THE IMPACT OF FRAMING ON POLICY PASSAGE: THE CASE OF ASSISTED REPRODUCTIVE TECHNOLOGY

A Thesis
Presented to
The Academic Faculty

by

Heather Smith

In Partial Fulfillment
of the Requirements for the Degree
MSPP in the
School of Public Policy

Georgia Institute of Technology
December 2011

THE IMPACT OF FRAMING ON POLICY PASSAGE: THE CASE OF ASSISTED REPRODUCTIVE TECHNOLOGY

Approved by:

Dr. Roberta Berry, Advisor
School of Public Policy
Georgia Institute of Technology

Dr. Richard Barke
School of Public Policy
Georgia Institute of Technology

Dr. Juan Rogers
School of Public Policy
Georgia Institute of Technology

Date Approved: August 23, 2011

ACKNOWLEDGEMENTS

I wish to thank the School of Public Policy faculty for answering my many questions that I had while working on this paper. I also wish to thank my committee and my advisor for helping bring this paper to completion despite the logistics and many challenges of this summer. I would like to thank Dr. Elizabeth Berliner for her insightful comments on earlier drafts, and my colleagues for listening to my many revisions to the concepts. I would especially like to thank Dr. Roberta Berry for the extensive amount of time and work she has put into guiding this paper to its final form. And finally, I would like to thank my mother and father for being patient with me in this journey to a final paper. Your support and love has given me the strength to reach the end.

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LIST OF ABBREVIATIONS

AFA	American Fertility Association (formerly, American Infertility Association [AIA])
AID	artificial insemination by donor
AMA	American Medical Association
ART	assisted reproductive technology
ASRM	American Society for Reproductive Medicine
AATB	American Association of Tissue Banks
CDC	Centers for Disease Control
CMMS	Centers for Medicaid and Medicare Services
CPDF	comparative policy design framework
DHHS	Department of Health and Human Services
EAB	Ethics Advisory Board
FCSRCA	Fertility Clinic Success Rate and Certification Act
FDA	Food and Drug Administration
GIFT	gamete intrafallopian transfer
HEW	Department of Health Education and Welfare
ICSI	intercytoplasmic sperm injection
IVF	*in vitro* fertilization
NICHHD	National Institute of Child Health and Human Development
NCOART	National Coalition for the Oversight of Assisted Reproductive Technologies
NRC	National Research Council
OTA	Office of Technology Assessment
PCB	The Presidential Commission for the Study of Bioethical Issues

SART	Society for Assisted Reproductive Technology
ZIFT	zygote intrafallopian transfer
PROST	perionatal oocyte and sperm transfer

SUMMARY

In the last 30 years, in vitro fertilization (IVF) has created a significant amount of controversy around the world. Within the U.S., policy movement has been limited, occurring primarily at the state level, which has created a fragmented system of rules to manage the technology. However, there appear to be indications that how the issue is presented, and which actors are chosen to be represented in legislation, may impact the passage of policy, thereby also providing a reason for why little policy movement has occurred. In this study, pieces of federal, California and Georgia legislation were examined for the occurrence of differing frames, as identified by the actors presented, in order to determine whether different frames occurred in passed legislation than those found in failed legislation. It was determined that, while actors did not differ significantly between passed and failed legislation, there were some slight differences between actors used at the federal level, as well between the different state levels. Even further, the presentation of actors and their interests did appear to differ slightly between passed and failed legislation.

CHAPTER 1

BRIEF INTRODUCTION TO ASSISTED REPRODUCTIVE TECHNOLOGIES AND THE POLICY REGULATORY ISSUES

In the United States, the clinical application of assisted reproductive technology (ART) has been understood to enjoy freedom from governmental intervention, particularly in contrast to many other developed countries. Although the research aspects of the technology (embryo research, cloning, etc.) have undergone extensive scrutiny and been subject to a number of policy restrictions, the clinical aspects have largely remained free of government policy constraints (Bleiklie, et al., 2004, p.83). In fact, the clinical application and use of ARTs have widely been observed to be largely exempt from governmental oversight, data collection and regulation, particularly at the federal level (Goggin & Orth, 2004, p. 83; DeMelo-Martin, 1999, p.65). In Bleiklie, Goggin and Rothmayer's *Comparative Biomedical Policy*, Goggin's chapter on the U.S. ART policy observes that the U.S. has little in policy with relation to access to ARTs. Even further, both the chapter by Goggin and a white paper by Rebecca Harris recognize the emphasis upon professional self-regulation as the primary rule type related to ARTs (Goggin & Orth, 2004, p.92; Harris, 2010). Harris also points out that the traditional means of managing medicine seems to be the dominant model of managing ARTs in the U.S., stating that "[t]he model for medical regulation has been professional self-regulation, with licensing and liability torts as the primary tools of compliance. This places power squarely in the professional societies and medical practitioners (as well as medical malpractice insurance companies)." (Harris, 2010).

The few policy studies of the ARTs, such as those using Bleiklie, et al.' s Comparative Policy Design Framework (CPDF) and the white paper by Harris, make attempts to explain facets of the policy problems of the ART arena. Neither one,

however, appears to capture the full story of the lack of policy change within the U.S. policy context. The CPDF's particularly extensive study of institutional structure, actor coalitions, and policy designs (p. 5-13), informed the approach of this study, particularly the understanding of the coalition groups in existence. The Harris study provided some insight into the power situation of the arena. However, these earlier studies tend to appear highly static in nature, particularly ignoring the dynamics and history of the interactions they are studying. This study is an attempt to understand the policy arena as a dynamic system with strong policy currents that maintain the political policy structures.

This study views the policy making in a given arena as a dynamic, iterative process and focuses on how problem definition and policy framing affect the development and successful passage of ART policies on the federal and state levels. Some barriers to policy creation that have been pinpointed are due to the fragmentation of opposition groups (Rothmayr, et al., 2004, p.228), but this study proposes that additional constraints are due to the problem constructions (and solutions) found within the policies themselves and are influenced by the historical institutional structures of medical governance.

1.1 A general overview of the technologies and the approach of this study

ARTs have held a relatively unique position in the U.S. policy world. Since their debut on the world medical stage in the late 1970s, they have been hailed as the solution to infertility problems faced by numerous 'traditional' couples each year. With the birth of Elizabeth Carr in 1981, the first 'test-tube baby' born in the U.S., hundreds of infertile couples in the U.S. found that they would now have the opportunity to have children to whom they were genetically related, just as other more fertile couples had been doing for generations. Further, numerous 'non-traditional' couples/parents would also be able to have children of their own. Through the years, ARTs have not escaped scientific scrutiny and appear to be both safe and effective.

Despite this, these technologies as a treatment for infertility have not been free of criticism from other scholarly disciplines. Many of these critiques have stemmed from the fields of ethics and law, since many of these technologies either interfere with previously accepted ethical norms and beliefs, or because many of the controversies relate to complex, interrelated rights issues of the parents, their expected children, the practicing professionals, or other impacted groups, such as surrogates. For example, consider the argument outlined by Robert Blank and Janna Merrick in their book *Human Reproduction, Emerging Technologies and Conflicting Rights* (1995), about the lenses through which one can view reproductive rights: (1) the right not to have children, (2) the right to have children and (3) the right to determine the quality or characteristics of said children (1995, p. 5). Alternative bodies of critique also have developed in parallel to these mainstream arguments, such as in feminist law, in the sociology of medicine, in feminist ethics, and from the religious and pro-life communities.

These critiques often focused upon the impact of ART on the 'pillars' of society, such as family, health, and the research possibilities created through the use of these technologies (de Melo-Martin, 1999). Even further, questions have arisen regarding the ethical and economic incentives that arise due to the availability of such technology, such as embryo sex-selection and the transfer of excess embryos (Schonfeld, 2003; Collopy, 2004). Moreover, some doubt has been cast on the effectiveness of evaluation methods such as health technology assessments, due to possible applications of socially constructed biases embedded in the assumptions of these methods (de Melo-Martin, 1999). Examples of arguments over the impact of ART use include the altered role of women in society (Wilker, 1986; Kerian, 1997), the long-term effects of fertility drugs used in conception (Rutnam, 1991), the incentive to postpone conception (Heitman, 1995), and the advent of gamete donation and surrogacy (Robertson, 1996; Kierien, 1997). It has also been noted by scholars that there has been little federal policy development, despite the number of critiques. The sole exception to this is the *Fertility*

Clinic Success Rate and Certification Act of 1992 (FCSRCA), which publishes whether fertility clinics have a standardized process for transfer that falls within professional standards, and their success in accomplishing live births through their transfer process (Goggin & Orth, 2004, p.90).

Despite the fact that critiques of this technology are far from scarce, federal policy regarding their management has been limited in the last twenty-plus years that it has been in use (Eggen, 1991; de Melo-Martin, 1999). In fact, the management and regulation of ART practice has often appeared to gain saliency in public and political discourse only in the case of high-profile developments, such as the controversy surrounding 'octomom', or in cases of ethical conundrums, such as the price of egg donation. (Kolata, 1999; Kolata, 1998; Naik, 2009). Even during these developments, passage of policy has not necessarily occurred. The reasons for the saliency of these issues have not always been clear. For example, the saliency of the 'octomom' event may have been derived from the fact that she relied upon public assistance to support her family, almost as much as the fact that she was the first to give birth to surviving octuplets (Bowe, 2009). Alternatively, the saliency of egg donation in New York appears to have been more focused on the ethics of economic incentives (Kolata, 1999; Kolata, 1998). While major reports such as 2004's *Reproduction and Responsibility* by the President's Commission on Bioethics pinpointed several areas of ethical concern and provided subsequent policy recommendations, little policy appears to have materialized (PCB, 2004).

In part, the lack of policy at the federal level has been argued to be a false indicator of policy movement and that a majority of regulatory action occurs at the state level (Adamson, 2002). It is important to note that this position of deferring to federalist principles is not unusual in the U.S., particularly with regard to medical policy (OTA, 1988; PCB, 2004). According to Goggin & Orth, the states have been far more proactive in establishing oversight of ARTs than what is found at the federal level (2004, p. 92). An additional facet of regulation is the role of professional organizations, which are argued

to provide a number of self-imposed rules and which collect a significant amount of data. They are also recognized to play a significant role in the engagement of non-medical members of the community in oversight (Adamson, 2005; Aronson, 2000). This system of rules has largely been argued to suffer from significant fragmentation, which exemplifies how much the U.S. regulatory structure still differs from its counterparts and how little comprehensive oversight occurs (Rothmayr, et al., 2004, p.231).

With regard to public scrutiny, some highly publicized cases have reached mainstream media attention (Kolata, 1999; NYT, Feb. 12, 2009), but the issue of additional ART oversight appears to be pursued more heavily in scholarly and legal forums rather than public forums. There has been little exploration as to why this is the case, but it has been proposed that social construction within the policy arena may have a significant impact on how policy plays out (Rothmayr, et al., 2003, p.251). This may also be the case for the public forums. However, the intersection of ethics, law and policy on this topic has proven to be fertile ground for discussion, and has instigated a number of debates, including the role of ethics in policy analysis (Amy, 1984; Kenny & Giacomini, 2005), and the extent to which policy may intervene in the lives of private citizens (Kenny & Giacomini, 2005).

To some extent, this debate between scholarly communities can be traced to the dispute over whether ART use is a private, health-related decision or a public and social health concern. In the sight of many, particularly medical professionals and consumers, it has been argued that ART applications are a matter of couples exercising their reproductive rights (Robertson, 1996). Key to this argument is the establishment of negative reproductive rights through the federal courts, examples of which include *Roe v. Wade*, among others (*Roe v. Wade*, 410 U.S. 113 (1973)). At points, there have even been attempts to extend this argument towards the positive right to reproduce, as evidenced by the disputes regarding coverage of procedures by employers, private insurance and publicly funded healthcare plans (Gordon, 2005). This concept of a right to reproduce has

been heavily relied on to trump many arguments for additional oversight, as additional oversight, data collection or monitoring could have the potential of interfering with privacy (Robertson, 1996).

In contrast to the reproductive rights argument, there is a diverse number of arguments against the open policies currently governing ART use, including considerations of the long-term impact upon women, the rights of the children produced, and cost to society overall. Examples of oppositional positions include the impact of health history knowledge on the part of children produced via donors (Daniels, 2000), the long term repercussions of drugs used in fertility treatments on the women using them (Jennings & Callahan, 2001), and the longitudinal data on children produced via IVF (Green, 2004). Beyond the argument about the need to institute policies to protect potentially vulnerable actors (such as women, children, or the infertile couple) and society, questions have also arisen regarding the effectiveness of internal, professional oversight in an industry that clearly benefits from the continuance of limited external oversight (Charo, 2002). Given the findings that infertile 'couples' may have altered perceptions of risk and that the physician holds some 'self-interest' within the transaction, questions regarding the clarity and objectivity of decision-making in these transactions have arisen also (Grobman, et al., 2001).

