2022-0579), 12-13.

⁵⁰ Ibid.. 13

⁵¹ Ibid., 15

⁵² Ibid., 16

⁵³ Ibid.

context of civil liability—an *in vitro* embryo has rights of personhood equivalent to those of a minor. Thus, in vitro embryos must be suitably protected and enabled to grow, just as the state of Alabama expects parents and communities to protect and enable other minors. For the purposes of civil liability, parents of *in vitro* embryos are well within their rights to sue clinics and practitioners for the loss of their "extrauterine child," just as other parents would be within their rights to sue a doctor whose negligence led to the death of their three-year-old.

IVF Clinics Respond by Pausing Operations

Perhaps unsurprisingly, this decision had somewhat of a chilling effect on IVF clinics in the state of Alabama. As soon as the decision was announced, three IVF clinics in the state ceased fertilization and implant operations. Practitioners reasonably understood that if in vitro embryos were now *legally* understood as human children, their actions as producers and handlers of these children were newly contextualized; nothing could be assumed. Perhaps, under this new standard, medical professionals could be held liable for an embryo that did not properly implant, either resulting in an ectopic pregnancy or failing to produce a pregnancy at all. Perhaps the regular practice of discarding embryos could be met with legal ramifications that would increase malpractice insurance costs or overall costs for clinics. With such concerns newly within the realm of possibility, the University of Alabama at Birmingham, Alabama Fertility, and the Center for Reproductive Medicine at Mobile Infirmary quickly paused their work.⁵⁴

Turned away by their doctors, patients looked to the state legislature for some kind of relief: what were they to do now about their plans for a family? Undergo the onerous—surely, in many circumstances, impossible—burden of packing up their lives to start over with IVF services in another state? The Alabama legislature provided, within a manner of weeks, a short and simple bandage meant to enable clinics to resume their work. In less than a handful of

February 21, 2024, https://www.nbcnews.com/health/health-news/university-alabama-pauses-ivf-services-courtrules-embryos-are-childre-rcna139846.

⁵⁴ Aria Bendix, "Three Alabama clinics pause IVF services after court rules that embryos are children," NBC News,

paragraphs, SB 159 shielded these clinics and their employees from civil and criminal liability in the course of their IVF work. The core assertion of the law is that:

Related to in vitro fertilization and notwithstanding any provision of law, including any cause of action provided in [the Wrongful Death of a Minor Act] ... no action, suit, or criminal prosecution for the damage to or death of an embryo shall be brought or maintained against any individual or entity when providing or receiving services related to in vitro fertilization.⁵⁵

Manufacturers and transporters are also relatively protected from liability, such that they can only be sued for damages equal to the price of the current disrupted *in vitro* cycle.⁵⁶ This law was enough to encourage the University of Alabama and Alabama Fertility to resume their IVF work, while the Center for Reproductive Medicine—the provider found liable in February—currently only operates as a storage facility and does not provide patient-facing services.⁵⁷

Of course, this stopgap provided by the legislature leaves many questions unanswered. The Alabama Supreme Court specifically based their judgment on the Wrongful Death of a Minor Act, which is a civil—not criminal—statute, but the legislature has shielded IVF providers from both civil and criminal liability. What does this mean for the legal status of *in vitro* embryos? Are they only "human" in some circumstances? If an embryo is purposefully destroyed by someone who is not employed within an IVF clinic, can that person be criminally prosecuted for murder? Additionally, *NPR* has suggested that any abandoned frozen embryos might—under the standard of embryonic personhood—be the responsibility of the state, in the same way that abandoned children fall under the state's custody.⁵⁸ How will the state take responsibility for those embryonic children? Will they actively undertake the process of finding volunteers for implantation? Will taxpayer dollars go to indefinitely storing thousands upon thousands of embryos? The outcomes to all of these questions, and more, remain to be seen.

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⁵⁵ AL SB 159, 2, https://legiscan.com/AL/bill/SB159/2024.

⁵⁶ Ibid., 3.

⁵⁷ Adriel Bettelheim, "Alabama IVF clinics plan to restart operations," *Axios*, March 7, 2024, https://www.axios.com/2024/03/07/alabama-ivf-clinics-reopen-protection.

⁵⁸ Liz Baker, Debbie Elliot, and Susanna Capelouto, "Alabama governor signs IVF bill giving immunity to patients and providers," *NPR*, March 6, 2024, https://www.npr.org/2024/03/06/1235907160/alabama-lawmakers-pass-ivf-immunity-legislation.

