5-2019

Embryo Litigation : The Legal Categorization of Embryos as Protected Humans or Property

Caroline Koboska
Montclair State University

ABSTRACT

This thesis explores the issue of the unknown legal status of frozen embryos in the United States. With an examination of the issue through the discipline of law, it becomes evident that the lack of legislation and guidance on the issue has left it a matter up to the states, rather than the federal government. Central to the issue is the history and laws of abortion in the United States that can help provide precedent. The thesis examines embryos in light of property law, contract law, and family law. Also included is a review of embryos through a second discipline of political science. This allows for an in depth review of embryos as they relate to political parties. The thesis defines and examines relative sub-topics such as “culture war” and the new field of human biotechnology. The culture changes and hesitancy of government regulation provides a better understanding of embryos according to society. The thesis then relates both disciplines together, finding correlations where both disciplines highlight similar findings, such as a lack of policy. The thesis suggests a federal statute to help provide a clear definition of an embryo and a more government regulated field of biotechnology to control the process of freezing embryos.

Montclair State University

Embryo Litigation: The Legal Categorization of Embryos as Protected Humans or Property

by

Caroline Koboska

A Master's Thesis Submitted to the Faculty of

Montclair State University

In Partial Fulfillment of the Requirements

For the Degree of

Master of Arts

May 2019

College: Humanities and Social Sciences

Department: Political Science and Law

Thesis Committee:

[redacted]
Thesis Sponsor: Jack Baldwin LeClair

[redacted]
Committee Member: Avram Segall

[redacted]
Committee Member: Andrew T. Fede

EMBRYO LITIGATION: THE LEGAL CATEGORIZATION OF EMBRYOS AS PROTECTED HUMANS OR PROPERTY

A THESIS

Submitted in partial fulfillment of the requirements

For the degree of Master of Arts

by

CAROLINE KOBOSKA

Montclair State University

Montclair, NJ

2019

Table of Contents

Chapter I: Introduction

Advances in the technology have radically changed the dynamics of family law with the introduction of Assisted Reproductive Technology. As of 2006, there were approximately 400,000 frozen embryos stored in clinics around the United States. Attempting to attach legal rights to embryos, the courts are left with a difficult decision as to how to define an embryo, both legally and scientifically. If legally humans beings, embryos would acquire rights and immunities of human beings under the law. They must be kept frozen until eventual implantation while couples fight over child custody. If found to be property, embryos could be divided among the parents for personal use as desired, donated to fertility clinics, or sold to the biotechnology industry for research. An interdisciplinary research approach presents the opportunity to view the issue through the perspectives of both law and political science.

Examination of the legal status of embryos uncovers the root of the issue: lack of federal law establishing legal status. Furthermore, states have freedom to create their own laws on the issue and rule accordingly, leading to an inconsistency in the law. Research has proven that states incorporate several types of law to decide cases including property law, contract law, and family law. Some argue that abortion case law, such as *Roe v. Wade*, should be used as precedent and courts should rule according to the privacy rights established in the realm of abortion and procreation. In the absence of a concrete decision or federal law construing embryos as children or property, the debate is left unresolved.

American "Culture Wars" complicate making public policy concerning biotechnology. In addition to the discipline of law, the discipline of political science demonstrates that the debate contributes to the ongoing "culture war" in the United

States, complicates the relationship between biotechnology and politics, and stands as a wedge issue among Republicans, Democrats, and other social and political groups. Scholars also argue that reticence to intervene by the federal government and state governments leaves Assisted Reproductive Technologies largely unregulated and grants the medical community a significant amount of power in handling such medical practices. From a global standpoint, initiative to resolve the issue is long overdue by the United States. Almost all Western European countries have intervened to regulate biotechnology.

An interdisciplinary approach integrates both disciplines, allowing insights from both political science and legal scholars. These insights provide alternative solutions and preventative processes to resolve the regulatory issues. With the creation of universal guidelines, a legally enforceable consent form, and government intervention to regulate the processes of Assisted Reproductive Technologies, establishing the legal status of embryos becomes possible. Integrating both legal and political science perspectives furthermore proves that until the government can issue a federal ruling to establish legal status, the processes of creating such embryos must be regulated accordingly.

Chapter II: Law

Introduction

In December 1988, Mrs. Mary Davis' nine eggs were fertilized with Mr. Junior Davis' sperm through In Vitro Fertilization (IVF). Two of the embryos were implanted in Mrs. Davis. Neither procedure resulted in pregnancy. The seven embryos that remained were put in cryogenic storage for possible future use. No consent forms or official agreements about the future of the embryos in the event of divorce were signed. The couple divorced in February 1989 and Mr. Davis requested to prohibit the use of the embryos by Mrs. Davis. A circuit court judge ruled in favor of Mrs. Davis, explaining that the embryos were "preborn children" and their best interest would be for the mother to pursue their implantation. However, Mr. Davis appealed the decision. The Tennessee Court of Appeals reversed the decision in favor of Mr. Davis, classifying the embryos as property and giving both parties joint control of the embryos.[1] The court's reasoning behind its reversal lies in the belief that each party has an interest in the nature of ownership and because the embryos do not have any protection under the law, they can therefore be divided among their owners equally.

The Davis case illustrates the complexity of the ongoing embryo debate in the United States in which the courts grapple with the decision to classify embryos as property or as humans to be protected under "the best interest of the child" standard. Countless court decisions made across the country are contradictory due to lack of applicable precedent regarding embryo legal status and the absence of a federal law concerning embryos. As of 1994, 2.4 million married couples between the ages of 15 and

[1] Davis v. Davis, 842 S.W.2d 588 (1992).

44 in the United States were infertile.[2] As of 1990, there were 23,863 frozen embryos in clinics around the United States.[3] If construed as humans, these embryos would acquire human rights and would have to be kept frozen until eventual implementation while couples fight over child custody. If designated property, the embryos could be divided between the parents for discretionary use, donated to infertility clinics, or sold to the biotechnology industry for research. Furthermore, the courts are forced to make the ultimate controversial decision as to whether embryos are legally defined as children, or simply property to be divided.

The History of Embryos

A. Embryos According to Philosophy

Before the existence of scientific and empirical evidence of embryos, the definition of an embryo was determined by philosophers.[4] St. Thomas Aquinas argued that bodies, minds, and consciousness were all parts of "one unified entity".[5] Aquinas implied that embryos, though they lacked bodies, were indeed humans because they were believed to be conscious and spiritual beings, while incarnated physically.

Contrary to the monist view, Dualism, was rejected by philosophers such as Germain Grisez, Robert Boyle, and John Finnis who doubted that spiritual entities existed within human beings.[6] Immanuel Kant argues that humans were intrinsically valuable,

---

[2] John Robertson, *Children of Choice: Freedom and the New Reproductive Technologies* (Princeton: Princeton University Press, 1994), 98.
[3] Robertson, 109.
[4] Jane Maienschein, *Who's View of Life?: Embryos, Cloning, and Stem Cells* (Cambridge: Harvard University Press, 2003), 16.
[5] Robert George and Christopher Tollefsen, *Embryo: A Defense of Human Life* (New York: Doubleday, 2008), 69.
[6] Ibid.

questioning how humans can kill embryos if we, too, were once embryos.[7] Furthermore, natural law philosophers argued, "human persons may not be damaged or destroyed for the sake of some greater good."[8] The conflicting views and arguments made by these well-known philosophers mark the beginning of the embryo debate. However, with contradicting beliefs of the definition of an embryo and the rights, if any, they possess, the status of embryos as humans or property was left unsettled.