Social constructions have also been argued to play a role in the debate, both in how actors are targeted through policy and which actors are able to gain political legitimacy and access to the political arena (Goggin & Orth, 2004, p.93-96). The effects of actor social construction in this arena, as well as knowledge social construction, have not been heavily researched previously and therefore, the implications for policy have been unclear. As proposed by Helen Ingram and Anne Schneider, social constructions can play a role in policy power dynamics (Ingram & Schneider, 1997, p. 192-3), but can also potentially restrict policy solutions and even which problems are considered (Ingram & Schneider, 1997, p. 106). For example, the social construction of doctors as 'experts',

'uninfluenced by market forces', 'ethically above self-interest', have been argued to not only contribute to the ways through which they are targeted in policy, but also the historical means through which they can wield power politically (Stevens, 2002, Varone, Rothmayr & Monpetit 2006). As such, the role of social constructions is not minor in the study of this policy arena.

The purpose of this study is to understand the role and effects of frames in this policy arena, with frames here referring to the wording and rhetoric used to refer to the wording and structure of problems and solutions in a particular policy area. The institutional arena has been somewhat defined by previous studies (Bleiklie, et al., 2004; Varone, Rothmayr & Monpetit 2006), as have some of the power balances that may define the boundaries of the arena (Harris, 2010, Varone, Rothmayr & Monpetit 2006). This study hopes to shed further light on the role of frames in explaining the persistence of actor social constructions. A more tangential focus of this study is the historical constructions of actors, such as medical professionals, the historical development of reproductive rights and how the relationship between these two things yielded certain policy frames that gained traction early in the establishment of the ART policy arena[1]. Therefore, the initial focus of analysis will be on the history of specific actors of medicine and reproduction in ART. The following chapter will contain a breakdown of relevant groups and organizations for the purpose of finding frames and the final portion will consist of an examination of federal and state level legislation pertaining to the use of ARTs. The remainder of this chapter focuses on the state of the technology, an outline of past and current policies, the critiques of both the technology and its management, and will address the historical structures present. The subsequent chapters will address the

[1] Feedback is an important aspect of the effects of historical constructions on policy creation, but is outside of the scope of this current study. Even so, the author does acknowledge that history can be viewed as constraining the available views on a particular policy problem through factors such as power balances, status quo bias and institutional availability.

theoretical and methodological approaches of this study, followed by the results and conclusions.

1.1.1 What ARTs are and How They Work

As defined by the Centers for Disease Control (CDC), assisted reproductive technologies are "all fertility treatments in which both eggs and sperm are handled" (CDC, 2009). This definition does refer to many of the technologies often utilized for treatment of infertility/involuntary childlessness, and it also neglects several treatments or technologies often included in the broader classification of 'reproductive technologies', such as artificial insemination (by donor [AID] or by husband [AIH], hereafter referred to solely as AID) and fertility-enhancing drugs (Blank & Merrick, 1995, p. 96-98). While IVF and its associated techniques are the only technologies managed by the CDC through FCSRCA legislation, it is important to note that the other two forms of reproductive enhancement also are controversial and closely related in nature.

Currently, the most common technologies used in assisting reproduction, as reported in the 2007 *Assisted Reproductive Technology* report published by the CDC, are IVF, with or without intracytoplasmic sperm injection (ICSI), gamete intrafallopian transfer (GIFT) and zygote intrafallopian transfer (ZIFT). Developed in 1978, IVF is the oldest of the three techniques mentioned above, with ZIFT and GIFT being developed in 1984 as a means of improving the success rates of ARTs (Asch, 1994, p.75-76). IVF and ZIFT are the most similar to each other, both involving the creation of an embryo outside of the body prior to implantation, whereas GIFT involves the implantation of individual gametes into the fallopian tubes, at which point fertilization is expected to occur (Asch, 1994, p. 75). ICSI, in contrast with the other three techniques mentioned, only acts as a mechanism to assure fertilization, through the injection of sperm into the ovum rather than incubating the gametes together within a culture medium (Asch, 1994, p. 76; CDC ART Report, 2007, Appendix B).

1.1.2 Drawing the line & limiting the scope

While IVF with or without ICSI, GIFT, ZIFT, AID and fertility-enhancing drugs all have ethical issues associated with them, their management is largely separate. The U.S. Food and Drug Administration (FDA) has clear jurisdiction over the management of fertility-enhancing drugs. It has some control over aspects of AID and ART through the regulation of use and testing of human tissue (Adamson, 2005; Adamson, 2002). The CDC however, monitors ART data in ways that AID are not managed, for example, tracking of success rates. Little evidence of AID management outside of the FDA's management of human tissues exists. For the purpose of maintaining clarity and consistency, this study will accept the limits of the CDC's definition of ARTs. While sources will not be excluded based on the inclusion of AID management, legislation solely directed at AID will not be considered. As a result, it is acknowledged that this may bias the study as a means of understanding policy frames in this area. However, it will also provide the necessary exploratory boundaries to assure a clear explanation of how frames affect policy direction in technology. It is also important to note that the examination of policy frames will be limited to legislation; while public media may play a role in ART political development, they will not be considered a primary source of data in this study.

1.2 The History of ARTs in the U.S.: : Inconsistency and Challenges to Underlying Norms

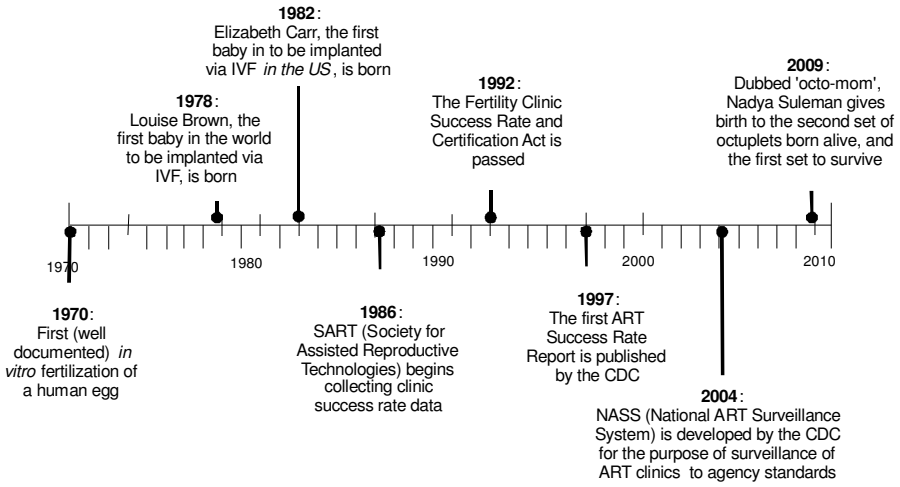

Figure 1:A general overview of the history of ARTs

1.2.1 What ARTs are and How They Work

Policy movement targeting ARTs was limited prior to the birth of Elizabeth Carr in 1981 (Cohen, et al. 2005). In fact, the 1978 Ethical Advisory Board's (EAB) evaluation of the ethical acceptability of ART is one of the few public policy actions of the 1970s (deMelo-Martin, 1998, p. 65-66). Other examples include the National Research Council's Committee on Life Sciences and Social Policy's technology assessment (HEW, 1979) and a 1975 regulation issued by the Department of Health, Education and Welfare (HEW), under which funding for IVF was banned until the EAB had reached some conclusions on the ethical acceptability of the technology (Grobstein, 1983). Much of the scrutiny of ART did not occur until after the birth of the first IVF baby (Grobstein, 1983). Even with the advent of ethical approval, however, which was included in EAB's 1979 report to the HEW (de Melo-Martin, 1999; EAB, 1979), public funding was not released due to the expiration of the EAB prior to giving approval of funding. Following the expiration of the board's charter in 1980, little policy action appeared to be taken based upon the report's recommendations, and further federal examination of ART did not occur until the Office of Technology Assessment's (OTA) reports on it in the 1980s

(Bonnicksen, 1986). The segment of the time line of in which the above policy action took place can be seen in Figure 2: A timeline of ART from 1970-1984 below.

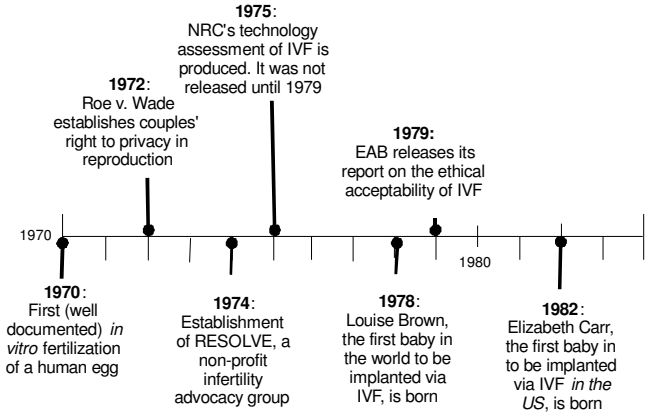

Figure 2: A timeline of ART from 1970-1984

As acknowledged above, there are a number of technologies that play a role in treating infertility, such as AID. Many of these technologies are not currently regulated under the same standards as ARTs. AID, as a means of treatment for infertility, was a technique utilized since early in the twentieth century to assist some infertile couples in reproduction (Smith, 1968). While this technology predates and provides the scientific foundation of many of the techniques now generally referred to as ARTs, it is governed by laws based upon the handling of materials, and is not covered by FCSRCA. It is not clear as to why AID is distinguished from other ARTs because, as can be seen throughout the literature (Beller & Weir, 1994; Walters & Singer, 1982), many of the ethical and social issues that arise from IVF (or GIFT) also occur with AID, with the exception of embryo experimentation (Asch, 1994).

ARTs were introduced for commercial use in the U.S. in the early 1980s, with the birth of Elizabeth Carr, but they debuted on the world stage as a means of treating infertility in 1978, with the birth of Louise Brown. The introduction of IVF as a technique available within the U.S. would not come for another four years, but its introduction as a technique potentially to be used on humans raised a number of questions

based on the potential for ethical conflict. In 1979, the EAB released its initial report to the HEW (later the Department of Health and Human Services (DHHS)) for the purpose of establishing whether IVF was ethically acceptable (EAB, 1979). This early policy report provided insight into the potential for ethical and safety issues, and also laid the groundwork for the possibility of public funding of the technology. The EAB determined several important points with regard to the management of IVF[2] and established that proceeding with IVF research in the U.S. was an ethically sound and acceptable course of action (Studdard, 1981). As a result of this report, doctors and scientists led by Howard Jones at Eastern Virginia Medical School, were able to successfully culminate the first U.S. IVF baby in Elizabeth Carr in 1981 Studdard, 1981).

It is important to note that this early report covered an exceptional amount of ground on the ethics of new biomedical technologies and provided an interdisciplinary perspective on the challenges facing the technology. It managed to include opinions from legal, ethical, social science and medical scholars in its attempt to understand the multidimensional implications of ART use. From a legal standpoint, the report determined that the right to privacy as it relates to reproduction and marital relationships, or 'reproductive rights', most closely applied to IVF clinical use (EAB, 1979, p. 65). However, legal arguments divided their understanding of ART use between clinical and laboratory applications of the technology (EAB, 1979, p. 68). Other ethically based arguments on ART also make this distinction. As such, this study addresses only the management of clinical aspects of this technology (EAB, 1979, Ch. 4; Studdard, 1981).

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[2] The points include (1) risks to mother and potential child were not clearly established and a review of additional animal models could improve understanding of the health risks and effects; (2) further technology research involving humans *was* ethically acceptable given that (a) human subjects guidelines were followed, (b) research was designed to determine safety that could not otherwise be determined through other models, (c) the people involved would be explicitly informed of the use of their gametes, (d) the embryos would not be sustained abnormally longer than the normal time of completion for implantation, and (e) that the public as well as 'interested parties' would be informed of the outcome if the procedures showed evidence of higher than normal abnormalities in offspring; (3) it did not address the issue of funding of such research.

1.2.2 Policy treatment of ARTs from the advent of commercial use to the establishment of FCSRCA

By the time the first IVF baby was born in 1981, policy recommendations and legislation on clinical use and application of ARTs were limited. However, with the availability of ART to treat infertility, scholarly, public and political debate erupted, focusing on the use and monitoring of these new technologies (Hyer, 1978; Lee, 1986). As ARTs became more available, the reality of social impacts began to reach the forefront of the debate. The concepts of property, parenthood, legitimacy and family had all shifted, and it became apparent that new rules and definitions would have to be developed, as the previous ones no longer clearly applied. (EAB, 1979; Wadlington, 1983)

A primary point of interest during this decade of ARTs was the safety and efficacy of the technology (EAB, 1979; Kurinczuk, 2003). As explained in the third paragraph of section 2.1, following the ethical approval of IVF by EAB, research proceeded that culminated in the birth of Elizabeth Carr in 1981. From this work, a number of new IVF and similar techniques were developed, including GIFT, Perionatal Oocyte and Sperm Transfer (PROST) and ZIFT. The birth also provided a catalyst for policy development in the ART arena (Bonnicksen, 1986). Between 1981 and 1992, the management and analysis related to ARTs fell within the domain of OTA. During this period, they published one study addressing policy development pertaining specifically to infertility and ARTs and several others that addressed the role of new biotechnologies in society and medicine. (OTA, 1988a; OTA, 1988b; OTA, 1987). The 1988 infertility report provided a number of insights into the ethical[3], legal[4] and policy[5,6] issues

[3] The right to reproduce, the moral status of the embryo, the relationship between parents and children, the patient's right to know (regarding experimentation), confidentiality and honesty, and the responsibility of one generation for the one(s) after it.