Discussion: Considering the Logic of Alabama's Decision

For the purposes of this present discussion, I want to briefly point out some logical inconsistencies within the assertion of embryonic personhood made by the Alabama Supreme Court. There are four obvious concerns right now: inconsistent use of the right to life, the related question of the embryo's "potential", the arbitrarily special nature of IVF that protects its practitioners, and the unclear difference between criminal and civil liability. Each of these concerns raises questions for the future practice of IVF, as well as the legal status of embryos moreover in the state of Alabama. My purpose is not to answer these questions or solve the present inconsistencies, but rather to demonstrate that the only cohesive goal sought by the Alabama Supreme Court is a defense of anti-abortion logic via a legal and ideological defense of embryonic personhood.

The first inconsistency is perhaps the most obvious when it comes to IVF. All three sets of parents in the Alabama case signed paperwork with the Mobile Infirmary Medical Center that gave the facility authority to destroy and/or experiment on their leftover embryos. ⁵⁹ In at least one medical facility that has continued IVF work since the decision, patients are required to sign a new liability waiver, surrendering their right to sue the Fertility Institute of North Alabama if their embryos fail to successfully implant and/or are destroyed. ⁶⁰ Similarly nervous about the new definition of embryos, Huntsville Reproductive Medicine says they will not discard or destroy any embryos without "notary-signed consent from patients." ⁶¹ These three examples present the most important inconsistency within the argument for embryonic personhood. You *can* legally give consent for a facility to destroy your embryos. You can*not* legally give consent for a facility to destroy your children.

This detail was ignored by the Alabama Supreme Court, and entirely sidestepped by the

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⁵⁹ LePage v. Center for Reproductive Medicine (SC-2022-0515; SC-2022-0579), 23-4.

⁶⁰ Bendix, "Three Alabama clinics."

⁶¹ Ibid.

legislature's contribution. Either embryos are children and thus should be protected by the state and enabled to develop, or they are property, bundles of cells that can be justly disposed of or experimented on based on the consent of their owner. But embryos cannot be both. As such, we are forced to ask: what does the liability waiver and/or written permission for disposal actually grant these medical facilities? If embryos are children, destroying them is illegal and such documents cannot be legally binding. In the end, the court does not seek to address this inconsistency, thereby leaving a muddy area where the rights of the embryonic human are incredibly suspect.

The second inconsistency is related to this unclear granting of rights to the embryo. As established above, it makes no scientific sense to call an *in vitro* embryo a human being—it simply is not. Consider the somewhat popular logic presented by pro-choice proponents: a hospital wing is on fire, threatening both the fertility clinic and the pediatric ward. The fertility clinic houses thousands of frozen embryos, and there are about twenty children in the pediatric ward. According to the logic of embryonic personhood, the fire department should prioritize the fertility clinic, which has far more "lives" within it. A similar version of this scenario asks: if you were holding an *in vitro* embryo in one hand, and a 3-month-old baby in the other hand, would you be equally distraught to drop one or the other?

These hypotheticals point to the fact that an *in vitro* embryo certainly has the potential for human life, but is not yet equivalent—in either our scientific standards or our social definitions—to a human child. For an *in vitro* embryo to become a human being, it must first—at the very least—be successfully implanted in a human uterus. Until such a time as that happens, the *in vitro* embryo has just as much *potential* to become a human being as an unfertilized egg waiting in an ovary or unutilized sperm in the testes. We do not grant rights to eggs and sperm simply because they have the potential to become a human being, so it makes no sense to grant rights to *in vitro* embryos that *might* one day, under favorable circumstances, develop into a

child. The Alabama Supreme Court's granting of such rights demonstrates that the decision is based in ideology rather than scientific fact.

The third major inconsistency has to do with the legislature's protection of IVF providers. The state supreme court says that *all* types of embryos are children and thus should be protected, but the legislature says that *in vitro* practitioners should be protected from liability, meaning that their handling of *in vitro* embryos is protected from the court's decision. Why should this be? There is no defense given as to why IVF is special, or why physicians working in IVF clinics are less liable to claims of negligence than pediatricians, for example. If doctors can be held liable for the death of a child, why are IVF doctors exempt from such a standard? There is no reason to make this distinction, except to encourage IVF practitioners to continue their work in a new landscape where the embryos they create and implant are newly defined as children. But this certainly presents an inconsistency in Alabama's logic, and demonstrates the gap between the court and the legislature. After all, if the court intended IVF practitioners to be protected from liability, they would not have found in favor of the plaintiffs. The court's overall goal thus seems meaningfully different from that of the legislature, and it is not impossible for the legislature's new stopgap to be eventually judged unconstitutional within the state.