B. Embryos According to Religion

Although there has been a lack of agreement among philosophers, religious remain in opposition to any proposal denying soul and personhood. According to Judaism, the embryo is not a human until the soul enters the human body, known as ensoulment, which is believed to occur at forty days in utero. At the forty-day mark, the Jewish moral and legal status of the embryo change.[9] Islamic and Muslim beliefs mirror that of Judaism, both agreeing with ensoulment at forty days. Catholicism differs from the Jewish opinion arguing that human life occurs when the fetus has begun to grow at conception; therefore, the embryo itself is not a human until it begins to evolve.[10] Though the religions mirrored each other's beliefs regarding the status of embryos, they lacked empirical evidence of ensoulment and proof of the exact moment fetuses begin to grow. Furthermore, the discrepancies amongst religions failed to provide a concrete answer as to whether or not embryos are in fact human beings, or property to be divided.

C. Embryos According to Science

---

[7] Ibid, 97.
[8] Ibid, 86.
[9] Maienschein, 17.
[10] Ibid, 18.

Defining the embryo according to science, rather than theories of philosophy and religion, provides a factual evaluation of embryos that can help determine their legal status. An embryo, scientifically defined, comes into existence at the initial moment an egg and sperm are conjoined during the fertilization process that can be done both inside and outside of the human body.[11] Scientists argue that the embryo itself has the same genetic information as human beings.[12] Early embryonic cells are totipotent: they have the ability to divide and "twinning" may occur. [13] Furthermore, this makes some scientists believe that the initial fertilization does not determine the actual fate of the embryo. After the fourteenth day, totipotency is lost and the embryo is considered to be in its final form and ready to develop into a fetus.[14] However, scientists also argue that IVF embryos, unless implanted into a uterus, could never evolve into fetuses on their own outside of the human body.[15] Furthermore, embryos are expected to have about a fifty percent chance of evolving into a human fetus.[16] Some experts argue that the twenty-eight day mark after fertilization is considered to be the moment that embryos can suffer pain and begin feeling.[17] Scientists fail to answer the primary questions of the debate: whether or not embryos have souls, the exact moment embryos begin to develop human

---

[11] Andrew Sullivan, "Early Human Embryos Are Human Beings" in *Human Embryo Experiment*, ed. Roman Espejo (San Diego: Greenhaven Press, 2002), 59.
[12]vIbid.
[13] Helga Kuhse and Peter Singer, "Early Human Embryos Are Not Human Beings" in *Human Embryo Experiment*, ed. Roman Espejo (San Diego: Greenhaven Press, 2002) 29.
[14] Ibid, 29.
[15] Bonnie Steinbock, *Life Before Birth: The Moral and Legal Status of Embryos and Fetuses* (New York: Oxford University Press, 1992), 200.
[16] Ibid, 63.
[17] Kuhse and Singer, 35.

traits, and if embryos are in fact human beings. Therefore, science provides little to no relief in terms of settling the moral and legal disputes of the embryo debate.

Embryos and the United States Legal System

A. The Fourteenth Amendment

The Fourteenth Amendment prohibits the government from depriving any citizen of life, liberty, or property without due process. However, scholars question whether or not embryos fall under the same category to receive such protections.[18] Helga Kuhse and Peter Singer note the difference between humans and embryos, arguing, "The minimal characteristic needed to give the embryo a claim to consideration is a sentience, or the capacity to feel pain for pleasure."[19] As scientists have proven that embryos cannot feel pleasure or pain until twenty-eight days, Kuhse and Singer's argument would therefore support the claim that embryos are not human and do not have the right to life until that exact day. Therefore, this side of the debate supports the claim that if an embryo is frozen after fertilization and is frozen before development, it is not protected by the Fourteenth Amendment.

However, the notion that sentience is the core difference between embryos and humans is not a proven fact, but a debatable one. Andrew Sullivan explores the concept of sentience, stating, "If the difference between a real human being and an embryo is "viability", then the physically incapacitated, mentally incapacitated, and the very old would also not be considered human beings."[20] Sullivan counters Kuhse and Singer's argument by noting that not all human beings who are alive have the physical ability to

[18] U.S. Const. amend. XIV.
[19] Kuhse and Singer, 32.
[20] Sullivan, 59.

feel pain or pleasure. Those who are paralyzed are not deprived of their right to life in the United States Constitution; therefore, sentience is not an adequate measurement of human life. Though little guidance has been given as to how to approach the Fourteenth Amendment rights in relation to embryos, the Ethics Advisory Board of the United States found that although the human embryo is entitled to deep respect, the respect does not automatically include full legal and moral rights that persons have.[21] The vagueness of the comment by the Board provides little clarification as to how much rights an embryo has.

B. Statutes and Precedent

1. State Sources of Law

Determining an embryo's legal status is difficult in the absence of a federal statute and precedent. Every embryo case involves different circumstances involving parent's intentions, prior agreements, and judge's discretion leaving no two cases alike. As a result, abiding by precedent is nearly impossible. Seeking guidance from statutes, judges and advocates must turn to state law, as there is no federal law on the issue.[22] In the United States, Assisted Reproductive Technology is mostly unregulated while only a few states have inclusive legislation on the issue.[23] Minnesota, Louisiana, and Illinois have changed their laws regarding homicide to ban the intentional destruction of extracorporeal embryos.[24] Similarly, laws in California, New York, Florida, and North

[21] Steinbock, 208.
[22] Maienschein, 153
[23] Ibid.
[24] Robertson, 104.

Dakota all differ in regards to embryos and their legal status.[25] For states without legislation, Jane Mainschein explains that they "call on ownership and property rights, parental rights and responsibilities, and inheritance rulings for guidance."[26] Furthermore, the courts in states lacking legislation have little to no guidelines to follow when deciding embryo cases. Scholars argue that the freedom given to states on the topic of embryos has created an inconsistency in the law and call for a federal statute to rule on the issue.[27] Though no federal statute exists regarding embryo legal status, states will continue to have discretion and rule over the issue accordingly.

2. Abortion Case Law as Precedent

Although no binding precedent exists for deciding the legal status of embryos, the possibility of referring to abortion cases and laws for guidance exists. However, John Robertson argues that landmark abortion cases, such as *Roe v. Wade,* cannot be applied to embryo litigation. Robertson explains that abortion cases have no relevance as they penalize termination of pregnancy during gestational periods of pregnancy, not destroying embryos that are not yet in the gestational period.[28] Furthermore, Robertson implies the moral and legal status of embryos and fetuses are different due to their different stages of development and placement in the woman's body.