[4] Transactions relating to the transfer of gametes, embryos and neonates, as well as what the definition of parenthood is within the legal context (as compared to the genetic/scientific context)

underlying both clinical and laboratory use of ARTs (OTA, 1988b). Overall, a number of policy options were addressed, including additional regulation. However, the report also reinforced the idea that much of the power of governance for ARTs lay at the state level, through professional licensing and jurisdiction over health issues and family law. (OTA, 1988a, p.172) As a result, few federal government options found in the report were implemented. Congress also held several hearings on issues of the implications, access, and consumer protection related to these technologies, but they too resulted in little policy action (Blank & Merrick, 1995).

In contrast to the federal level, state level and professional organizational level policy movement was not insignificant. On the professional side, the Society for Assisted Reproductive Technology (SART) began collecting success rates for member clinics in 1985, through a system that would later provide the framework for measures implemented by the CDC in its oversight capacity (CDC, 2009). Given this action, and work done by the American Fertility Society (now known as the American Society for Reproductive Medicine [ASRM]), a number of professional measures were put in place for practitioners of ARTs (Blank & Merrick, 1995, p. 96;). Since this time, regulation in the U.S. has mostly consisted of self-regulatory guidelines established at the professional level (Adamson, 2005). These professional organizations, along with consumer organizations such as RESOLVE and the American Fertility Association (AFA, formerly the American Infertility Association) also dominated much of the discourse on ART, through coalitions such as National Coalition for Oversight of Assisted Reproductive

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[5] This section clearly articulates costs (of infertility as well as infertility treatment), issues related to quality of product, and the breakdown of the affected population(s). It also, briefly addresses the state of management of that technology as it related to policy product at that time, which was largely considered to be an issue to be dealt with at the state level (with regard to clinical practice), given that it was considered a 'medical issue' and a consideration for family law, both state level matters.(OTA, 1988, p.10)

[6] The OTA report on IVF also identified nine areas in which potential policy options existed, including: (1) data collection, (2) infertility prevention measures, (3) consumer information/ awareness, (4) infertility treatment access, (5) assessing the reproductive health and well-being of veterans, (6) gamete and embryo transfer, (7) keeping of accurate records, (8) surrogacy, and (9) research related to reproduction. (p. 15)

Technologies (NCOART) and legislative advocacy (Adamson, 2005; SART, 2010). They also played significant roles in the management and implementation of FCSRCA through both provision of oversight and acting as a facilitator for the collection of additional clinic data.

With regard to state policy action during this period, some states were quite active in creating legislation related to ARTs. At least 11 states created policy mandating either insurance coverage or the offer of coverage for infertility treatment. Two of these states, California and New York, specifically excluded the coverage of IVF (NCSL, 2009). Even further, several states instituted restrictions on insemination, ranging from a ban on self-insemination to a requirement that insemination be conducted by a physician (Blankenship 1993). Overall, while state policy action was not stagnant during this period of time, it also was fragmented, creating a number of different types of policies.

The key policy move of the decade at the federal level, however, was the development and enactment of the FCSRCA of 1992. In the late 1980's and early 1990's, a few clinics were cited for false advertisement of success rates, a term often used to refer to live-birth rates, by the Federal Trade Commission (FTC) (FTC, 1990, p. 26). As a result, Congress moved to implement legislation to 'protect' the ART consumer from false advertisement. Once during the second session of the 101st Congress (1989-1990), and twice during the first session and once during the second session of the 102nd Congress (1991-1992), a bill was introduced with the intent for providing a system of certification for fertility clinics and a reporting/tracking system for their success rates (H.R. 756; H.R. 3490; H.R. 5110; Pub.L. 102-493). The final introduction of the bill in 1992 passed both houses of Congress and was enacted. This piece of legislation is the single example of successful ART legislation at the federal level in the U.S.

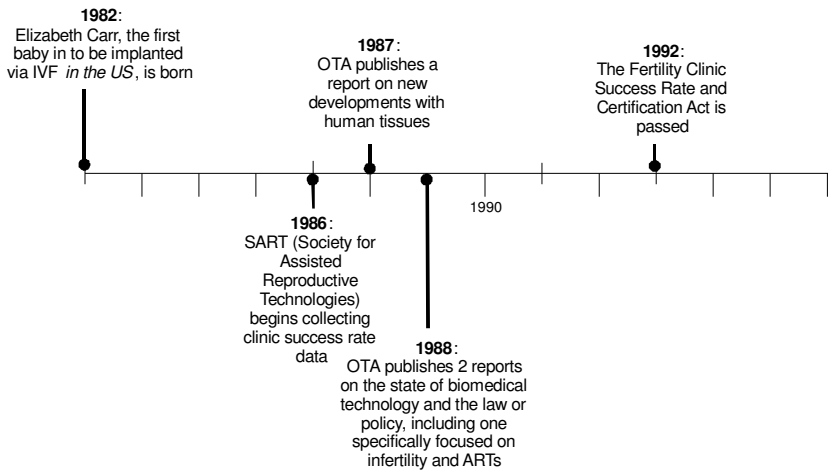

Figure 3: A timeline from 1982-1995

1.2.3 Policy treatment of ARTs from FCSRCA to present

After the passage of FCSRCA in 1992, one might expect that this represented a change in attitude towards centralized ART policy. However, much of the successful policy change since FCSRCA has been in areas of access more so than oversight. As acknowledged in the fifth paragraph of the last section, part of the reason behind the implementation of FCSRCA was a response to an FTC violation on advertisement of success rates (Adamson, 2005). Whether FCSRCA has been successful at correcting for this issue is less clear and evaluative study of its effectiveness appears to be limited. With regard to other aspects of ART policy, however, the CDC has published the results of their current oversight activities publicly since 1997 (CDC, 2005). Further, the PCB revisited the issues facing ARTs in 2004 (PCB, 2004). The report states many of the points made by earlier reports from the EAB and OTA regarding potential means of managing ARTs, such as a need for additional data from which to draw conclusions and the need to create additional infertility prevention measures (EAB, 1978; OTA, 1988a). With regard to changes in management strategy, a few high profile cases have created short-lived turmoil in the policy arena and, yet again, little has morphed into public policy change. Changes in professional self-regulatory guidelines, on the other hand,

have been far more dynamic, often responding to public outcry (Adamson, 2005; Adamson, 2008). However, not all of this change has been transparent, with guideline access largely being restricted to members of ASRM (ASRM, 2010). Overall, policy change within the last 18 years has largely been limited to state regulation and professional self-regulation.

At the state level, the legislative action has been varied. Some states, such as Louisiana, Pennsylvania and New Hampshire, have been very active in creating laws to govern ART use within their states (PCB, 2004; Adamson, 2005). Some states have implemented rules not only on the status of the embryo (Havins, 1999), but also the requirements, rights and responsibilities of all parties that are directly involved, including establishing an owner or guardian of embryos once they are created (Havins, 1999). Moreover, states have taken some action regarding informed consent and other measures to improve the outcomes for the consumer, on top of those provided by FCSRCA (Rosato, 2003). Even given this policy action, however, a number of gaps are still acknowledged to exist, one of which has been the lack of uniformity of policy across states. However, this lack of uniformity has generally been explained by the structure of the U.S. government, which creates fragmentation through its separation of powers and federalist structure (Blank & Merrick, 1995).

1. The state of the law and legal structures in ARTs

The judicial regulatory history impacting ARTs begins with judicial decisions made about the right to reproduce or not reproduce. *Griswold v. Connecticut* established a right to reproductive choice about contraception within the context of marriage (*Griswold v. Connecticut*, 381 U.S. 489, 1965; de Melo-Martin, 1999, p. 64). *Roe v. Wade* established the right to privacy in reproductive choice about abortion (*Roe v. Wade*, 410 U.S. 113 (1973)). *Skinner v. Oklahoma* guaranteed the right to reproduce without interference (*Skinner v. Oklahoma*, 316 U.S. 535 (1942)). While all of these cases were

key in establishing what are known as negative reproductive rights, the rights of individuals to be free of governmental interference in their reproductive choices, many argue that a more essential right in the assisted reproductive world is a positive right to reproduce, which would guarantee not only the right to be free from government intervention in one's reproductive choices, but also that it is the responsibility of the government to provide infertile couples with the means to reproduce, including the provision of services like ART. (de Melo-Martin, 1999, p. 65)

Beyond the judicial decisions regarding one's right to use ART for the purpose of reproduction, there have also been some rulings regarding the outcomes of the procedure or steps within the procedure. These include cases establishing familial and property rights and concerning physicians' discretion to provide treatment (Ekstut, 2008). For example, several rulings have been made regarding establishment of parentage of a resultant embryo, in the case of surrogacy or gestation and gamete donation, and establishment of parenthood by parties (Eckstut, 2008; K.M. v. E.G., Cal. 2005; UPA, 2002) or in the case of changes in the relationship between gamete donors (or 'parents') (Eckstut, 2008; UPA, 2002), and the ability of the embryo/child to inherit with postmortem implantation (Eckstut, 2008; UPA, 2002). In the case of surrogacy contracts, gamete donation and establishing parentage, it can clearly be seen that the norms defining parenthood that formerly informed family law have changed, not only due to a division of genetic and physical parenthood, but also because of the potential financial incentives offered to surrogates and donors (Levine, 2010). A number of ethical concerns arise due to these new incentives, such as the commodification of women's bodies and human gametes, coercion, and risk discounting (Collopy, 2004; Redshaw, Hockley & Davidson, 2007; Levine, 2010). There is also great potential for discrimination in the provision of services, particularly against non-traditional couples and single parents, based on the wording of some judicial rulings and statutes (Eckstut, 2008). Yet another emerging area is embryo status. Ownership/property status, adoption status and postmortem birth all are

examples of situations in which the norms that underlay family and property law, no longer clearly apply. Ideas of consent, parentage, and legitimacy for the purposes of inheritance are now confused due to the shift in when activities can temporally take place, as in the case of a pregnancy achieved after the death of one of the parents, or adoption of an embryo though it often lacks the legal status of a post-natal child (OTA, 1988, p. 224).

However, a number of states also have made attempts to clarify statutory confusion due to ART practice, ranging from establishing ownership or guardianship of embryos at insemination, creating legislation to determine the parentage of the child produced, and establishing the timetable for legitimacy in the case of inheritance (Moses, 2006, p. 33). As such, many have argued that ARTs are not 'free' from regulation (Adamson, 2005). The counter argument to this point however has often been that since regulatory statutes and judicial rulings are not consistent across states, the industry remains effectively unregulated (Valverde, 2007; Moses, 2006).

These cases reveal the legal challenges posed by ARTs, as they render the prior regulatory structures irrelevant or unclear. The norms governing previous rulings have now been altered by the new possibilities in reproduction and parenting, as well as access to services (Moses, 2007). What is clear is that the consequences of using ART are much broader than just the positive or negative right to reproduce and the decisions made regarding them are likely to be far reaching.

1.3 Policy, regulatory and other critiques

The issue with ARTs is not only that regulatory oversight is insufficient but also that there are a number of ethical, scientific, and social implications of these technologies. According to physicians and consumer groups for the infertile, ARTs provide a way to ease the suffering associated with the inability to produce children in the traditional manner (Adamson, 2005). Even further, these technologies provide new

avenues of research to cure diseases suffered by thousands of people every day, such as diabetes and Parkinson's, through cell-based therapies (NIH, 2009). However, the critiques of the use and management of these technologies also are significant. The U.S. policy development on this issue has been limited, resulting in a permissive regulatory structure in the industry. At the federal level, this manifests as a structure that is limited in both oversight and rule development (Bleiklie, et al., 2003). Even further, as discussed in section 2.4, much of the decision making power exists at the state and professional levels (Moses, 2005). This structure has been one of the targets of critique, given that it is relatively unique amongst the developed countries that utilize ARTs (Bleiklie, et al., 2003). But regulatory structure is not the only source of critique of ARTs. There have also been questions on the scientific safety of these technologies, as well as their social impact. This section will briefly address some of the science critiques that question the safety of ARTs, and social critiques, which object to the use of ART for reasons beyond science. The final part of this section will address the regulatory critiques, or those critiques that propose means to address the problems pinpointed by these social and/or science critiques.