The final issue at hand is over the civil and criminal definitions of a "person" within Alabama. The court addressed an alleged disparity between these definitions in their decision, arguing both that the definitions do not *need* to be congruent, *and* that the definitions actually *are* congruent; they say that Alabama criminal-homicide laws indeed include unborn children, regardless of viability.⁶² They go on to explain that, despite this congruence, "it is wrong to assume that the prospect of civil liability for the mishandling of embryos necessarily raises the spectre of criminal liability for the same conduct," as criminal prosecution is far narrower than what is required in a civil suit.⁶³ So, the court has established that unborn children are protected

⁶² LePage v. Center for Reproductive Medicine (SC-2022-0515; SC-2022-0579), 19

⁶³ Ibid., 20.

by both civil and criminal laws, *but* argues that this does not necessarily mean someone who mishandles embryos can be found criminally liable.

This logic is suspect at best and purposefully ignorant at worst. After all, Alabama's abortion ban labels the termination of an embryo or fetus—at *any* stage—as a felony offense, no different from murdering a fully-gestated human. ⁶⁴ If *in vitro* embryos are no different from *in vivo* embryos—in a human womb—then why would demonstrating a criminal destruction of the embryo be different? A doctor in Alabama who performs an abortion can be sent to prison, but a doctor in Alabama who disposes of an *in vitro* embryo is only civilly liable—or not liable at all, thanks to the legislature. Why would this be, if the court has decided they are equivalent beings? Furthermore, the Alabama state constitution says that all laws should be construed to protect the unborn. ⁶⁵ With this in mind, the threat of criminal sanctions certainly seems consistent with the protection of *in vitro* embryos, and future criminal proceedings cannot be ruled out.

So we are left with a number of questions left to be addressed in Alabama. These include, at the very least: the future of frozen embryos that were meant to be used for research and/or disposed of; the legal definition of "person"; the constitutionality of the legislature's protection for IVF practitioners; the extent to which failed IVF procedures will be qualified as "abortions"; and the future of criminal-homicide definitions and proceedings surrounding *in vitro* embryos. This range of unanswered issues speaks to the single-minded goal of the Alabama Supreme Court when they decided that *in vitro* embryos can be defined as human children. If looking for political, legal, and ethical consistency—if looking to guide Alabama residents as to their political, legal, and ethical responsibilities—the court has assuredly failed. Instead, the court has written an ideologically driven defense for a new type of fetal personhood, and legally established a defense for the state's abortion ban.

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⁶⁴ AL HB 319, https://legiscan.com/AL/text/HB314/id/1980843.

⁶⁵ According to the LePage decision, this sentiment is found in Article I, § 36.06(b), of the Alabama Constitution of 2022.

Looking at the outcome of the February 2024 decision, one might assume that the state of Alabama's end goal was to make IVF even *more* inaccessible than it already is.⁶⁶ Alternatively, they might assume that the state of Alabama is trying to consistently apply their interest in embryos and fetuses, regardless of viability. In reality, both of these assumptions are incorrect, as are any other assumptions having to do with Alabama's regulation of IVF moreover. The fact of the matter is that the only coherent product of this complex situation is a legal and ideological defense for Alabama's near-total ban on abortion. Two important pieces of the scenario in Alabama demonstrate this: first, the topic of the decision is not IVF itself or ART procedures in general, but rather whether *in vitro* embryos are human beings; second, the Alabama Supreme Court decision emphasizes that viability is irrelevant when determining the right to life. Put together, these details reveal the implicit connection between the February 2024 Alabama Supreme Court decision and the state's statute on abortion.

In the first place, the text of the decision itself makes it very clear that the central focus of the case is not IVF. IVF technology is technically at the core of the case, but the question under review is not about the procedure or the practice in general; rather, it is about a product of IVF, the *in vitro* embryo "living" in cryogenic storage. Certainly the technological development that has enabled the human race to produce a human embryo in a lab is part of this case—there would be no question to review were it not for the special nature of these embryos, the fact that they were not gestating in a human body when they were destroyed. However, the Alabama Supreme Court does not discuss IVF as a practice and is solely concerned with including *in vitro* embryos in the state's definition of "child" for the purposes of civil liability. The court does not address other IVF-related questions because they are not relevant to the court's purpose of establishing embryonic personhood.