Some scholars favor the adoption of abortion laws in embryo cases. Andrew Sullivan counters Robertson's argument by stating that embryos are in fact an early stage

[25] Deborah L. Forman, "Embryo Disposition and Divorce," *Journal Of The American Academy Of Matrimonial Lawyers* 24, no. 1 (2011): 90.
[26] Mainschein, 104.
[27] Ibid, 104.
[28] Robertson, 104.

of the fetus and therefore have the same rights.[29] Sullivan argues that without embryos, there would be fetuses would not exist; therefore, the existence of a life should not be measured by how long it is in existence.[30] Deborah Barnard notes the applicability of the *Roe v. Wade* ruling to all aspects of procreation, including embryos, stating, "Several decisions [following *Roe v. Wade*] found that the right of privacy encompassed marital relations, procreation, contraception, and family relationships."[31] Scholars such as Barnard argue that the right to privacy established in *Roe v. Wade* grants the right for parents to do as they wish with their embryos without interference from the government as the decision is within their privacy rights. Barnard goes on to state that in acknowledging a women's right to privacy in *Roe v. Wade*, the Court established that a fetus is not entitled to constitutional protection and is therefore not a "person" in terms of the language of the Amendment.[32] If the landmark abortion case were to be used as binding authority in the courts when settling embryo cases, most disputes would be settled by acknowledging the right to privacy for couples regarding procreation and the freedom to choose the fate of their embryo, as it does not have constitutional rights.

C. Property Law

1. Embryos as Divisible Property

Embryos have commonly been ruled as property with parents having "interest" and "ownership" in their existence. Courts that give embryos special status end up

---

[29] Sullivan, 60.
[30] Ibid.
[31] Deborah Barnard, et. al., "The Evolution of the Right to Privacy After Roe v. Wade," *American Journal of Law and Medicine* 13, no. 2 (1987): 373.
[32] Ibid.

turning to property law to decide the legal dispute.[33] In terms of natural rights, scholars argue that the embryo is made up of the parents' bodies and therefore the products of the body can be considered their property as well.[34] Other experts argue that if embryos are not considered part of bodily property, parents otherwise contribute "labor" in the production of an embryo.[35] Therefore, this "investment" gives them the right to have property interest in the entity. Jessica Berg argues the benefits of referring to property law when settling embryo disputes, stating, "Interests in children can be transferred via custody agreements and adoption. Individuals can transfer interest in embryos to the other progenitor, another person or couple, or to research."[36] Berg argues that treating embryos as property gives reasonable interest rights that can be transferred and amended. Therefore, treating embryos as property rather than persons allows the courts and the parents to have valid authority over the embryos with the elements of property law as guidelines. Berg implies that as embryos develop biologically, they will gain more personhood rights and the property interests will decrease accordingly.[37] Nonetheless, scholars in support of the claim that embryos are property rather than humans support the notion that courts can settle disputes much more easily by referring to the instructions and legal guidelines provided by property law.

E. Child Custody and Family Law

1. The Right Not to Become a Parent

---

[33] Jessica Berg, "Owning Persons: The Application of Property Theory to Embryos and Fetuses", 40 *Wake Forest Law Review* 159-217 (2005), 211.
[34] Ibid, 182.
[35] Ibid, 182.
[36] Ibid, 199.
[37] Ibid, 217.

As humans have the right to life, they also have the right to procreate and not to procreate. Inevitably, most embryo cases involve the dispute of one parent wanting to procreate with the embryos after the dissolution of the relationship, while the other does not. Furthermore, if courts decide that an embryo is in fact a child, parental rights and family law must be called upon to settle the case. However, when faced with this situation, most courts apply the "balancing approach" as to which parent's interests, the interests being to procreate or not to procreate, prevail over the other.[38] Dara Purvis explains that courts most often favor the right not to become a parent against one's will, stating, "Modern courts have ruled that the right not to be a parent outweighs any right to procreate or 'expectational' parental interest in the stored pre-embryo."[39] Courts therefore remove the bodily autonomy from the embryo and focus the battle on parental interests.[40] As a result, courts make the difficult decision of denying the parent the right to procreate and the embryo the right to life by ruling in favor of the parent that does not wish to become a father or mother.

2. The Protection of Fathers' Rights

The decision of *Roe v. Wade* ruled in favor of a mother terminating her pregnancy; however, scholars have noted that the courts have yet to protect the interests of the father equally to the interests of the mother in family cases. As presented in the *Davis v. Davis* case, Mr. Davis defended his right to not become a parent, a right of the father that was not specifically mentioned in *Roe v. Wade* as it was for the mother of a

[38] Forman, 61.
[39] Dara E. Purvis, "Expectant Fathers," *Journal Of Law, Medicine & Ethics* 43, no. 2 (2015): 331.
[40] Ibid.

fetus. The concept of fathers' rights is explored by authors Illya Lichtenberg and Jack Baldwin LeClair in the article, "Advocating Equal Protection for Men in Reproductive Rights and Responsibilities." LeClair and Lichtenberg argue for the protection of fathers' rights, stating, "If women have a right to spare their lives from the responsibilities of child rearing until they feet fit or until they have the desire, then so should men."[41] Although child bearing takes place in the physical body of the mother, child rearing is a process that is equally shared by both parents. When a child is born, fathers are just as capable of having an equal role in a child's life, if not more than mothers.[42] Fathers can therefore suffer the same effects of an unwanted child as a mother, including, psychological harm and a distressful life and future.[43] The decision to freeze embryos for future implantation presents the possibility of a parent revoking their temporary desire to become a parent. Though it may be easier for a mother to prevent implantation of the embryos due to her objections to physically carrying the baby, a father's right to not be a parent must be given the same importance as that of a mother's right. In the case of *Davis v. Davis*, the detriments of an unwanted child ultimately exceeded the mother's desire to carry out the implantation of the embryos.[44]

D. Contract Law

1. The Possibility of Clinic Forms as Enforceable Contracts

---

[41] Illya Lichtenberg and Jack Baldwin LeClair. "Advocating Equal Protection for Men in Reproductive Rights and Responsibilities" *Southern University Law Review* 38, no. 1 (2010): 27.
[42] Ibid, 6.
[43] Ibid, 8.
[44] Ibid, 7.

Some scholars argue that the resolution to the embryo debate lies in contract law, rather than property or family law, and the enforceability of consent forms. Further, if clinic consent forms signed at the Assisted Reproductive Clinic detailing the fate of the embryos were ruled to be binding authority in the court of law, consent forms would be an effective way to solve legal embryo disputes.[45] However, the current issue with consent forms is the absence of a cohesive, universal, form which provides a set agreement about the fate of the embryos in the event of the dissolution of a relationship. Some consent forms merely require a name, address, and phone number, leaving out specific information regarding the embryos themselves.[46] Due to vagueness of the forms, close to 3,000 embryos have been abandoned in the United States simply from losing contact with the parents.[47] Robertson also touches on the issue of enforceability of consent forms, writing, "The question is whether those choices will be legally binding on the couple when … one party now disagrees or wishes to make a different disposition, or when both partners wish to deviate from the conditions and restriction imposed by the IVF program to which they initially agreed."[48] As Robertson highlights, even a detailed consent form is not necessarily binding because it lacks legal credibility. Given the discretion courts must again decide if the consent form is enforceable now that the parents have separated and their intentions have changed. Obtaining a detailed and universal consent form that would require a lawyer with specialized knowledge of the

[45] David Vukadinovich, "Assisted Reproductive Technology Law: Obtaining Informed Consent for the Commercial Cryopreservation of Embryos," *Journal of Legal Medicine* 21, no. 1 (2000): 71.
[46] Vukadinovich, 71.
[47] Ibid, 71.
[48] Robertson, 106.

law regarding assisted reproduction could significantly help the issue.[49] Legally binding consent forms could help settle embryo disputes in the courtroom by holding parents to their prior written agreements regarding the fate of the embryos and therefore preventing a judge from having to make the difficult decision of property or persons.