1.3.1 The state of the law and legal structures in ARTs

Within the science of ARTs, there is a limited amount of questioning of the safety and outcomes of the technology as it is currently used. Often these critiques do not argue that use of IVF be banned, but often they do point out the problems with how it is applied and how well the implications are understood. The latter is often expressed in terms of the long and short term health impacts. For example, it has long been acknowledged that pregnancies achieved through ART show an increased risk of multiple births (Doyle, 1996; CDC: Assisted Reproductive Technology, 2010) and ovarian hyperstimulation syndrome (OHSS) (Keith & Oleszczuk, 1999). There have also been indications that there is an increased risk of morbidity for both mother and resultant child through the

ART process (Grobstein, et al., 1983; CDC, 2010). A number of health complications for singleton children of ART have also been reported. For example, low birth weight has been reported for both singletons and multiples, and previous studies have linked it to a number of long term health issues for children conceived through ART (Omblet, et al., 2006; McDonald, et al., 2009). The issues relating to health impacts on children conceived via ART appear to be confirmed through the CDC's ten year surveillance program of ART outcomes (CDC website, 2009). However, it has also been pointed out that the conditions suffered by IVF children cannot be conclusively linked to ART usage because of the possibility that the result may be due to the subfertility of the parents (McDonald, et al., 2009).

There are also the psychological aspects of ART to consider. Foremost is the indication of greater acceptance of risk by couples undergoing ART in order to reach their optimal number of children (Collopy, 2004). There have also been questions regarding the long term health, development and welfare of children produced from ART. Specific examples include the bonding process between parent and child when donor gametes are used for conception and the valuation of children due to the economic and physical costs associated with achieving conception (Little, et al., 2006).

Alternatively, even in light of the questions, it is also unfair to characterize the use of this technology as being without merit. Responses to some of the critiques include the argument that these technologies ameliorate some of the psychological suffering caused by infertility (Jordan, 1999; Schmidt, 2006), making it possible for non-traditional couples and individuals to build families (Liu, 2009), and create new avenues for research and disease treatment (citation). Moreover, it is pointed out that many of the early issues that plagued ARTs, such as high percentages of multiple births and low live-birth success rates, have steadily decreased in prevalence as the technology has matured (Toner, 2002). Therefore, it is postulated that many of these issues will be resolved given time, without government intervention or oversight (Adamson, 2002). Even further, this

line of argumentation proposes that proposed solutions would in fact hamper the development of the technology (Gleicher, 2005; Moses, 2005). For example, the proposition to limit the number of embryos transferred, in order to minimize the occurrence of multiple births, (1) would be a one-size-fits-all solution for a problem that requires case-by-case evaluation; and (2) would increase the cost of treatment to achieve a single birth because it could increase the number of cycles involved (Little, et al., 2006).

1.3.2 Social/social science critiques

Regarding the social impacts of ART, beyond those impacted by current law, as discussed in this chapter there are also a number of ethical and sociological issues to be addressed regarding ARTs. For example, there are questions not only about the health of the mother and child during and after the procedure, but also about the impact of the technology itself on the valuation of these individuals in society (Schonfeld, 2003). It has been argued by a number of feminist writers that these technologies change the role of the woman from 'person' to 'womb', and this change in social norms thereby devalues the position of women in society that they have worked so hard to redefine (Kerian, 1997). This section will be split into three parts, and although some aspects of these parts overlap in discipline, the arguments presented are distinct.

1.3.2.1 Sociological & Political Science Critiques of ARTs

Within the sociological scholarly community, ARTs have received a wealth of attention, particularly within the study of the sociology of medicine. Given the role of ARTs in changing social and physiological norms that have previously existed, as addressed in section 1.4 of this chapter, it is clear that there is a social component to the practice and outcomes of ART. Much of the motivation for this study stems from the arguments regarding 'medicalization' within this field. As defined by Peter Conrad, medicalization is the process through which a problem becomes defined by medical

terms, utilizes a medical frame for its understanding, or involves a medical intervening force for the purpose of 'correction' (Conrad, 1992). His definition provides one perspective from which to view the critiques that will be presented here.

Medicalization, particularly of childbirth and reproduction, has been a prominent lens through which critiques of ARTs have developed. A primary point of interest in this set of critiques is the development of 'involuntary childlessness', a socially constructed status expressing want, into 'infertility,' a disease or disability requiring treatment (Finkelstein, 1990). The medicalization process as a lens through which to view ARTs and their use has featured heavily in feminist critique, as will be addressed in section 1.3.2c. However, more general medicalization critiques also play a role in the understanding of ART, such as Conrad and Leitner's examination of the role of 'infertility as a disease' in the debate over insurance reimbursement, coverage and litigation regarding coverage (Conrad & Leitner, 2004). Even further, this critique extends into the effects of medicalization on people's decision-making, primarily it's role in their pursuit of some technologies, such as IVF or surrogacy (Richard, 1990). Overall, the medicalization critique focuses not only upon the role of medicine in defining expertise as it relates to concepts such as infertility, but also its role in the pursuit of certain treatments such as ARTs.

Another prominent point that has been made about ARTs is its creation of new families by expanding the option to reproduce not only to the 'biologically infertile', but also the 'socially infertile'. Groups included in this definition of socially infertile are those who could not reproduce due to choices regarding sexual and interpersonal relations and those who choose not to reproduce by traditional means, for example, because of lifestyles or potentially devastating genetic problems they would prefer not to risk passing onto their offspring (Shultz, 1990). While not objectionable on face value, these new reproductive options have often been pointed out to create new areas of concern because of the involvement of external partners such as surrogates and gamete donors.

This has not only complicated previous legal understandings of parenthood, as addressed in section 1.2.4, but also the cognitive and social perceptions of 'parenthood', 'family', and the fundamental understanding of relationships (Robertson, 1996). Therefore, the division of previously indivisible 'stages' of parenthood (genetic, gestational, and social), has created a loss of information for both the individual and society as a whole that has not been successfully reacquired.

The additional sociological considerations on ARTs to be addressed in this paper fall within the following two categories of ethical critiques and feminist critiques. While it is acknowledged that this current outline only touches upon a fraction of the critiques associated with ARTs, it was determined that these were of the most importance to this study. Other critiques, such as the impacts of social construction on non-traditional couple access, while important in the larger study of ART, are not among the subjects of interest in this study.

1.3.2.2 Ethical Critiques of ARTs

By far the largest body of critique and support for ARTs appears in the ethics literature. A number of ethical arguments have been made in favor of minimal government intervention in ART practice, based upon the implications of these technologies for the well-being of both biologically and socially infertile couples (Shultz, 1990) as well as the protection of procreative liberty (Robertson, 1996). However, others have pointed out important countervailing ethical considerations, including the rights of the embryo and the resultant child (Clements, 2009), how well informed the party undergoing the procedure is with respect to the risks and long term implications (Grobman, et al., 2001), and the utilization of multifetal reduction to address the transfer of multiple embryos (Coleman & DeBuono, 1999). Further considerations involve the right of children to know the means of their conception and, if necessary, access their genetic information. The former issue of understanding the means of one's conception, in

part conflicts with the rights of the parents' privacy regarding their own reproductive choices (Robertson, 2004). However, it also relates to the argument in favor of the collection of longitudinal health data on children conceived by IVF, which has been suggested as a means to gain a better understanding of the potential health and health policy issues that may arise due to IVF (Fastoulis, 1999).

Beyond the ethical implications related to the embryo however, are the issues related to social pressures upon couples to have a child, thereby forcing a less than optimal choice selection, and the implications of the reduced risk perception and increased risk discounting of infertile couples (Collopy, 2004). While it has often been noted that physicians have guidelines relating to the provision of clear information to the prospective patients, it has often been suggested that ARTs, like experimental techniques, should require informed consent. In part, this has been argued for the reasons related to their perception of risk, and the social pressures associated with their 'infertile status' (Schmidt, 2006). However, there has also been the suggestion that the implementation of informed consent or some similar documentation would assure the prevention of self-interested parties taking advantage of parties for the purpose of gain, be it the physician of a couple for the purpose of financial gain or the couple of a surrogate for the social gain (Houmard & Seifer, 1999).

Overall, it can be seen that ARTs are not without a number of ethical considerations, not all of which are easily handled by policy. However, as it pertains to our study, the existence of these ethical conflicts provides some insight into the diversity of frames potentially held by the public. It is also important to note that this is not an exhaustive list of all ethical considerations related to ART use or research, but those that relate most closely to our study's interest in public values regarding the clinical application of ARTs. Other tangential considerations not mentioned above include those risks and incentives of surrogates and gamete donors, particularly egg donors, because of the invasiveness of the techniques involved in creating and maintaining pregnancy

through IVF, as well as what incentives are created by allowing for compensation in these cases.

1.3.2.3 Feminist Critiques of ARTs

A number of critiques of ARTs exist under the general umbrella of 'feminism'. Some of these critiques oppose the use of ARTs, based on previous power relations both within and outside the medical establishment, as well as the psycho-social implications (Ettore, 2000). These studies often take the form of historical analyses of the medicalization of childbirth or critiques of the patient-doctor relationship, in which one party is dependent upon the other due to perceived expertise (Birenbaum-Carmeli, 2003). Other critiques focus on the potential consequences for women within society because gestation still remains an aspect of reproduction in which the burden falls upon the woman. This critique often focuses upon the potential for exploitation and commoditization of women as 'incubators' (Kerian, 1997). Alternatively, critiques have also focused upon the likelihood of women bearing most of the burden of ART procedures in the short and long term, through things like hormone injections to increase the likelihood of implantation, the impact of gestation, and other unknown, long-term implications (Luke, et al., 2007). However, additional feminist arguments advocate for use of the technology, as well as expansion of access, since they create the ability of women to procreate independent of men, thereby providing yet another form of procreative freedom for women. Even further, some arguments also cite the psychosocial impact of infertility upon women, not from the perspective of medicalization or social pressures surrounding childlessness, but instead from a perspective of procreative freedom. While the arguments both for and against the use of this technology are expansive, it is more important to acknowledge the existence of the debate than to expound upon the specific arguments at this point. Some of these arguments are addressed within the case studies, as they pertain to the frame analysis.

1.3.3 Regulatory/Policy proposed alternative approaches

The focus of this paper is both the critiques presented above and also the lack of oversight and regulation found within the policy arena, the latter of which has often been the motivation behind a number of the critiques above. A number of regulatory suggestions have been proposed to solve the issues addressed by the critiques listed above. Some minimal regulatory or oversight frameworks have been proposed in the U.S. to date, such as those proposed in the EAB report of 1979, the OTA report of 1988, and the PCB report of 2004 (EAB, 1979, p. 104-108; OTA, 1988, p. 15-31; PCB, 2004, p.183-204). There have also been a number of scholarly regulatory frameworks proposed, many of which overlap with those of the official reports. The primary reason for the interest in these proposed regulative approaches is that they represent alternative lenses through which ART policy frames may be constructed. In this section, the regulatory and oversight approaches proposed in formal reports will be addressed first, followed by those covered in the scholarly literature.

When EAB first confirmed the ethical acceptability of ARTs in 1979, specifically IVF, they included a number of caveats and suggestions for potential oversight regarding ARTs, largely because ARTs involved a number of health risks and other unknowns. One point that they emphasized in their summary was that their approval was based upon the argument that the use of IVF was "defensible but...legitimately controverted" (p. 100). In effect, they established that, while it would be ethically acceptable to move forward with additional IVF research, the ethical arguments against it were neither unfounded nor unwarranted. They advocated for additional animal model research to improve efficacy and provide better data about the risks (p. 104). They also concluded that research involving humans would be ethically acceptable given a number of caveats, as addressed in footnote 1 of section 1.2.1 (p. 106) and that support by HEW would be ethically acceptable within the bounds of those caveats of research involving humans, though they specifically did not address whether this should include federal funding of such research

(p. 108). They also concluded that additional data should be collected by multiple organizations, including the National Institute of Child Health and Human Development (NICHHD), in conjunction with private and international organizations (p. 112), and that the establishment of a 'uniform or model law' should be created for the purpose of further clarifying the legal status of children born of ARTs (p. 113).

Following from this, given that the EAB was not renewed in 1980, the OTA became the primary body for assessment of ARTs. They produced a report focusing specifically upon the ethics and policy options related to the use of ARTs in 1988 (OTA, 1988). They also produced two reports related to AID and the implications of new biomedical technologies on 'rights' around the same time, which provided further context for how politically salient biomedical technologies had become. The issues that they identified in their 1988 report, were as follows: (1) the right to reproduce, (2) the moral status of the embryo, (3) the bonding between parent and child, (4) research involving patients, (5) the confidential aspects of ART use and the extent of 'truth-telling', and (6) inter-generational responsibility (p. 11). The report touched on many aspects of ARTs, including feminist and religious perspectives on ARTs, the legal perspectives associated with it at the time, how it was addressed with regards to federally provided benefits, such as veterans benefits, and how other countries have addressed issues with ARTs. Their conclusions with regard to policy options for ARTs, particularly which aspects of ART were open for congressional action, were data collection on reproductive health, research on preventing infertility, consumer information and awareness, consumer access, veteran reproductive health, gamete and embryo transfer, recordkeeping, surrogacy, and research (p. 15). They further elaborated that there was interest for the federal government in each of these areas, including[7]:

1. extension of federal bills to enhance education regarding reproductive health,

[7] A full list of policy recommendations provided by the OTA report can be found in table 1 of Appendix A

2. enacting comprehensive and less localized, longitudinal studies related to ART use,
3. expansion of healthcare benefits provided by the federal government to include ART procedures,
4. institution of national standards for gamete donation, and
5. expansion of infertility research.