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⁶⁶ For information about inaccessibility of IVF, see the report published by The Ethics Committee of the American Society for Reproductive Medicine in 2021 (in Bibliography).

The court is painfully clear about the scope of their decision; they dismiss several questions that they will explicitly *not* be considering, and write that their only purpose is to affirm that "the Wrongful Death of a Minor Act applies to all unborn children, regardless of their location." Whether *in vivo* or *in vitro*, embryos are children—the court sees no distinction. Interestingly, they do not even bring the technological development to bear on their consideration of definitions of the word "child," which is a core part of their argument. Their wanton neglect of this crucial detail—the fact that when he was writing his 1864 dictionary, Webster could not have imagined an embryo existing outside of a human womb—demonstrates that IVF itself is irrelevant to the court's concerns. The core purpose of the Alabama Supreme Court's decision is to establish, within their state, a precedent that includes *all* types of embryos in the definition of "unborn child." This is in the service of the state constitution's protection of the unborn, as well as the state's abortion ban.

In fact, it seems that the court wants to push the legislature's abortion ban to its absolute extreme. A crucial element of the court's logic is that viability does not matter—it is arbitrary, and the right to life exists even for embryos that could not survive independent of their cryogenic nursery. In the context of the decision, this has to do with the fact that the *in vitro* embryo is only really *potentially* a human; it cannot think, breathe, or feel, but it may one day, after development. But to dismiss this concern, the court says the fact that the embryo needs gestation and development is not enough to nullify said embryo's right to life. However, taking this question of viability out of IVF context is important, and brings me to my second point: the dismissal of viability as a practical concern only serves an anti-abortion logic. Indeed, it serves a *radical* anti-abortion logic that goes even further than the state's near-total abortion ban.

Alabama is one of fourteen states that has, since *Dobbs*, completely banned abortion except to save the life of the pregnant person. Importantly, these states do not make exceptions

⁶⁷ LePage v. Center for Reproductive Medicine (SC-2022-0515; SC-2022-0579), 3

for mental health or financial concerns, and they reserve the right to determine whether the "risk" posed to the pregnant person is severe enough to warrant an abortion. However, several of these states, including Alabama, explicitly make exceptions for ectopic pregnancies and lethal fetal anomalies—in other words, non-viable fetuses. An embryo that has taken root in the fallopian tube instead of the uterus cannot be made viable again, and a fetus that has development issues and will die within hours of its birth cannot be miraculously saved; the state legislature explicitly understands that to force a pregnancy in these scenarios is pointless.

At the same time, just because these exceptions are written into law does not mean that they are carried out in practice. For example, in May 2023 a 13-physician committee in Alabama denied the termination of Kelly Shannon's fetus, which had several life-threatening issues; the committee, however, said that those issues were "potentially survivable," and denied her physician's request for an abortion. This determination certainly aligns with the state supreme court's logic: their dismissal of viability clearly implies that the Alabama Supreme Court does not care if your child will die within hours of being born. As long as you will not be killed by the act of gestating and giving birth, you are legally obligated to do so. Viability *does not matter*. After all, an eight-cell embryo is certainly not viable on its own—it needs to be gestated for several months in a human womb before it can survive independently. But still that embryo is protected, despite its non-viability. In the same way, a fetus who has a high likelihood of dying after being born is protected inasmuch as it cannot be legally exterminated where it poses non-life-threatening health issues to its parent.

This makes no logical sense in terms of a consistent application of a human being's right to life. Most importantly, it raises crucial questions about how viability issues should be addressed. Taking Kelly Shannon as an example—what would have happened if she had not

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⁶⁸ AL HB 319, https://legiscan.com/AL/text/HB314/id/1980843.

⁶⁹ Nadine El-Bawab, "Alabama mother denied abortion despite fetus' 'negligible' chance of survival," *ABC News*, May 2, 2023, https://abcnews.go.com/US/alabama-mother-denied-abortion-despite-fetus-negligible-chance/story?id=98962378.

acquired an abortion out of state? Imagine that she endured a dangerous and fraught pregnancy that ended tragically with the stillbirth of her child, or a live birth followed shortly thereafter by the infant's death. Is someone liable in this situation? If viability doesn't matter, and that infant had a right to life, who is to blame for the extinguishing of that life? Can Shannon be compensated, or was it her responsibility to somehow enable a life for her non-viable infant? Will she be criminally liable, in the way that other states have charged women for their miscarriages?