Conclusion

The Davis case highlights the conflicting sides of the ongoing embryo debate in the United States. While Mrs. Davis saw the embryos as potential children, Mr. Davis disagreed and sought to have the embryos destroyed. Lacking a contract or legally binding agreement regarding the fate of the embryos, the court was left to decide whether their embryos were truly human beings or divisible property. The absence of a federal law on the issue enables the states to have flexibility and control over the matter. While some courts turn to property law for guidance, others turn to family law and parental rights to determine the fate of the embryo. Precedent such as *Roe v. Wade* established privacy rights in the realm of abortion and procreation, leaving some to believe that the fate of the embryo is similarly in the hands of the parents, and not a decision to be made by courts. In the absence of a concrete decision or federal law construing embryos as children or property, the debate is currently left unresolved. Though examining the issue through the discipline of law provides valuable insights regarding the issue, a second discipline of political science can provide a further understanding of the legal status of embryos and a possible resolution for the future.

[49] Forman, 85.

Chapter III: Political Science

Introduction

Though examining the issue through the discipline of law provides valuable insights regarding the issue, a second discipline of political science can provide a further understanding of the legal status of embryos and a possible resolution for the future. In his introduction of different disciplines of study, Allen Repko defines political science as a "perpetual struggle" over whose interests and values succeed in establishing priorities and making collective decisions, all based on the "search for or the exercise of power."[50] Additionally, the discipline of political science provides insight into how controversial topics, such as embryo litigation, are viewed in the political arena by government actors and political players. Examining decision-making processes, political philosophies, and the operations of political institutions in relation to embryos offers different, yet significant, knowledge as to how embryos are viewed in the world of politics.[51] The study of political science incorporates history, sociology, economics, and psychology, providing a unique analysis encompassing several other social sciences.[52]

The Political Debate

A. The Evolution of the Embryo Debate

To fully understand the embryo debate, it is essential to recognize how the controversial topic of embryo legal status entered the political realm. Questions of embryonic legal status began before Assisted Reproductive Technologies were created.

---

[50] Allen Repko, *Interdisciplinary Research: Process and Theory* (Los Angeles: Sage Publications, Inc., 2008) 70.
[51] Ibid.
[52] Ibid.

The debate involving the unborn began with the issue of abortion. The "pro-life" movement was the first movement dedicated to protecting embryonic rights.[53] Though the embryo debate introduced the concept of embryonic rights, circumstances differ in relation to embryos stored in clinics and fetuses in the gestational stages. Other political debates surrounding various forms of Assisted Reproductive Technologies and stem cell research still fail to address the question of the moral status of embryos, but rather focus on government funding and scientific advances.[54] Neither the abortion nor the ART discussions have proven to resolve issue at hand: whether embryos are humans or property.

B. The Cultural Debate

A. The Era of A Cultural War in the United States

As societal norms change with time, the existence of an ongoing culture war in the United States separates the traditionalists from the modernists on the topic of family structures. At the Republican National Convention in 1992, Patrick Buchanan declared an American "religious war" and a "cultural war", arguing that the then emerging issues regarding family and religion in the United States would determine what kind of nation we would be, just as other wars such as the Cold War determined.[55] Buchanan recognized the change occurring to family structures and warned that this debate is just as significant as the debates regarding major wars of U.S. history. Emerging issues at the time included same-sex marriage and the status of prenatal life, both of which, he suggested, created if

[53] Janet Dolgin, "Surrounding Embryos: Biology, Ideology, and Politics," *Health Matrix: Journal of Law-Medicine* 16, no. 1 (2006): 60.
[54] Ibid, 58.
[55] Ibid, 30.

not a culture war, then a "culture gap."[56] America began that process of transitional from traditional family values and structures into a new era that would soon set the stage for the embryo debate. With constant emerging advancements such as Assisted Reproductive Technology, the culture gap between traditionalist values and the ever-changing society continues to exist. Older generations relentlessly hang onto conventional notions of family structures and ways of life. On the other side of the gap, younger generations are more open to adopting the changing perceptions of relationships and family. The existence of this cultural gap translates into the political realm as politicians are forced to reevaluate long-standing established policies and programs to accommodate a revolutionizing society.

C. The Cultural Issue at Hand

The common thread that links the same-sex marriage debate, the abortion debate, and the embryo debate, is that each of these debates implicates conflicting ideological/sociological visions of the "proper" way to live and how to relate to other people.[57] These social issues capture the attention of the public and become significant political issues because every citizen has individual opinions regarding family structure and relationships. Such topics are present in each citizen's everyday lives and ultimately attract significant amounts of attention in the political arena when the people seek a resolution for the issue. The social issues at hand in these debates include gender roles, family structure, and the scope of relationships among families.[58] The legalization of abortion and same-sex marriage stand as landmark cases that ultimately revolutionized

[56] Ibid, 31.
[57] Ibid, 60.
[58] Ibid.

the relationship between politics and social issues as political parties, policies, and programs must all conform to these decisions. Furthermore, the debate regarding the legal status of embryos could soon become the next groundbreaking social issue to alter political party positions and government policy.

D. Science Enters the Cultural Debate

Though cultural debates rely heavily on values and norms, the inclusion of science is used by each side in an attempt to validate their opinions on the issue of embryonic life. Arguments made by each side of the embryo debate call on biology and science to settle the issue. Janet Dolgin, in her study of the interaction between biology, ideology, and politics, claims that this invocation of biology comes from the general societal understanding that "good science produces truth."[59] However, this scientific truth provides support of moral and political agenda on both sides of the argument. In the case of Davis v. Davis, each expert called into the courtroom justified their explanations of biological development in accordance with their moral assessment of the status of embryonic life.[60] When science can be manipulated to support moral opinions, it fails to provide comprehensive truth. The central issue of this debate rests on the moral issue of when a life begins, a question that science, ultimately, cannot answer.