While the list presented here is not a comprehensive list of considerations, the overarching story found in these recommendations is that a number of regulatory and oversight policy options were proposed in response to the issues posed by ART use.

The final major report regarding ART use is that of the PCB, which was released in 2004. They also identified a number of ethical issues to be addressed, including more common considerations such as the implications for potential biological intervention into human procreation and the impacts upon the participants of the procedure, as well as more tangential issues for our study such as disposal, and research on and post-production use of embryos (p. 36). More important than the ethical issues presented in this report, are the direct and indirect ways through which ART were outlined to be regulated by government, in which direct forms of governance include physician licensing for ART procedure performance and location and indirect forms of governance including Investigational New Drugs (IND) restrictions by the FDA at this point in time. Moreover, even with the expansive list of federal, state and non-governmental regulations in place, it was determined that the 'patchwork' regulatory system was inadequate to properly provide sufficient protections for those involved (p. 78). Several policy options were provided, both as alternatives to or augmentations of the current system (Part II, p. 181). Some of these included the creation of a new regulatory agency, additional legislative action and increased monitoring (p. 186, 189, 194). However, this report also recognized the increased costs associated with both its institutional and substantive policy options, as well as uncertainty regarding the implications and decreasing incentives to

alter the current structure (p. 183). With regard to recommendations, the council offered three broad recommendations[8]: Increased federal data collection, reporting, and monitoring regarding use and effects (p. 208), increased oversight by professionals and professional societies (p. 215), and additional, targeted legislation (p. 218).

A number of scholars have also raised additional important regulatory considerations, going beyond these expansive reports. While many of them have mainly emphasized the need for additional oversight (Grobstein, et al. 1983; Cohen, 1997; Islat, 1998), some have also questioned the proposed means of regulation because they are insufficiently reinforced by current mechanisms, such as informed consent for patients (Cohen, 1997). What has also been pointed out is the emphasis within the current system on costs and benefits, which, while important, have largely overwhelmed other concerns (Andrews & Elster, 2000).

Therefore, the overall conclusion beyond those measures proposed by much of the larger reports and further emphasized by many of the scholarly publications is that, regardless of what regulation were to be put in place, a large barrier beyond the cost, which exists for most legislative action, is the breadth of concerns additional regulation would need to address. For example, informed consent would be expected to have minimal impact without additional data collection and publication. Even further, the conflict of social versus economic values is also a consideration which impacts the passage or consideration of new regulation.

1.4 A Short History of Medicine and Reproductive Rights

[8] The full list of recommendations and subheadings can be found in of Appendix 1

In order to flesh out the socio-political relationships of how the frames that are hypothesized to exist in the bills, it is necessary to provide some history on medicine[9] in the United States, as well as reproductive medicine. Not only has this means of governance been suggested to play a role in the understanding of how these technologies may be governed and by who, it may have had some impact on the composition of interest groups and who is considered a legitimate participant in the development of policy.

In the US, the intertwining of the abortion debate and the ARTs debate have often resulted in them being cast as flip sides of the same coin. As such, the mobilization of resources and interest groups therefore is strongly impacted the development of the frames and therefore it is important to introduce how reproductive has been framed and how the actors have behaved.

1.4.1 A General Overview of American Medicine

Medicine, in the modern U.S. context, has a unique history, with the institution of medicine emerging during the early twentieth century (Starr, 1982). The establishment of American medicine as an institution and the implications of it are important to this study; it will be argued that these were key in shaping the legislation related to ARTs practice. In order to contextualize this argument, a brief history of American medicine since the beginning of the 20th century will be the starting point of this analysis. Women's health and reproduction in America as a medical practice is a second important topic that will be

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9 As has been pointed out by numerous scholars, part of the reason that the regulatory structures in areas like assisted reproductive technologies differ so drastically from other developed countries is due to the means through which medicine has been traditionally governed in the U.S. (Wilsford, 1991; Bleiklie, et al, 2004).

proceeded to. From there, a brief overview of the legal aspects of government intervention in the institution of medicine will be given.

1.4.2 American medicine in the 20th century: A brief history of the development of the 'institution of medicine' in the U.S.

The present day system of medicine, with medical doctors occupying the organized and influential positions that they do today, is an artifact of the last century, rather than American history (Starr, 1982). In fact, according to Paul Starr, the development of the current system of medicine was more of the development of an institution rather than the development of medical practice (p. 8). Starr's analysis indicates that a key part of the American medical system is scientific and technological advancement (Starr, 1982 p. 10-12; Wilsford, 15). Moreover, standardization paired with a cultural shift towards health and a reliance upon the professional as an expert in the application of medical care (Starr, p.20; Wilsford, 1991, p. 8).

An early development in the history of 'modern medicine', was the increased standardization of the profession, and its connection with state licensure. Often argued as the key turning point in American medicine, the increased standardization of medicine created the ability for M.D.s to create barriers to entry to their field and effectively an economic monopoly upon the field of medicine (Starr, 1982, p.20). According to a centennial article on the founding and development of the American Medical Association (AMA), it was in 1905 that this organization created a 'Council on Medical Education', with a headquarters, for the specific purpose of providing oversight and a minimum standard of medical education (Fishbein, 1947). In 1906, state licensure boards began to require graduation from a medical school designated by the AMA as meeting minimum requirements (Walker, 1929). The establishment of being an entity responsible to a 'greater good' than the market also provided not only justification for the market barriers,

but also provided an air of distinction to the profession that, in turn, increased its legitimacy and its authority (Starr, 1982, p.20).

Also important to the development of 'modern medicine', was the advancement of science. The advent of pharmaceuticals and devices to treat people's ailments allowed the medical profession to gain acceptance and legitimacy in two ways: (1) it allowed the profession to distinguish itself from competitors within the health market and (2) it provided further justification for monopolization of the market because of the increased complexity of information for the consumer (Starr, 1982, p. 24; Law & Kim, 2005).

Beyond the ground work laid in the 'early' history of medicine in the U.S. providing for physician professional dominance, later actions within medicine also contributed to the current politics of medicine in the U.S. The role of state and federal governments in the management of medicine is distinct in the U.S., with the state holding a majority of the power to regulate. However, early 20th century health related legislation, including the Federal Food, Drug and Cosmetic Act and the Federal Occupational Safety and Health Act, allowed for greater federal intervention. Both of these were enacted under the auspices of “commerce law" over which the federal government has jurisdiction (Starr, 1982, p. 51-54). An alternative example of health policy that was established in the 1960s are the Medicaid and Medicare programs, established under the Social Security Act. While Medicaid involves a joint effort between the state and federal governments both are examples of how the federal government is not absent in historical health policy-making.

The structural limits and domains of medical policy, coupled with early 20th century development of 'professionalization,' have resulted in particularly strong professional autonomy. The organizational/structural changes that have occurred also have contributed a unique facet to the policy-making process, resulting in the development of a powerful interest group with regards to health-related policies.

1.4.3 American medicine in the 20th century: Reproduction in American Medicine

1.4.3.1 Perceptions of Women and Medicine

Another important historical aspect of medical practice, particularly regarding the issue of ART, is the relationship between women and doctors. A number of perspectives have been generated about how the traditions of medicine have impacted the development of medical practice, particularly as it relates to women, womanhood, reproduction and childbearing. The early thoughts on female sexuality and evolution of medicalized child birth play an important role in the understanding of ARTs as well as the opposition to it (Strickler, 1992). The medicalization critique also plays a strong role in the discussion, particularly with regard to infertility and the female body overall. Relatedly, the pro-status quo ART argument hinges on the idea that childbirth and infertility are medical issues to be handled by medical professionals. The historical development of these arguments is key to understanding how 'medical autonomy' matters to the ART debate, and also bridges the gap between medical autonomy and reproductive rights. I argue that the disconnect between these two perspectives on the childbearing process is part of what hinders the development of ART policy.

The starting point of this argument is the mid-nineteenth century, which was the point in time that physicians began to exact more control over the medical market. According to Charlotte Borst, obstetrics as an area of specialty in medicine was initially plagued with licensing issues (Borst, 1992, p. 201), competition from midwives (Borst, 1992, p. 207-208), and a general lack of respect from the wider physician community (Borst, 1992, p. 204). However, obstetrics did develop into a specialty, approximately around the 1930s (p. 201), after altering its focus from surgery to general practice. The impact of this was two-fold. First, it resulted in the expulsion of women-doctors from the practice, largely due to the thought that obstetrics was 'a man's work'. Second, it resulted

in a movement away from (and, at points, an elimination of) midwifery, which had previously dominated the area of childbearing (Borst, 1995, p. 118). In effect, women were largely removed from the act of childbirth, except as the patient.

The relationship between medicine and feminism also has a history dating back to the early 20th century. While some facets of this relationship will be addressed in the next section, it is important to at least preface it as a segment of the relationship between women and medicine.

1.4.3.2 Issues in women's reproductive medicine in the U.S.

Regarding perceptions of reproductive medicine, the development of obstetrics as a 'well respected field' was a long journey. In the early years of its establishment in the U.S., obstetrics was still viewed as a 'surgical science' and it was not until its joining with the association of gynecologists and a shift from surgery to general practice as its base of knowledge that it established itself as a 'legitimate' specialty of medicine (Zetka, 2008). The development of reproductive medicine with respect to women has been an ongoing example of those 'with power' and those 'with less'.

The primary perspective through which the progress of 'reproductive medicine' can be seen is through the change in perspectives on (1) access to contraception and abortion, and (2) pregnancy. The latter has been addressed above, through the examination of the rise of obstetrics and the stances on women as both practitioners and as patients. The former can be seen through the movements to ban contraception access independent of a physician in the early 20th century (Lester & Blakely, 1918). With regard to abortion, it was distinguished from contraception early on (Lester & Blakely, 1918; Ruppenthal, 1919). Whereas a number of states banned both equally, a few distinguished between abortion in the case of a pregnancy posing a threat to the life of the mother and other forms of contraception and abortion (Ruppenthal, 1919). With regard to statutes on birth control in Georgia and California, the two states selected for the case

studies of this paper, Georgia seemingly had no laws on the books regarding birth control. In contrast, California had laws that made it illegal to distribute, sell, compose, publish, print, give or loan [an] 'obscene or indecent writing, paper or book', a concept which included literature on birth control (Ruppenthal, 1919). This was later revised to omit "“or any notice or advertisement for producing or facilitating miscarriage.”" (p. 53).

1.4.4 American medicine in the 20th century: ART, the state and the State

1.4.4.1 Federalism: the role of the State and the state in the management of medical practice

According to Wilsford's comparative analysis between the U.S. and France, a key part of the American medical institution's development was its relationship with the state (p.3). From this perspective, the 'statelessness' of the U.S., paired with many of its traditions, such as a strong sense of individuality and a commitment to the concept of pluralism, contributed to the development of a stronger medical institution in the U.S. than in France (p. 62-72). As Leyerle points out, the development of the American healthcare system and the medical institution that drives it was a structural process. As such, any changes to this institution would also have to be structural (1984, p. 7). Examples such as those given above (the establishment of rules regulating medical education, determination of alternative licensing structures (BMJ, 1891), and other forms of professional standardization), show the effectiveness of the structural development of medicine and its process. It also shows the role of the state in the establishment of these rules and the importance of state power in the development of medicine.

For example, early in the process of the establishment of medical professionals as the preeminent experts in the maintenance of health, it was state boards that demanded adherence to AMA standards and created licensing (BMJ, 1891; Fishbein, 1947) and that began administering licensing exams for the medical profession (Walker, 1929). Given that the general consensus is that the U.S. Constitution grants to the states the power to

manage and govern with respect to health issues and, therefore, medical practice, the federal government has little jurisdiction (Christoffel, 1982, p. 49). While it has managed to circumvent this through the application of law within areas in which it does hold jurisdiction (such as interstate commerce or funding through grants), the constitutionality of such applications has not always been clear (p. 52-55). The takeaway point from this, however, is the importance of structure in the development of medicine and its current management.

1.4.4.2 Medical autonomy

A slightly less prominent but still salient issue in the ART debate is the issue of medical autonomy. While there is evidence to suggest that this autonomy from 'government', particularly federal and other entities, may date back to early in the establishment of the medicine as an American institution, whether this is the case was first argued by authors using the professional dominance model in analysis of the field. Under this model, it was proposed that professionals (such as physicians) manage to exist autonomously through embedding members within bureaucracy, which allows them to maintain control over entry into their field and the appearance of specialized knowledge (Prechel & Gupman, 1995). However, it has also been argued that this autonomy has been slowly eroded away by new organizations within the field of healthcare and by the increased awareness and interest of patients in participating in their own care (Prechel & Gupman, 1995).