Another question to consider, if viability does not matter to the state, is what kind of life should be provided for the *in vitro* embryos that have been abandoned by their parents. Estimates vary, but there are as many as one million frozen embryos currently in the US. Assuming that people in Alabama use IVF proportionally to people in other states, perhaps 1.5% of those million embryos reside in Alabama, or approximately 15,000. If we further assume that at least a third of those embryos have been abandoned—meaning, the genetic parents of those embryos have released "ownership" of them to their IVF clinic/provider—then the state of Alabama is newly responsible for five thousand abandoned children. After all, when children are orphaned or abandoned, they become the responsibility of the government, typically through a program such as Child Protective Services. So what kind of life will the Alabama CPS provide for these abandoned embryonic children? Will they actively undertake the project of finding volunteers to gestate these embryos? What kind of responsibilities will the clinics who technically "own" these embryos have? Does the legal language of ownership even apply anymore, under the embryonic personhood standard?

This is all by way of demonstrating some questions that the Alabama Supreme Court did

⁷⁰ Annalisa Merelli, "Embryo loss is integral to IVF. Alabama's ruling equating embryos with children jeopardizes its practice," *STAT News*, February 22, 2024, https://www.statnews.com/2024/02/22/alabama-frozen-embryo-ruling-threatens-ivf-clinics.

⁷¹ This is based off of 2020 census data, which demonstrates that Alabama is home to approximately 1.5% of the US population.

not care to consider when dismissing viability. The court's *only* goal in dismissing viability is to defend the state's near-total abortion ban, a piece of legislation that does not signal a certain developmental stage before which abortion is legal; as such, the court's decision defends the logic behind the ban to the extent that the embryo's or fetus' developmental stage does not affect its right to life. In fact, the court's explicit refusal to acknowledge viability perhaps signals that they would strike down the abortion ban's exceptions for non-viability if presented with an opportunity to do so.

Put together, the Alabama Supreme Court's narrow focus on defining *in vitro* embryos as "extrauterine children" and its related dismissal of viability as a relevant factor in the right to life suggest that the only coherent goal of their decision was to further an anti-abortion argument. If embryos are children, and children have a right to life, then embryos have that right as well. The implications of this decision—some of which have been posed above—are wantonly neglected by the court, and cowardly sidestepped by the legislature. In the coming months, some of the above questions will certainly have to be addressed, and new ones will likely arise. Additional states may soon face similar controversies and IVF restrictions, and perhaps a contradictory goal will be achieved by the Alabama Supreme Court: fewer children born in the state of Alabama. Regardless, the practical concerns and consequences associated with the legal granting of embryonic personhood are not settled in the US, even in Alabama. This conversation is only just getting started, and on this new frontier of anti-abortion logic, nothing can be taken for granted.

Bibliography

American Society for Reproductive Medicine. "Oversight of Assisted Reproductive Technology." The American Society for Reproductive Medicine, 2021. https://www.asrm.org/globalassets/asrm/advocacy-and-policy/oversiteofart.pdf.

Asplund, Kjell. "Use of *in vitro* fertilization—ethical issues." *Upsala Journal of Medical Sciences* 125, no. 2 (2020): 192-9. DOI: 10.1080/03009734.2019.1684405.

Baker, Liz, Debbie Elliot, and Susanna Capelouto. "Alabama governor signs IVF bill giving immunity to patients and providers." *NPR*, March 6, 2024. https://www.npr.org/2024/03/06/1235907160/alabama-lawmakers-pass-ivf-immunity-legislation.

Barad, Karen. "Getting Real: Technoscientific Practices and the Materialization of Reality." In *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, 189-222. Duke University Press, 2007.

Bendix, Aria. "Three Alabama clinics pause IVF services after court rules that embryos are children." *NBC News*, February 21, 2024, https://www.nbcnews.com/health/health-news/university-alabama-pauses-ivf-services-court-rules-embryos-are-childre-rcna139846.

Bernstein, C'Zar. "Fetal Personhood and the Original Meanings of 'Person." *Texas Review of Law and Politics* 26, no. 3 (2022): 485-554.

Bettelheim, Adriel. "Alabama IVF clinics plan to restart operations." *Axios*, March 7, 2024. https://www.axios.com/2024/03/07/alabama-ivf-clinics-reopen-protection.