Political Parties

A. The Democratic Party

Those favoring choice rather than tradition in the domestic arena commonly support the right to abortion, same-sex marriage, and gender equality in family

[59] Ibid, 59.
[60] Ibid.

structures.[61] In addition, individuals who identify with this group tend to be less involved with theological orthodoxies. In the 2004 presidential campaign, the majority of those who favored these ideologies identified as liberal Democrats. In addition, 72% were in support of stem cell research.[62] Furthermore, the Democratic Party tends to favor the notion that embryos are not legally humans.[63]

Actions made by the Democratic Party support their argument that embryos should be used according to the mother's choice. In 2008, the Obama administration created a new Presidential Commission for the Study of Bioethical Issues to help provide expert advice regarding bioethical issues.[64] In addition, President Obama extended the powers of the National Institutes of Health to reinstate federal funding for embryo research that allows embryos intended for in vitro fertilization (IVF) to be used for research if the woman who provides them consent.[65] Rather than identifying embryos solely as property, Democrats generally agree that the embryos should be used according to how the woman desires them to be used. Moreover, the support for "women's choice" results in a largely female Democratic Party with fifty-four percent of women identifying as Democrats opposed to forty-one percent of men.[66]

B. The Republican Party

---

[61] Ibid, 61.
[62] Ibid.
[63] Ibid.
[64] Anne Donchin, "In Whose Interest? Policy and Politics in Assisted Reproduction," *Bioethics* 25, no. 2 (2001): 98.
[65] Ibid.
[66] Kathleen Geirer, "Abortion's No Wedge. It's a Winning Issue," *In These Times* 41, no. 7 (2017): 17.

In contrast to Democratic ideology, those who favor tradition in the domestic sphere support fixed roles and status differences based on gender and age in addition to opposing abortion and embryonic stem-cell research.[67] Likewise, this group usually opposes same-sex marriage and identify strongly with religious communities; the majority of this group voted Republican in the 2004 presidential election.[68] The Republican Party is commonly known for its strong support of pro-life legislation and the argument that human life is a life at every stage of development.

However, the 2004 election was just the onsight of controversial platforms and the debate continued with the issue of abortion in 2012. In 2012, the Republican Party ran on the platform of overturning the landmark *Roe v. Wade*, arguing that pregnant women do not have a constitutional right to privacy and that life begins at conception.[69] If overturned, legislation prohibiting terminating the life of an unborn child could be passed. In addition to the 2012 platform, Congressman John Ryan also argued that killing a fetus is only justified if a woman's pregnancy was caused by rape, incest, or threatens the life of a mother.[70] Democrats were quick to criticize Ryan, stating that if a fetus is a human being and has the same right to life as other humans, these rights cannot be overridden by the way the child was conceived.[71] If the Republican Party were to

---

[67] Janet Dolgin, "Surrounding Embryos: Biology, Ideology, and Politics," *Health Matrix: Journal of Law-Medicine* 16, no. 1 (2006): 61.
[68] Ibid.
[69] Celement Dore, "Republicans on Abortion Rights," *Think: Philosophy for Everyone* 14, no. 39 (2015): 9.
[70] Ibid.
[71] Ibid, 10.

establish human rights for all embryos, 400,000 frozen embryos currently stored in the United States could be "adopted."[72]

C. Other Political Groups

The pro-life and Assisted Reproductive Technologies debate has been primarily centered around the opinions of Republicans and Democrats; however, other groups have strong opinions on the issue that don't necessarily identify with the two political parties. Feminists, environmentalists, and public health professionals have all attempted to voice their opinions on the incorporation high-technology infertility intervention into standard practice and the moral implications.[73] Nonetheless, these groups lack an effective lobby and do not have adequate funding to create a powerful campaign against the medical lobby and influence of fundamentalist religious groups.[74] Feminist groups argue for the privacy of women in regards to reproduction and their right to choice. However, they also concern themselves with the impact of ART services, arguing that the technology does not always have positive effects on women and its benefits should be considered while examining class, ethnic, and religious differences regarding access and choices surrounding ART.[75] For example, while women who can afford the technologies benefit, poorer fertile women are used as surrogate mothers and ova sellers to ART clinics.[76]

---

[72] Janet Dolgin, "Surrounding Embryos: Biology, Ideology, and Politics," *Health Matrix: Journal of Law-Medicine* 16, no. 1 (2006): 63.
[73] Anne Donchin, "In Whose Interest? Policy and Politics in Assisted Reproduction," *Bioethics* 25, no. 2 (2001): 99.
[74] Ibid.
[75] Faye Ginsburg and Rayna Rapp, "The Politics of Reproduction," *Annual Review of Anthropology* 20 (1991): 315.
[76] Ibid, 215.

Furthermore, feminist groups are more concerned with the impact on the female population rather than the legal status of the embryo.[77]

D. The Reproductive Debate as a Wedge Issue

Critics of the political system claim that the reproductive debate serves as a "wedge issue" to gain supporters and create a distinction between the parties. By identifying as strictly pro-life, Republican candidates and the party itself have been able to gain voters who might normally align with the Democratic Party.[78] "Party switching" occurred around the 1990s when candidates began taking more extreme positions on the moral issue of the abortion debate.[79] However, some scholars argue that wedge issues are used as political platforms and are not issues to be solved. The pro-life debate remains a significant political issue because the two positions are fundamentally irreconcilable, putting up women's rights against the unborn rights, meanwhile politicians gain more by leaving it as a wedge issue for votes rather than resolving it.[80] Critics claim abortion and embryo debates continue to be political issues by choice.

Biotechnology, Bioethics, and Political Science

A. Lack of Policy

ART in the United States has little regulation. The regulation that does exist is a combination of vague federal statutes, state medical licensing, and local institutional

---

[77] Ibid.
[78] David Orentlicher, "policy and politics: The Legislative Process Is Not Fit for the Abortion Debate," *The Hastings Center Report*, no. 4 (2011): 13.
[79] Mitchell Killian and Clyde Wilcox, "Do Abortion Attitudes Lead to Party Switching?" *Political Research Quarterly* 61, no. 4 (2008): 562.
[80] David Orentlicher, "policy and politics: The Legislative Process Is Not Fit for the Abortion Debate," *The Hastings Center Report*, no. 4 (2011): 13.

review of boards. [81] Anne Donchin describes the little policy that does exist, stating, "Conservative critics exerted a powerful influence over government policy and public sentiment, fearing that technological developments would yield too much power and control to researches and special interests".[82] This soon resulted in the dissolution of the Ethics Advisory Board. Regulations vary per state; however, a lack of federal policy fails to create a universal law on the issue. Furthermore, this allows patients to "shop" for treatment from state to state.[83] In addition, Obama's extension of the National Institutes of Health was soon challenged by right-wing religious groups stating that the government policy violates the Congressional appropriation bills that forbid use of public funds for research that destroys embryos.[84] Evidently, policy taking either side of the debate will result in controversy, as the opposing side will be dissatisfied with the policy. This serves as a valid explanation as to why the federal government allows the issue to be governed at the state level and vary accordingly.