1.4.5 Reproductive Rights and politics in the U.S.

The development of rights and law in the U.S. has been a critical part of the assisted reproductive technology debate. A large part of this could be argued to be culturally specific to the U.S., particularly the relationship between what have been termed 'reproductive' rights and the management of ART technologies. In addition to the

rights of the physicians to practice medicine unhindered, the role of reproductive rights also has weighed heavily in the ART policy arena. The ability of the infertile couple to exercise a negative right[10] has been a compelling reason for a lack of policy intervention. However, the contention about whether this right should be extended to a 'positive right'[11] has been less clear. As a result, contractual and family law have also become deeply embroiled in this debate. The following section will provide the key institutions, landmark cases, timeline and major groups that have shaped the reproductive rights debate.

1.4.6 A Brief History of Reproductive 'Rights' in the U.S.

First of all, it is necessary to establish what institutions are instrumental in enforcing and driving these rights--the courts. Rulings such as *Roe v. Wade* and *Griswold v. Connecticut* altered the previous structures regarding both childbirth and reproductive medicine (Starr, 1982, p.391). However, state legislatures have also been very formative in this debate. Moreover, the medical field has also contributed to the discussion, given its role as the 'experts' within this area. Given the possible evidence of a decline in physician autonomy due to third party health organizations, it is important to acknowledge the role of insurance companies and managed healthcare organizations in the development of and access to the products involved in utilizing one's rights to make reproductive decisions. As such, the role of federal level administrative bodies such as the Federal Drug Administration (FDA) and National Institutes of Health (NIH) and other federal level health care bodies have also impacted the ability of individuals to exercise this right (Noah, 2004).

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10 The right by which the government is obligated to refrain from interfering in reproductive choices.

11 The right to government assistance in the pursuit of their goals.

A key conceptual institution in this debate has been the U.S. Constitution. Often, it has been interpreted to guarantee individuals the right to decisional privacy--through the 14th Amendment prohibition on state deprivation of liberty without due process of law--of which the ability to reproduce without interference from the law and the state is an example (Havins, 1999). Alternatively, through the 14th Amendment, the right to reproduce can be constructed as a 'positive' right, at least with regard to insurance coverage. However, the application of this interpretation has been less widespread, as can be seen by the levels of access for infertility/fertility treatment across states and federal legislation regarding the application of federal dollars towards such treatments (Goggin & Orth, 2004, p.83-84).

1.4.7 The relationship between reproductive rights, medical practice and ART management

Reproductive rights, early structural aspects of the development of the medical profession, and the structure of the healthcare system overall, have all played a role in the development of ART management. Given the monopoly on reproductive medicine derived from the rise of obstetrics in the early 20th century and the close relationship between the medical institution and science, the IVF developments in science during the 1940s and 50s and its 1980s applications in medicine should be less than surprising. Even further, given the role of 'specialized knowledge' in the exclusivity of the profession, the monopoly of obstetrics on knowledge relating to reproduction has also been a key part of the development of the construction of 'involuntary childlessness' as 'infertility'.

The structural arrangements within the medical profession, particularly the arrangements of organizations related to specialties, the role of organizations such as the American College of Obstetrics and Gynecology (ACOG), ASRM and SART also have played a role in how ART policy management has developed. Beyond the simple

explanation of the 'power' of the medical institution itself, the role of the 'professional organization' in policy development directly ties back to social movement theory and the issue of the mobilization of bias. Given the creation of ASRM and SART in the 1980s, the development of alternative and oppositional movements could arguably be said to have been hindered in part by the fact that the rules of the 'game' had already been previously established and the bias towards the status quo institution within the arena, primarily the institution of medicine. While the organization and economic resources of ASRM and SART, as compared to other organizations such as right-to-life organizations (RTL) and feminist organizations, undoubtedly play a part in the successful creation of an oppositional movement in this area, the structural aspects of access to discourse and development of legitimacy in that discourse cannot be ignored.

The monopolization of the American medical institution on reproduction (and therefore the constructions of knowledge relating to reproduction), also may explain how this particular issue has been played out in the policy arena. The tie to previous reproductive rights issues clearly has also affected the development of the management of the technology, primarily with regard to (1) the legitimacy of some oppositional groups and (2) the ability to mobilize others. The former can be argued by examining some of the available hearings in Congress and the parties invited to testify. For example, in the case of the hearing before the House Committee on Children, Youth and Families, the testimony consisted of three doctors and a representative from the office of pro-life activities of the National Conference of Catholic Bishops (Alternative Reproductive Technologies: Implications for Children and Families, 1987). The latter has been shown somewhat in previous literature, such as Bleiklie's comparative study and the existence of 'fragmentation' within the action coalitions (2003). While there is less clear historical evidence of barriers to mobilization of groups, it provides a potentially interesting area for future research.

1.4.8 The defining cases & 'historical events'

1.4.8.1 Medical autonomy

In the development of the ART policy arena, there have been particularly poignant cases that have been cited with regard to ART reproductive rights. The primary cases of interest have obviously been *Roe v. Wade* and *Griswold v. Connecticut*, which relate directly to the 'reproductive rights' ties to ART. The basic argument derived from *Roe v. Wade* has been the negative right to reproduction, as stated previously. *Griswold v. Connecticut*, on the other hand, preceded *Roe v. Wade* in establishing the guarantee of the U.S. Constitution to the right to privacy with regard to reproduction. Its landmark decision established the right of couples to access contraception and prevent the establishment of other laws that would infringe upon a couple's right to privacy relating to reproduction. Another often cited reproductive rights case is *Skinner v. Oklahoma*, which abolished the ability of the state to institute compulsory sterilization as part of criminal punishment. This case provides much of the groundwork for later barriers to state intervention in reproductive activities.

More recent examples of key ART legal rulings include the case of 'Baby M' and *Davis v. Davis*, which provided the framework for many states to enact statutes regarding surrogacy and custody/use of embryos in the event of circumstance changes since their development (Davis v. Davis, 842 S.W.2d 588 (1992); In re Baby M, 537 A.2d 1227, 109 N.J. 396 (1988)). These cases have resulted in the breaking of new ground in the areas of both family law and property law, and have even forced some jurisdictions to establish the legal standing of embryos. While most of the recent rulings apply more at the state level than the national level, they still resonate nationally.

Overall, the legal system has played a significant role in the development of ARTs, creating additional structural constraints to a political system already bound by

other structural barriers built by other institutions. In fact, political structures as barriers to types of policy developments abound in this area, as evidenced by history. However, history does not show definitively whether there are in fact any constraints within the legislative policy process.

1.5 Summary of research questions and orientations

The theoretical foundations of this study will include path dependency framework and social movement theory, both of which inform the proposed research questions. I propose that the policy process related to clinical ART practice, as detailed in the preceding sections, has taken the route that it has due to lock-in of policy frames. I believe that this lock-in is due not only to the fragmentation of political coalitions, but also the history of access in the policy arena and past precedent. Through historical and frame analyses, I believe it is possible to 'track' a set of widely used policy frames (held by those that benefit from power asymmetries) through proposed and successful policy, thereby providing evidence of path dependence of these frames.

This is of interest to and contributes to the wider scholarly community in two ways. For one, it could provide a means of empirically studying frames. For another, I argue that it provides insight into how social movements may be stifled by policy processes.

CHAPTER 2

UNDERLYING THEORIES AND FRAMEWORKS

2.1 General Overview of the frameworks and theories

The nature of the debate surrounding this technology has often devolved into one of ethics, and therefore one that cannot be resolved through policy. And though a few authors have made inroads into the way in which policy has progressed on this topic, both in the U.S. and abroad, there are still gaps regarding the political dynamics that have contributed to the policy changes and lack thereof, particularly within the U.S. context. This study seeks to fill one of these gaps by understanding the nature of the policy change, particularly the relationship between this change and the frame of the problem. Key to this discussion of the ART policy dynamics is the concept of problem framing. While several authors, including Goggin and Orth (2004), Rothmayr and Varone (2002), and Montpetit, Rothmayr and Varone (2005) have been very informative in outlining the policy arena of ARTs from a comparative perspective, their analyses largely provided a potential framework, not an explanation of why policy has failed to be implemented, particularly in the U.S. context. This paper argues that problem frames are the drivers and maintainers of the current policy state found in the U.S. It is important to note that I am not arguing that problem framing and problem definition *caused* the policy state, only that given the political structure, they facilitate it's maintenance in the current direction.

Again, a tangential focus of this study is also the directionality of the process, and by this I mean that it is 'path dependent'.[12] It may explain why policy hasn't happen, presenting an effective 'non-event'.

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[12] The concept of path dependency, in short, is that future decision making is severely constrained by past decisions. While it cannot be addressed in this study, the path dependence of this particular policy area could further shed light on the historical barriers to policy making in this area

As mentioned throughout Chapter 1, little federal policy has been made in the U.S. regarding this technology, and it has been hypothesized that this is due in part to the social constructions of actors as well as the fragmentation of collective action coalitions (Bleiklie, et al., 2003, p. 101). Some work has been done on the role of power within the policymaking arena as it impacts the passage of policy, and this work's acknowledgment of the fragmentation within the policy arena has furthered the insight into the power dynamics involved (Harris, 2010).

In this paper, however, the focus is not on power dynamics or the fragmentation found in actual or potential coalition groups, per se. Instead, the focus is on how problems are articulated through framing, which may in turn affect the ability of coalitions to form. Relying on previous work done on social construction and problem definition, I hope to utilize public documents, more specifically legislative bills, to exemplify consistency in framing (Verloo, 2004).

In this chapter, I will cover a small portion of social movement theory for the purpose of explaining how framing plays a role in policy making. Additionally, the elements of policy framing will be discussed.

2.2 Social Movement Theory

In trying to understand the means of both path dependence and problem definition in the problem of ARTs, it is also necessary to understand the role of social movements in creating change. Admittedly, a key aspect of this discussion, addressed by previous scholars looking at the ART arena through both discursive and collective action lenses, is that there is a great deal of fragmentation of oppositional collective action. This can be seen through Farquhar's examination of the ART discourse (1996) as well as in Bleiklie, et al.'s comparative study of ART policy (2003). However, the problem being addressed in this paper regarding ART is why NO policy change has been observed in this particular policy arena at the federal level, essentially a 'non-event'. This becomes a

question of whether the 'non-event' is a case of a problem not addressed or a non-problem. My premise and this study assumes that there is a 'problem', and social movement theory provides some insight into how this could be. For one, the political perspectives of social movement theory provide insight into how politics can constrain or facilitate policy developments (Kiese, 2004, p. 66-90). It also provides insight into the structural aspects of mobilization of bias as a factor in how problems get placed upon the policy agenda.

Social movement theory's primary importance to this study is its justification of the selection of path dependence as the analytic framework. In the political science context of social movement theory, path dependence is somewhat justified. Two key points of the path dependence framework are the role of institutional density and political opacity, which have often been noted to be insufficiently explained. Social movement theory from a political perspective provides some insight into how the institutional density and opacity of politics may create an opportunity for some arenas to be 'path dependent'.

2.2.1 Social Movements & Political Frames

The political 'context' of social movement theory, according to *Blackwell's Handbook on Social Movement Theory*, is based upon two important aspects: cultural model and institutional structure (p.69-79). It is this institutional structure that is the primary focus of this paper, with the cultural model aspect of political context being secondary, but both require some elaboration. The cultural model, as outlined by Kiese, is one in which stable cultural artifacts are of primary importance (p. 72). Kiese points out that it is the cultural institutions that affect the ability of actors to decide to act collectively (p.70-71). Of particular interest is Koopmans and Stathams' discursive opportunity, as presented by Kiese (p.72). As elaborated by him, the ability of groups to create discourse on their issue and create symbolic legitimacy is very important to

successfully mobilize groups within a movement. The ability to create this discursive legitimacy, however, is dependent also upon the structural strategies of political actors for 'dealing with challengers' commonly present in the political system (p.71). This cultural model can provide a great deal of insight into the constraints of ART policy making from a mobilization and message standpoint, particularly with regard to how 'legitimate' parties appear to be. It also has potential in the study of two facets of the debate: (1) 'legitimacy' of access and input on Congressional decision-making, such as who testifies before Congress or gets placed on commissions for the purpose of investigations, and (2) the effects of a fragmented oppositional group on the policy process. As will be addressed in the next section, resource mobilization also plays a role in how cultural models play out.

The second part of the political context framework is the institutional structures aspect. From this perspective, it is argued that the institutional structure strongly influences how the policy arena develops. As explained by Kiese, the openness of a policy making body can both constrain and facilitate actors from participating. As he outlined in his chapter of *Blackwell's Handbook on Social Movements*, in conjunction with cultural models, “opportunity sets” can be developed (p. 72). The institutional structure aspect of policy making, as applied here, is derived from historical institutionalism, i.e. the perspective that historical actions influence future actions and decisions. To summarize, Thelen points out that historical institutionalism looks at the development of institutions as a product of process as compared to the rationalist perspective of coordinated functions (1999). From this perspective, feedback and historical incidences become greater in importance because they determine future interactions and 'structures'. However, in this study, the examination is not of the effects of a 'social movement' but instead on the inability to generate such a movement. Meyer argues that the political context approach is derived from the concept that 'grievances' are not chosen “out of a vacuum”, but are the result of political structure (2004). This continues along the same lines as the historic constructionists, insisting that 'context' (or

'history') matters. His argument continues along the lines of rebutting the common critique of political process theory, by arguing that agency can only be understood within the confines of the "rules of the games" (2004, p. 128).