Bishop, Lauren A., Davora Aharon, Catherine Gordon, Erika New, and Alan Decherney. "IVF From Incubation to Injection." *Fertility and Sterility* 111, no. 2 (2018): 205-7.

Boonstra, Heather D. "Human Embryo and Fetal Research: Medical Support and Political Controversy." *Guttmacher Policy Review* 4, no. 1 (2001). https://www.guttmacher.org/gpr/2001/02/human-embryo-and-fetal-research-medical-support-and-political-controversy#:~:text=The%201974%20National%20Research%20Act,Human%20Services%2C%20or%20DHHS.

Cohen, Jean, Alan Trounson, Karen Dawson, Howard Jones, Johan Hazekamp, Karl-Gösta Nygren, and Lars Hamberger. "The early days of IVF outside the UK." *Human Reproduction Update* 11, no. 5 (2005): 439-59.

"Conversation with Dr. Leon Kass: The Ethical Dimensions of in Vitro Fertilization." Washington, D.C., American Enterprise Institute for Public Policy Research (1978).

El-Bawab, Nadine. "Alabama mother denied abortion despite fetus' 'negligible' chance of survival." *ABC News*, May 2, 2023. https://abcnews.go.com/US/alabama-mother-denied-abortion-despite-fetus-negligible-chance/story?id=98962378.

Ferber, Sarah, Nicola J. Marks, and Vera Mackie. *IVF and Assisted Reproduction: A Global History*. Palgrave Macmillan, 2020.

Hoffman, Jan. "Alabama's IVF Protection Law Will Reopen Clinics but Curb Patient Rights." *New York Times*, March 6, 2024. https://www.nytimes.com/2024/03/06/health/ivf-law-alabama.html

Koeninger, Kevin. "Ohio 'heartbeat' abortion law struck down by state court." *Courthouse News Service*, October 24, 2024. https://www.courthousenews.com/ohio-heartbeat-abortion-law-struck-down-by-state-court.

Merelli, Annalisa. "Embryo loss is integral to IVF. Alabama's ruling equating embryos with children jeopardizes its practice." *STAT News*, February 22, 2024. https://www.statnews.com/2024/02/22/alabama-frozen-embryo-ruling-threatens-ivf-clinics.

Needham, Lisa. "A Brief Guide to Fetal Personhood, the Next Frontier in Anti-Choice Politics." *Balls and Strikes*, May 25, 2022. https://ballsandstrikes.org/law-politics/fetal-personhood-explainer/#:~:text=Fetal%20personhood%2C%20in%20other%20words,get%20pregnant%20at %20all%20times.

Palermo, Gianpiero D., Claire L. O'Neill, Stephen Chow, and Zev Rosenwaks. "The Story of ICSI." *Fertility and Sterility* 111, no. 2 (2018): 195-8.

Singer, Peter. "Taking Life: The Embryo and the Fetus." In *Practical Ethics*, 2nd ed, 135-74. Cambridge University Press, 1993.

Singer, Peter, and Karen Dawson. "IVF Technology and the Argument from Potential." *Philosophy & Public Affairs* 17, no. 2 (1988): 87-104.

Thomson, Judith Jarvis. "A Defense of Abortion." *Philosophy & Public Affairs* 1, no. 1 (1971): 47-66. http://www.jstor.org/stable/2265091.

The Editors of Encyclopaedia Britannica. "Embryo." *Britannica*. Last modified March 8, 2024. https://www.britannica.com/science/embryo-human-and-animal.

The Ethics Committee of the American Society for Reproductive Medicine. "Disparities in access to effective treatment for infertility in the United States: an Ethics Committee opinion." *Fertility and Sterility* 116, no. 1 (2021): 54-63. https://www.asrm.org/globalassets/_asrm/ practice-guidance/ethics-opinions/pdf/disparities_in_access_to_effective_treatment_for_infertility_in_the_us-pdfmembers.pdf.

The New York Times. "Tracking Abortion Bans Across the Country." *New York Times*, April 9, 2024. https://www.nytimes.com/interactive/2022/us/abortion-laws-roe-v-wade.html.

Wisniewski, Mary. "'Fetal pain' anti-abortion laws spur fierce debate." *Reuters*, April 6, 2011. https://www.reuters.com/article/business/healthcare-pharmaceuticals/fetal-pain-anti-abortion-law s-spur-fierce-debate-idUSTRE735728/.