B. Biotechnology and Politics

The field of human biotechnology remains a largely untouched topic by the government. Isabelle Engeli and Christine Allison explain the difficulty governing such issues stating, "Governing human biotechnology requires balancing a series of contrasting, and potentially conflicting, interests and policy goals."[85] These conflicting

---

[81] Anne Donchin, "In Whose Interest? Policy and Politics in Assisted Reproduction," *Bioethics* 25, no. 2 (2001): 96.
[82] Ibid.
[83] Ibid.
[84] Ibid.
[85] Isabelle Engeli and Christine Rothmayr Allison, "When Doctors Shape Policy: The Impact of Self-Regulation on Governing Human Biotechnology," *Regulation & Governance* 10 (2016): 248.

interests can be observed in the discussion of embryos. Governments hold back creating policy, but rather leave it up to private actors, such as fertility clinics, with broad autonomy in carrying out their practice.[86] This ultimately allows the medical community to operate as a "socially legitimate partner" with little challenges to their power.[87]

The medical community's clashes with other organizations with contrasting policy opinions, including religious actors, who argue against human biotechnology and professional self-governance.[88] Human biotechnology in the form of Assisted Reproductive Technologies is largely unregulated in that clinics determine their own processes for their infertility services. On a global level, the United States fails to address the issue while, with the exclusion of Ireland, all Western European countries have already shifted towards more direct state intervention into human biotechnology.[89] The United States chooses to leave the issue without government intervention and refers the issue to private actors and biotechnology experts. Furthermore, so long as the government hesitates to regulate the growing field of biotechnology, practices such as Assisted Reproductive Technologies will remain largely in the hands of private organizations that will continue to self-govern the issue.

C. Bioethics

The ability to create embryos outside of the womb is an undeniable triumph of the medical community; yet, the question is where such discoveries lie on the spectrum of ethics. Doctors who join sperm and eggs in petri dishes walk a very thin line between

[86] Ibid, 249.
[87] Ibid, 249.
[88] Ibid, 250.
[89] Ibid, 259.

ethical and unethical practices, as do the doctors who practice gene editing to create male or female embryos at the wishes of parents. The common processes accepted by society such as an embryo forming inside a mother and the process of heredity are challenged. The conversation about these medical advancements not only involve biologists, but also policymakers, ethicists, legal scholars, and social scientists who seek to weigh in on the issue.[90]

Altering embryos and their DNA creates a new opportunity to remake life. Though gene editing may be viewed as superficial, it can do good by preventing diseases and other birth defects through gene alteration.[91] However, the worry that comes with all groundbreaking discoveries is that such processes will not always be used for the good of society. Enabling gene editing and the remaking of life opens the door for such techniques to be used by any parents seeking to conjure up their "perfect" child. The ethics of such practices become blurred, questioning whether these advancements are ethical or unethical.

As advancements in biotechnology continue to emerge, it is imperative for these discoveries to be monitored in order to prevent unethical practices. The first approach is to engage and include the public.[92] Though there is plenty of skepticism regarding public participation in science and technology decisions, including the people's opinions on policies and procedures makes future policies more sustainable and more likely to be accepted.[93] Secondly, diversifying the deciders to include experts in different fields the

---

[90] The Editorial Board, ed. "Should Scientists Toy With the Secret to Life?" *The New York Times*, January 28, 2019.
[91] Ibid.
[92] Ibid.
[93] Ibid.

world can help ensure practices are safe. The creation of a "global observatory" that includes an international compilation of experts will make new biotechnology processes and policies well-rounded in all fields of practice.[94] Lastly, levers of control including legal prohibitions and other enforceable restrictions on scientists and doctors will help regulate how the technology is being used.[95] Most forms of gene editing are illegal in the United States which allows advancements to stay within research facilities and not yet practiced in the medical community. Biotechnology continues to push the boundaries of ethics and science. Though scientific discoveries are significant, they may not always outweigh the societal risks.

Conclusion

An analysis of the embryo debate through the discipline of political science provides valuable insight into the controversy regarding the legal status of embryos. Though the legal status of embryos is commonly seen as solely a legal debate, it has significant impacts on several aspects of politics. Not only has the debate contributed to the ongoing "culture war" in the United States between supporters of traditional family structures and the new generation in support of modern technology, but it has become defining boundary lines between Republicans, Democrats, and other political groups. Frequently labeled as a "wedge issue," some argue that the embryo debate purposely remains unsolved to gain political support and voters. Furthermore, when policies and programs are implemented to regulate the issue, they are quickly combated with criticism

[94] Ibid.
[95] Ibid.

and result in revocation. The lack of federal regulation regarding the treatment of embryos leaves the states with much discretion on the issue. Additionally, the hesitancy of government intervention by the federal government and state governments leaves Assisted Reproductive Technologies largely in the hands of private actors and grants the medical community a significant amount of power. From a global standpoint, initiative to resolve the issue is long overdue by the United States, as almost all Western European countries have implemented government intervention to regulate the field biotechnology. Furthermore, action in the field of political science, including the creation of a federal policy governing the issue, increased government regulation to reduce private sector power, and a possible compromise between both Democrats and Republicans can help establish a universal decision regarding the legal status of embryos.

Chapter IV: Integration of Disciplines

Introduction

The status of embryos is both a legal and political issue. Embryo status in the legal field creates issues among lawmakers and courtrooms, leaving judges with significant amounts of discretion when deciding cases. However, embryos in the political realm create a divide in our culture and society, creating a rift that causes lawmakers to avoid an ultimate decision on the issue. Although both disciplines see the issue in a different context, they inevitably influence each other due to the connection between law and political science.

Creating common ground during the interdisciplinary research process is necessary to resolve conflicting opinions and insights from scholars in both disciplines.[96] If a bridge of common ground is not established to link the two disciplines of research, the process of integration cannot occur.[97] Furthermore, connecting similar notions between the disciplines and including government regulation, abortion, science, and the cultural divide ultimately bridges the gap between the legal and political insights. Once the common ground is established, the integrative process can allow for a better understanding of the issue and a possible resolution for the future.

Legal and Political Perspectives on the Legal Status of Embryos

A. Common Ground Between Legal and Political Perspectives on Embryo Legal Status

1. Abortion as a Guide

Since the legal status of embryos lacks guidance from the federal government, many scholars propose the ability of abortion legislation to serve as a guide on the issue. Janet Dolgin argues that the embryo debate developed out of the abortion debate as both issues are concerned with embryonic rights.[98] Furthermore, she argues that from a political standpoint, both debates must approach the issue regarding the rights of the unborn in relation to the rights of the mother.[99] The abortion debate and the embryo debate through the lens of political science can be synonymous. Scholars from the legal

[96] Repko, 276.
[97] Ibid.
[98] Dolgin, 60.
[99] Ibid.

field also approach the possibility of applying abortion rulings and statutes to settle issues concerning embryos. From the legal perspective, Andrew Sullivan argues that both fetuses and embryos have the same rights, as a life should not be measured by how long it is in existence.[100] Similar to Dolgin, Sullivan agrees that both debates can be approached as one because there is no definite evidence proving when life begins.

Deborah Barnard also supports the connection of the abortion and embryo debates from a legal perspective. She opines that the landmark case of *Roe v. Wade* did not explicitly rule on abortion, but rather the right of privacy as a whole.[101] Barnard argues that several decisions following *Roe v. Wade* expanded the right of privacy to encompass marital relations, procreation, contraception, and family relationships."[102] If the abortion ruling encompasses the privacy of procreation as a whole, the legal status of embryos would be a matter for a family to settle, not the government. Scholars from both the political and legal disciplines find common ground in categorizing the embryo debate as a part of the abortion and privacy debate in its entirety.