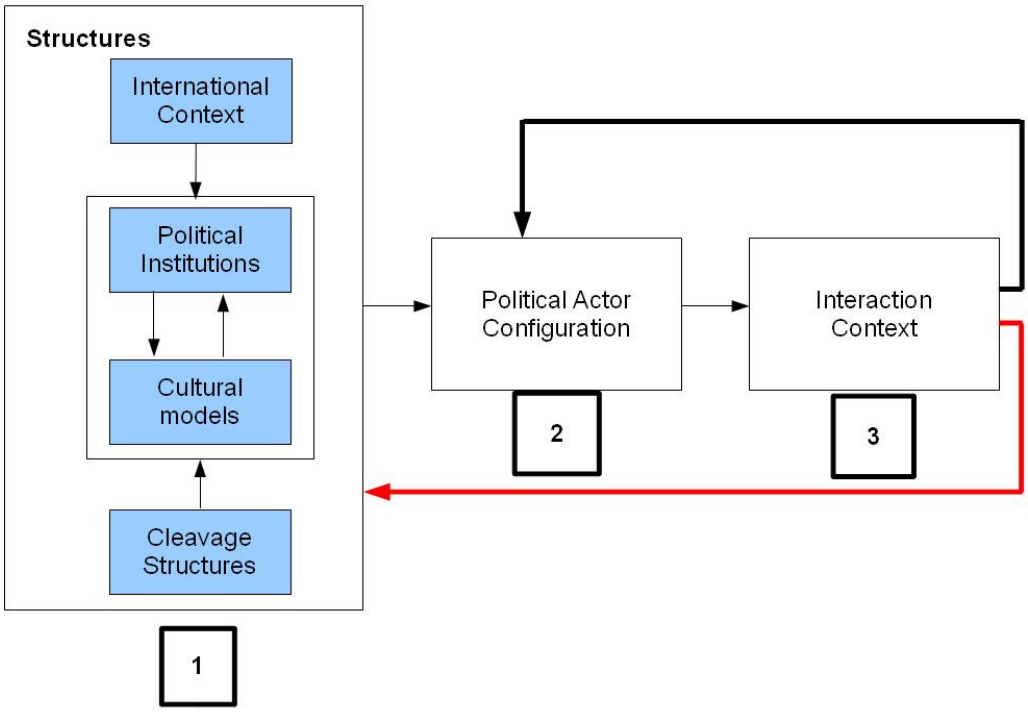


Figure 4: The model of political context, from social movement theory (Kriesi, 2004).

Nonetheless, political context authors are addressing the mobilization of movements, whereas in this study it is the limitedness of mobilization that is of interest. Utilizing the 'opportunity sets' expressed by Koopmans and Statham, provides more insight (1999). Their model of 'discursive opportunities' and 'institutional opportunities' as interacting measures of the ability to mobilize and 'gain legitimacy', shows the interaction between discourse, institutions, and political opportunity from a 'non-event' standpoint. Their model provides four options for movement outcomes: full response, co-optation, preemption, and marginalization (p. 248), in which preemption, co-optation and marginalization all could represent possible examples of 'non-events'. The selection of which, however, cannot be explained fully by the political context theory, but in

conjunction with mobilization of bias. Figure 4, above, shows the political context model as designed by Kiese. The portion of the model that is of most interest to this study is the structures aspect, which is labeled as segment 1 of the diagram. Within this, I am interested in the political institutions and cultural models.

2.2.2 Social Movements & Mobilization of Bias

From the perspectives of power and the policy process, resource mobilization from social movement theory also plays a part. While the political structures and process are integral to this story, the differential impact of being able to properly mobilize resources and 'people' for a particular cause could potentially impact both part 2 and part 3 of the political context model above. With consideration of the Koopmans and Statham model of political opportunity sets, mobilization of bias strengthens the argument for a path dependent framework as well, given that their argument essentially defines the conditions under which groups become marginalized. Mobilization of bias explains the continued lock-in of marginalization in the policy cycle.

From a social movements perspective, mobilization of bias derives from EE Schattschneider's 1975 seminal work on biases in political movements (Strolovitch, 2006). Beyond just the immediate implications of his terming 'mobilization of bias' as an important concept of the political system, his work has also been used to explain the importance of symbols in social movements (Strolovitch, 2006; Cobb, 1998). His work has also inspired the development of several theoretical perspectives, including problem definition and problem framing, which this paper draws heavily upon.

Beyond Schettshneider, however, is the concept that mobilization of bias embodies the importance of power in the discourse on policy and policy action (Bachrach & Baratz,1963). From the perspective of Bachrach and Baratz, this power distribution as the target of research is not based on a 'ruler' model nor a question of whether 'anyone' has power, but instead on how the structure provides for actions and who gains or loses

due to that structure (1963). From there, status quo bias could be analyzed and only from that point could an analysis of participation occur (p. 952).

2.2.3 Social Movement & ART policy arena development

While the question of this paper relates to the 'frames' of policy and how these frames affect policy making, social movement theory provides a great deal of explanation as to why context is necessary. It has been argued that fragmentation of coalitions and power have played significant parts in the development of the ART policy arena (Bleiklie, et al., 2003; Harris, 2010). The role that fragmentation and power play in the greater policy arena has not been clearly expressed, however. Social movement theory provides insight into not only what role fragmentation of oppositional groups plays in the development of policy, but also how this fragmentation may be utilized so as to maintain a particular policy-making process/arena. The political context of social movement theory provides the explanation that structures and history are important, and that politics is not just a matter of resources or the ability to mobilize, but must be understood within the confines of the rules of the political game in which resources or the ability to mobilize are brought to bear. Similarly, the mobilization of bias aspect of social movement theory provides an explanation of the role of power and particularly the role of symbols and discourse in the management of power. Even further, both of these facets of social movement theory tie directly in with the chosen approach: policy frame analysis.

2.3 Social Constructions, Problem definitions and Policy Frames

2.3.1 Social Constructions, Problem definitions and Policy Frames

Social construction of actors also informs the structure of path dependency, by delineating potential group interactions. More specifically, it provides a means of understanding and organizing the power relations that are played out through the implementation of policy. In the case of ARTs regulation, the social construction

framework acts as the object that is being passed down through the path, in the form of a policy frame. Helen Ingram, Anne Schneider and Peter DeLeon offer six propositions that characterize how policy design and process interact with social values (Ingram, et al., 2007, p.98-112). The propositions of Schneider, Ingram and DeLeon are as follows: (1) policy designs determine who can participate in the policy making process through explicit and implicit means, (2) power determines the distribution of benefits and burdens to target groups, in a given policy, (3) policy designs differ according to the social construction of the target group, (4) social constructions created by policymakers are largely dependent upon 'approval or approbation', (5) the shape and structure of public policy is a potent, but not the only force for the change of social construction of given target groups, and (6) the context of policy design matters when predicting policy change (Ingram, et al., 2007, p.98-112). Application of these propositions reveals how social values and constructs can become important to future decision-making. In effect, the group social construction within a policy and the values of a society or a subset of the society interplay through policy feedback loops, as a result of the perceived success of previous policy outputs containing those social constructions (p. 112-113).

Social construction has been argued and understood to play a central role in the ARTs policy arena for a significant amount of time. (Bleiklie, et al., 2003) Although a number of social constructions have been argued to be in play, it has not been clearly documented how these social constructions may exist in policy or what role they play in the policy process. This study is interested in whether early policies can determine the outcomes of later policy debates and, therefore, later policy. The social construction framework allows this to be measured by focusing on the lock-in mechanism. The social constructions of traditional target groups would be expected to be found within successfully passed legislation and the social constructions of alternative target groups would be expected to be found in less successfully passed legislation. In the frames, found in Appendix C, the proposed social constructions of actors can be seen, in

conjunction with the proposed relationship they are hypothesized to have within each frame.

2.3.2 Problem definition & Problem Frames

One of the problems often attributed to path dependency theory is its inability to explain how lock-in occurs. In this study, it will be argued that this is primarily through problem definition and problem framing. David Rochefort and Roger Cobb describe a number of different ways of defining a problem, such as the social construction of conditions, referred to as the 'social construction of reality' (1994, p. 5-6). Problem definition can also affect what are 'valid issues' and whether those issues reach the agenda in order to be considered (1994, p. 8). On a more basic level, even the understandings within society can have an innate problem definition that can color how problems are realized (1994, p. 7). Additionally, problem definition is largely a product of discourse and rhetoric; in effect, the definition of a problem depends on how it was explained, what 'facts' are presented, and the relationship that is presented between ideas (1994, p. 9). Thus, discourse is imperative in understanding how problem definition affects many problems.

With regard to path dependency policy, problem definition not only adds to the complexity and ambiguity of political arenas mentioned by Pierson, but also heavily affects power asymmetries. This interplay among these four concepts of problem definition, social construction, policy frames and political structures can thereby be expected to create path dependency in policy-making, by virtue of limiting (1) agenda access and (2) political arena access, thereby restricting the recognition of potential problems and/or solutions. The theoretical perspectives of political context aspects of social movement theory and the mobilization of bias, introduce an alternative way of thinking about the impact that the introduction of ARTs has had and will be expected to

have, specifically, how pre-existing cultural and political structures can constrain future policy development.

As compared to problem definition, policy frame analysis has slightly more substance with regard to operationalization. Frame analysis has its origins in several areas. For one, it derives heavily from the frame concepts of social movement theory, such as collective action frames (Snow & Benford, 2000; Diani, 1996; Williams, et al., 2001). It also has connections to public opinion frames (Druckman, 2001). There are also connections to discourse analysis. In this context, I have chosen to look at the policy and the frames contained within the policy rather than the frames that create movement through groups and public opinion. The key difference between policy frame and problem definition lies in Snow's paraphrased interpretation of Goffman, in which he defines it as a "'schemata of interpretation that enable individuals to locate, perceive, identify and label occurrences within their life space and world at large" (1986, p. 464). It contains a 'diagnosis' and a 'prognosis' according to Lombardo and Meier (2006). This study, while adhering to the general aspects of the Multiple Meanings of Gender Equality (MAGEEQ) frame analysis, will use the terms 'problem definition' and 'solution definition' to define the diagnosis and prognosis aspects of the frame (Lombardo & Meier, 2006).

2.3.3 Understanding problem definition and policy frames in the context of ARTs

From a discursive perspective, there has been a great deal of controversy regarding how ARTs are discussed. The divisions between people in support of freedom in ART practice, those in favor of a complete ban and even those in favor of allowance but stronger rules are divided often by 'fuzzy' lines. Dion Farquhar, in her book *The Other Machine*, clearly parsed out the main divisions often seen within the realm of ARTs (1996). As she points out, the oppositional groups face more than one issue in formulating their position, including the fact that they might share an interest in the same

outcome as another group in support of a ban on ART, but their underlying reasons differ. However, she provides a clear framework from which to work in understanding and developing 'frames' through which to examine ART policies.

There appears to be very little previous frame analysis regarding ARTs, particularly with regard to policy frames and in the U.S. political context. Our approach to understanding the policy arena of ART is exploratory and unproven, but not unfounded. Given the wealth of literature on perspectives on ART, from 'pro', 'anti' and 'stringent' directions, it is believed that policy frames not only can be developed for ART, but that these frames can provide some insight into stability in the ART policy process.

2.4 The map for here on out

As stated earlier, this study seeks to assess (1) what current policy frames are articulated in the legislation produced relating to the clinical use and practice of ARTs and (2) how alternative policy frames are treated in the case of legislative passage. In the next chapter, the methods will be addressed. It is hoped that these methods will add something to the theory of framing. The fourth chapter is the frame analysis of legislation, which will act as the core of this study and the means of supporting the proposed hypotheses, also to be found within Chapter 3. Finally, the fifth chapter will contain the conclusions drawn from the fourth chapter, as well as address the theoretical and policy implications of the results.

CHAPTER 3

METHODOLOGY

3.1 Study data and research questions

While it is acknowledged that a huge part of the ART debate is based upon ethics, it is possible to understand the lack of policy change through policy theory, and specifically policy analysis. Though it may not be possible to resolve the debate with policy, it is possible to better understand the dynamics of the specific arena and how these dynamics appear to cause policy inaction. As alluded to in Chapter 1, I propose that key aspects of legislative policy movement are dependent upon the frames applied to the issue rather than the distributions of power or institutional arrangements alone. While a key underlying aspect of these frames may be derived from the values that stakeholders hold, I have chosen to examine policy change or lack thereof as explained from the perspective of problem definitions and frames.

In trying to understand ART policy in the US, not many pieces of legislation pertaining to ART are available. FCSRCA and its related policy statements are the primary piece of successful legislation at the federal level. In addition there are a few scattered pieces of successful legislation that exist at the state level. Given that this particular policy problem is very 'ill-structured' from a policy analysis perspective, the analysis in this paper shall be three-fold (Dunn, 2008). The first step was performed in Chapter 1, in which the different problems being 'perceived' by 'stakeholders' were defined through an abbreviated historical analysis, for the purpose of providing perspective on the stakeholders and context of the problems. The second step is the classification analysis, for the purpose of delineating the perceived groups of common problem definition. These two analyses (historical and classification analysis) are expected to provide the necessary frames for the third analysis, which will be a frame analysis of policies.