2. Agreements on the Role of Religion

Scholars in the discipline of political science present the notion of a "culture gap" existing in the United States due to issues such as the legal status of embryos, which correlates to the stigma surrounding family law in the legal system. Dolgin notes the "American religious and cultural war" declared by Patrick Buchanan at the Republican National Convention in 1992 where he explained that emerging issues involving family

[100] Sullivan, 60.
[101] Barnard, 373.
[102] Ibid.

and religion in the United States would soon cause a significant divide in the country.[103] Political scientists recognize that the embryo debate is a sensitive subject because it invokes perceptions of family life and family values that are historically derived from religion.[104]

Legal scholars also acknowledge the role of religion in relation to embryo legal status. According to Jane Maienschein, the legality and humanness of an embryo was first approached by religion in the absence of science.[105] Islamic, Muslim, and Jewish beliefs argue that ensoulment begins at forty days while Catholicism argues that the embryo is a human when it begins to evolve.[106] Furthermore, before science began to experiment with the issue, laws were significantly influenced by religion. This insight correlates with Dolgin's finding in that the core of this debate is deeply rooted in religion and continues to draw upon individual beliefs regarding human life and family structure to this day. Since religion was the first institution to confront the issue and provide insight, it continues to be used by both sides debating the issue. The legal history of the embryo debate proves to transcend into the political realm, creating today's "culture war."

3. Government and Science

The disciplines of political science and law both present the hesitance of government to become involved in matters concerning science. Isabelle Engeli and

[103] Dolgin, 60.
[104] Ibid.
[105] Maienschein, 17.
[106] Ibid, 18.

Christine Allison explain that government has thus far hesitated to govern human biotechnology because of the responsibility it bears.[107] Biotechnology such as cloning and Assisted Reproductive Technologies causes the government to have to balance "contrasting interests and policy goals" along with ethical repercussions.[108] Maienschein also notes the role of expert testimony that courts must rely on when dealing with cases involving science. She notes the Federal Judicial Center, American Bar, Association, and state court associations argue for the creation of educational programs to provide judges with scientific advice.[109]

The hesitation of judges to rule on matters involving science was best illustrated in *Roe v. Wade*. Rather than ruling the fetus as a human, the court decided to rule on the matter of privacy instead. Furthermore, government tends to avoid presiding over scientific concepts, but rather the larger legal rights in question, such as privacy. This concept is evident in the embryo debate, as the federal government has avoided a ruling on the issue. The government struggles to define Assisted Reproductive Technologies as falling in the domain of medicine or within the domain of family planning and social services.[110] If ruled as medicine, the services would be a state matter rather than federal matter.[111] The government's uncertainty on the matter of science is presented in its ruling on abortion and ultimately leaves issues such as human biotechnology and ART services unregulated.

---

[107] Engeli Rothmayr Allison, 248.
[108] Ibid.
[109] Maienschein, 275.
[110] Ibid, 153.
[111] Ibid.

4. Lack of Law and Policy

Both legal and political scholars acknowledge the lack of laws and policies defining the legal status of an embryo. Mainschein explains that the absence of a federal law has created inconsistency among states and state law.[112] However, the absence of a federal statute defining the legal status of an embryo mirrors the lack of laws regarding Assisted Reproductive Technologies (ART). In particular, Anne Donchin explains the political perspective that ART is also guided by "vague federal statutes".[113] These two inconsistencies can therefore be connected. Moreover, it becomes evident that until Assisted Reproductive Technologies are regulated by federal laws in the United States, the product of ART services cannot be defined by the law. Embryos, the product of these services, cannot be governed by the law until the process is governed as well.

However, scholars in the legal discipline question why the federal government will not create on a federal statute to govern ART and embryo legal status to which the political scholars may have an answer. Deborah Forman argues that laws in California, New York, and Florida all differ regarding embryos while other states do not have any laws.[114] An explanation to this variation can be provided by political scholar David Orentlicher, who argues that issues such as abortion and embryos serve as "wedge issues" to gain supporters during elections and are not meant to be resolved.[115] Furthermore, if the federal government was to issue a legislative definition whether embryos are property or children, the issue would ultimately be resolved. Politicians running for government

[112] Ibid, 104.
[113] Donchin, 96.

[114] Forman, 90.
[115] Orentlicher, 13.

would not be able to take sides on the debate because there would no longer be a debate. Cultural issues involving family matters and religion are played upon by political parties to split the people to vote one way or the other.[116] Dolgin also explains that the embryo debate followed in the footsteps of similar cultural debates including same-sex marriage and abortion that followed before.[117] Same-sex marriage divided Republicans and Democrats with one side arguing for traditional family structure and the other for freedom of marriage.[118] States had varying laws governing same-sex marriage until the Supreme Court was presented a case that they could not avoid. Once the ruling was decided, political parties no longer used the issue as a part of their campaign platform. Therefore, it may be possible that the embryo debate will follow a similar path in that the issue will continue to be used as a "wedge", until the federal government must make a decision.

5. Lack of Regulation and Increased Discretion

The lack of regulation and laws governing the legal status of embryos and ART processes result in an ample amount of discretion in both the legal and political realms. From a legal standpoint, Mainschein explains that judges are granted wide discretion to decide different cases involving embryos.[119] She notes that with the absence of formal laws and precedent, and since no two cases are the same, judges have the discretion to call upon ownership rights, property rights, and parental rights when deciding a case.[120]

---

[116] Ibid
[117] Dolgin, 31.
[118] Ibid.
[119] Maienschein, 153
[120] Ibid.

Although judges must rule cases objectively from his or her own beliefs, the possibility of a judge to rule according to personal opinion can also occur due to the lack of regulation. Legislators are considered rule-makers while judiciaries are considered rule-enforcers. However, if there is no law to enforce, judiciaries have the discretion to inevitably make their own to govern the issue.

Freedom and discretion is present on the political spectrum as well as the legal venue. Isabelle Engeli and Christine Rothmayr Allison both argue that lack of regulation results in more power granted to the medical community.[121] Similar to judges, private clinics are able use their own discretion when carrying out reproductive services.[122] Private clinics are able to self-govern their Assisted Reproductive Technologies with little to no guidelines from the government.[123] The lack of legislation creates an inconsistency among clinics, just as it creates an inconsistency among states and interpretation of those laws. Clinics having varying policies on consent forms, requirements, embryo storage, and disposal.[124] The variance among states and clinics creates the "service shopping" that occurs in the United States. Similar to how same-sex couples moved to states allowing same-sex marriage from a state that did not, couples seeking certain reproductive services can go state-to-state to find a more lenient or convenient clinic. The lack of federal regulations and laws creates a contradiction in decisions made by judges in different state courts and also inconsistencies in the way clinics operate across the country.

---

[121] Engeli and Allison, 248.
[122] Ibid.
[123] Ibid, 249.
[124] Ibid.

B. Integration of Legal and Political Science Perspectives to Achieve a Solution

1. The Absence of a Federal Law

From the evidence presented by both the legal and political disciplines, it is evident that a federal ruling or statute would ultimately settle the embryo debate and establish the legal status of embryos. However, it has also been concluded that a concrete federal law is not easily achievable due to the present-day culture gap and political divide. Although a law clearly stating the legal status would in fact solve the debate, it is not the only solution. Scholars from both the legal and political perspectives acknowledge that regulation is necessary; however, it may not be in the form of a federal law defining an embryo as property or person.

2. Regulating the Process

Joining together insights made by both disciplines, the regulation of Assisted Reproductive Technologies must begin at the start of the process to help prevent the possible legal disputes in the future. With more than 23,000 embryos frozen in storage and decisions regarding their right to life yet to be made, the topic of prevention enters the perspective.[125] Creating a possible prevention to stop the number of frozen embryos from increasing merges together concepts made by legal and political scholars. John Robertson explains that placing a set limit on the number of eggs that can be fertilized could help prevent clinics from becoming liable for significant amounts of embryos left

[125] Robertson, 109.

over after ART processes.[126] This type of regulation could provide relief and less legal disputes in the future if couples were to separate and seek control over their remaining embryos.

In addition, further prevention with the creation of a universal clinic consent form as a legally binding contract would settle custody issues of the embryos and prevent the issue from reaching the courtroom. Forman argues that the Society of Assisted Reproductive Technology's standardized consent form must be designed to capture all of the possibilities the couples might encounter in a future divorce situation.[127] If this cohesive and universal form is created and adopted by all states, there will be no inconsistencies among clinics and couples will be prepared for the future should their intentions change. David Vukadinovich suggests that forms be legally advisable so that couples will understand the agreement as binding and enforceable.[128] Legally binding forms would therefore prevent judges from having to make the ultimate decision as declaring the embryos property or persons.

Conclusion

Although political parties tend to avoid a solution for the issue, the government cannot allow the biotechnology field to remain largely unregulated by the state. The strong "self-regulatory" tradition that allows private medical communities to handle emerging medical discoveries and processes without delegation from the state must be transformed.[129] Medical communities cannot be granted self-governance while the

[126] Ibid.
[127] Forman, 67.
[128] Vukadinovich, 75.
[129] Engeli and Allison, 250.

services they offer lead to cultural divide, political disputes, and legal disagreements. Engeli and Allison state that with the exception of Ireland, all Western European countries have now evolved to a model with more direct state intervention into human biotechnology.[130] Furthermore, the United States must regain control over its growing field of biotechnology and ensure that its operations and services can be regulated appropriately and effectively.

[130] Ibid, 259.

Chapter V: Conclusion

Common ground established between the disciplines of law and political science has shown the extensive struggle between government and science, resulting in an unregulated field of biotechnology with legal and political consequences. Though a federal law defining an embryo as property or person may settle the dispute, several steps must be taken prior to ensure that the issue does not worsen. By integrating insights from both political science and law, alternative solutions and preventative processes have been established. With the creation of universal guidelines, a legally enforceable consent form, and government intervention to regulate the processes of Assisted Reproductive Technologies, the issue of establishing the legal status of embryos becomes a preventable one

Bibliography:

Bernard, Deborah, Susan Clement, Margaret Daley, Lori Goldstein, Lori Krauss, Duncan Maio, Steven Reske, Wendy Ravitz, Cheryl Schreiber, Thomas Schulte, Bruce Shapiro, Lisa Sheeler, Robert Whalen, and Jean Zoubek. "The Evolution of the Right to Privacy After Roe v. Wade." *American Journal of Law and Medicine* 13, no. 2 (1987): 368-525.

Berg, Jessica. "Owning Persons: The Application of Property Theory to Embryos and Fetuses", 40 *Wake Forest Law Review* 159 (2005).

Davis v. Davis, 842 S.W.2d 588 (1992).

Dickenson, Donna. "Property and Women's Alienation From Their Own Reproductive Labour." *Bioethics* 15, no. 3 (2001): 205-217.

Dolgin, Janet. "Surrounding Embryos: Biology, Ideology, and Politics." *Health Matrix: Journal of Law-Medicine* 16, no. 1 (2006): 27-64.

Donchin, Anne. "In Whose Interest? Policy and Politics in Assisted Reproduction." *Bioethics* 25, no. 2 (2001): 92-101.

Dore, Clement. "Republicans on Abortion Rights." *Think: Philosophy for Everyone* 14, no. 39 (2015): 9-18.

Engeli, Isabelle, and Christine Rothmayr Allison. "When Doctors Shape Policy: The Impact of Self-Regulation on Governing Human Biotechnology." *Regulation & Governance* 10 (2016): 248-261.

Forman, Deborah L. "Embryo Disposition and Divorce: Why Clinic Consent Forms Are Not the Answer: Why Clinic Consent Forms Are Not the Answer." *Journal Of The American Academy Of Matrimonial Lawyers* 24, no. 1 (2011): 57-105.

Geirer, Kathleen. "Abortion's No Wedge. It's a Winning Issue." *In These Times* 41, no. 7 (2017): 16-17.

George, Robert, and Christopher Tollefsen. *Embryo: A Defense of Human Life*. New York: Doubleday, 2008.

Lichtenberg, Illya, and Jack Baldwin LeClair. “Advocating Equal Protection for Men in Reproductive Rights and Responsibilities” *Southern University Law Review* 38, no. 1 (2010): 1-27.

Killian, Mitchell, and Clyde Wilcox. “Do Abortion Attitudes Lead to Party Switching?” *Political Research Quarterly* 61, no. 4 (2008): 561-573.

Kuhse, Helga and Peter Singer, “Early Human Embryos Are Not Human Beings” In *Human Embryo Experiment*, ed. Roman Espejo, 26-35. San Diego: Greenhaven Press, 2002.

Maienschein, Jane. *Who’s View of Life?: Embryos, Cloning, and Stem Cells.* Cambridge: Harvard University Press, 2003.

Orentlicher, David. "policy and politics: The Legislative Process Is Not Fit for the Abortion Debate." *The Hastings Center Report*, no. 4 (2011): 13-14.

Purvis, Dara E. "Expectant Fathers, Abortion, and Embryos." *Journal Of Law, Medicine & Ethics* 43, no. 2 (2015): 330-340.

Repko, Allen. *Interdisciplinary Research: Process and Theory*. Los Angeles: Sage Publications, Inc., 2008.

Robertson, John. *Children of Choice: Freedom and the New Reproductive Technologies*. Princeton: Princeton University Press, 1994.

Steinbock, Bonnie. *Life Before Birth: The Moral and Legal Status of Embryos and Fetuses*. New York: Oxford University Press, 1992.

Sullivan, Andrew. “Early Human Embryos Are Human Beings” In *Human Embryo Experiment*, ed. Roman Espejo, 58-60. San Diego: Greenhaven Press, 2002.

The Editorial Board, ed. "Should Scientists Toy with the Secret to Life?" *The New York Times*, January 28, 2019.

U.S. Const. amend. XIV.

Vukadinovich, David. “Assisted Reproductive Technology Law: Obtaining Informed Consent for the Commercial Cryopreservation of Embryos.” *Journal of Legal Medicine* 21, no. 1 (2000): 67-78.