Therefore, historical analysis will be used to provide the 'backdrop' and context of the technologies within the political system, as well as to contextualize the origins of those frames that are proposed to exist. It will provide some insight into how 'key' stakeholders and all other stakeholders are recognized in this particular problem arena. This historical analysis will also heavily shape the understanding of the second and third segments of the policy context model presented in Chapter 2, figure 4.

Classification analysis and frame analysis were used to develop the applicable frames and analyze the frame differences between successfully and unsuccessfully passed legislation, respectively. For the purpose of the classification analysis, the three main reports on the status and use of ARTs were utilized, supplemented by samples of scholarly literature. As classification analysis is dependent upon logical consistency in order to assess its performance, Dunn outlined five rules to increase the probability of meeting that criterion: (1) substantive relevance, (2) exhaustiveness, (3) disjointedness, (4) consistency, and (5) hierarchical distinctiveness (Dunn, p. 99-100). Hence, this study uses documents that appear to have fully structured the 'problem' of ARTs (the reports), along with supplementary documents to satisfy the exhaustiveness requirement. The purpose of using classification analysis as opposed to other problem structuring methodologies that may reduce the potential for 'solving the wrong problem', is because of the lack of clarity of what the 'problem' with ARTs is. As alluded to with the question this study is based on, it may be the result of different constructions of what constitutes a problem.

For the frame analysis, legislation from the federal level and two state level congressional bodies were collected for the purpose of coding for policy frames by distilling the actors from each piece of legislation and comparing these actors and the narrative associated with them, to the idealized frames created through the literature and the classification analysis. The means through which these actors will be distilled is a three part process of (1) obtaining a word count, (2) distilling the actors from this word

count, and (3) re-matching the actors within their portion of the narrative of each bill. The purpose in performing this action is to (1) separate out the actual wording used to describe actors in legislation, as opposed to assuming that the idealized terms are used; and (2) to get an idea of what words appear to be a central feature of bills the state and federal levels of government bills, overall.

The historical analysis is key to my argument. First, the structure of the U.S. governmental system is an important aspect of why ARTs are managed in the way that they are. The federalist structure in conjunction with the separation of power divides the arenas of access and increases the political complexity and opacity of ART policy problems. While it has been argued that this structure facilitates the ability of groups to access power, by providing multiple arenas of access, it could also be argued that this split in arenas increases the probability of fragmentation of oppositional groups because the means of altering policy are so varied. While this paper does not aim to argue that point, it is hoped that the historical analysis will provide some insight into how the US political system may structurally provide for certain outcomes over others.

Stemming from separation of powers, federalism and bounded rationality is the following argument: Policy arenas in which the primary frames are heavily influenced by federalism and the separation of powers tend to be path dependent in their management. Therefore, the management of the ART policy arena, given that it is heavily influenced by both 'reproductive rights' and 'medical practice' arguments, should be path dependent. The hypotheses are therefore as follows:

H1: Legislative action is dependent upon the frame of the policy problem and the policy solution

H1a: legislative action will be unsuccessful when the diagnostic aspect of the policy frame targets benefits to a group outside of the “traditional ART frame”

H1b: Legislative action will be unsuccessful when the solution definition of the policy frame targets burdens to a group inside the “traditional ART frame” via an outside agent

H1c: Legislative action will be successful when the prognostic aspect of the policy frame targets agency to a group inside the “open ART frame”

and

H2: Early problem definitions created a path dependence of policy management in the ART policy arena by association of dominant frames with 'reproductive rights' and 'medical autonomy'

3.2 Data Collection

In this study, all federal level bills from 1989 onward associated with IVF were collected from THOMAS, a federal database containing congressional documents, hearings and public laws. Associated revisions were also collected. The primary method of determining appropriate word searches was to utilize Congressional subject terms listed with FCSRCA. Additional search terms were developed from the 'keywords' of a diverse number of scholarly writings on ART, including subject words from *Fertility and Sterility*, the main publication of ASRM. While the sample of bills may be biased slightly towards a 'pro-ART' frame, much of the literature on ARTs seems to indicate that a common set of terms largely seems to be understood to apply to their use. Nonetheless, this is acknowledged to be a potential weakness in this bill search technique. The reason for the selection of 1989 as the start year although ART practice in the US had begun in 1982 is that THOMAS only lists full texts of bills from 1989 onward online, and due to time and financial constraints, it was not possible to access bills from the central depository, for the purpose of collecting bills proposed prior to 1989, for the purpose of analysis.

Data was also collected at the state level, limited to two state cases. The state of Georgia was selected because legislation was recently introduced that would have managed ART clinical use and practice in the form of State Bill 169. The second case selected was the state of California, in part because it was the location of the most recent

controversy related to ART, 'octomom'. This selection was also due in part to the fact that it is one of the few states in the U.S. having several pieces of active legislation directly relating to the use and availability of ARTs (NCSL, 2011). The search terms used for collected bills were the same as those used at the federal level, in order to maintain consistency over the two cases for later comparison. As with the sample of federal bills, it is acknowledged that this selection has the potential to bias the outcome of the bill search.

Of the bills collected, not all were utilized because of the narrowness of the topic, focusing on the management of clinical use and implementation of ARTs. While I acknowledge that legislation regulating and monitoring IVF research laboratory techniques and practices is not inherently independent of legislation attempting to regulate and monitor clinical IVF practice, I have attempted to limit the examination of bills to those that specifically address the medical/clinical practice of ARTs. Therefore, any bills that applied specifically to laboratory research protocols and IVF were discarded as they could not be coded within the frames constructed.

A minor part of the data collected was information regarding hearings for a selection of the bills. The primary purpose of collecting this information was to determine the more obvious actors that participated in developing the views related to the policy arena. This was primarily done at the federal level, because these hearings were the most easily accessible. Also for the historical analysis portion of this project, historical writings were used as the primary source of information. Secondary sources, such as scholarly works on the history of medicine and medical policy in the U.S. were also relied upon to build the story of how the history of medical autonomy and 'reproductive rights' influenced the development of frames and perspectives in the debate.

The classification analysis was based on logical divisions as informed primarily by the three large government reports created on IVF and other related technologies. This was supplemented by scholarly articles in discourse analysis, which has done some work on the division of different stakeholder groups in the ART arena; published medical

opinions; feminist critiques; religious critiques; legal writings; and other secular critiques. While this is acknowledged to have its limitations, particularly with respect to whether it successfully addresses the 'right question', per Dunn, it was believed that the main issue to be addressed before any analysis of frames in policy, was a 'clarification of concepts', which does not appear to have occurred in previous policy analyses of ART issues (Dunn, 2008, p. 96).

3.3 Summary of Sources

In total, 105 bills were collected. At the federal level, this included 52 bills of which 44 failed to be passed and one was passed into law. Originally, 52 bills had been collected at the federal level, but due to the use of the computer-assisted qualitative data analysis software (CAQDAS), NVivo (QSR, International, 2009), it was not possible to import all of the bills into the program, therefore the eight federal bills that were not imported were not used. At the state of California level, there were 43 bills collected, of which 18 failed to be passed. At the state of Georgia level, 17 bills were collected of which 13 failed to be passed. Given that we have collected bills as the primary set of data and a limited amount of related hearing information, the primary means of indicating 'failed' bills will just be whether or not they managed to be passed through both the house and senate bodies at the federal and state levels of government. A more detailed description of the legislation collected for this study can be seen in Appendix D. Even further, in **Table 13** of Appendix D, the legislation along with the publications on ART by federal level organizations can be seen. Both of these items are organized by year of the final version of the bill. The green shading indicates the years where a Congressional hearing on the topic of ‘ART’ occurred.

Table 1: The data for the frame analysis

Bill 'level'	Number Available	Number Passed	Available Range of Dates	Range of Dates Used

Table 1: The data for the frame analysis

Federal	44 (52)	1	1989-Present	1989-2010 [2009-2010 legislative year]
Georgia	17	4	1995-Present	1995-2010 [2009-2010 legislative year]
California	42	27	1993-Present	1993-2010 [2009-2010 legislative year]

CHAPTER 4

CLASSIFICATION AND FRAME ANALYSIS

4.1 Classification Analysis

The cleavages of this analysis were challenging, primarily because I have chosen to adhere to the principles of classification analysis outlined by Dunn. Given that he outlined 5 principles of classification analysis: (1) substantive relevance, (2) exhaustiveness, (3) disjointedness, (4) consistency, and (5) hierarchical distinctiveness (Dunn, p. 99-100), it was found that adhering to disjointedness and consistency became problematic because of the possibility of multiple frames existing within a single document. However, I chose to interpret the need for consistency to apply to the unit of measure (in this case, individual word/phrases/concepts) without the whole bills having to consist of a single frame.

The classification analysis can be seen in the figures below. The primary division between groups was one of those who favored 'more stringent' rules for ART use and those that favored 'less stringent' or 'status quo' rules for ART use (hereby, referred to as 'status quo'). In Dion's *The Other Machine*, similar distinctions were classified as liberal discourses and other discourses, of which other included fundamentalist and radical discourses (1996, p.18-25). As can be seen from the diagram in figure 5, the 'status quo' group is divided only between 'couple' and 'practitioner' foci. This division is resultant of two papers by David Adamson, in which he outlines the 'hierarchy of interests' in the ART policy arena to be primarily patients, in which he included gametic materials and future children, and secondarily 'physicians and embryologists', followed by all other interests, including professional organizations (Adamson, 2002; Adamson, 2005).

The divisions found within the 'more stringent rules' group, were initially based upon whether these groups were in favor of the technology within a spectrum of rules to be applied, or in favor of a complete ban. The reason for placing both 'rules' based and 'ban' based groups under the same umbrella of 'more rules' is primarily because prohibition can be seen as yet another form of greater stringency. Within this division, the Catholic Church and secular objectors are those that support no use of ART. Within Dion's analysis scheme, these groups could be considered analogous to religious fundamentalist, secular fundamentalist and feminist radicals (p.95-127).

The division of 'increased rules' groups between women, child/embryo/fetus and society/public health, was through a number of arguments in the scholarly literature. Regarding the 'women' grouping, there have been a number of questions, particularly early in ART development, about the safety and the social impact of the technology. As mentioned in section 1.3.1, some concerns are due to the physical short and long term health impacts that are not necessarily understood or are not well conveyed to the parties involved (Kerian, 1997). Others concerns have to do with the commoditization of 'the womb' and the concern for the potential for women or subgroups of women to become defined only by their reproductive capability (Kerian, 1997). This is distinguished from the 'feminist' grouping of the secular, ban branch beyond just their desire for rules versus ban, but also because we define the 'feminist' grouping to have a larger concern for the social position and pressures upon women to become mothers and bear children (Birenbaum-Carmeli, 2003). An example of an organization that holds more 'feminist' group interests would be the Feminist International Network of Resistance to Reproductive and Genetic Engineering (FINRRAGE).

The next group within the 'increased rules' branching, is those that focus on the future child, the fetus or the embryo. While seemingly this group could be subdivided further into those three classifications, there is a lack of evidence that there are representations of groups with a concern for one over the others. Many of the interests of these groups could be considered to overlap with the 'right-to-life' argument, found in abortion rights debates and discourse, but given the difference in technology there are some that fall outside of that debate. For example, the concern over future litigation based upon the idea of 'wrongful birth', is a concern of law related to the applications of ARTs. This litigation has been hypothesized to be a consideration due to birth defects and other health outcomes as a result of ART (Losco, 1989; Rosato, 2003). Another concern is the valuation and psychological effects of conceptions through ART, for example, the ability of parents to bond with children made possible through gamete donation and the valuation of children after the expense of ART-related treatments (WHO, 2002). Even further, the concerns for the embryo range from its ability to inherit after the death of a 'parent', its ability to be 'adopted' and the damage incurred due to storage, not to mention the concerns over the disposal of them in the event that the couple no longer requires them (Charo, 2002). Similarly, concerns for the fetus are related to those concerns found in the abortion debate, such as multi-fetal reduction, which is in effect abortion of some fetuses for the purpose of maintaining the pregnancy and the health of the remaining fetuses (Collopy, 2004). Other concerns relate to the rights of the mother to conduct herself in a manner that may be detrimental to fetal development or well-being (Merkens, Browner, & Press, 1997). Often referred to as the 'mother-fetal conflict', it provides another aspect of ARTs that is controversial. Overall, a key reason for the combination of

three categories for this classification branch, is that they are not very distinct from each other in the sense that all of the concerns somewhat overlap in time. For example, in order to 'protect' the fetus from 'damage' or poor outcome, some steps may have to be taken at the time an embryo was being implanted, and therefore, not a fetus. Similarly, the measures of 'poor outcome' would not be easily assessed until the fetus had become a child, at which point it would have 'rights', whereas in its current state, it does not.

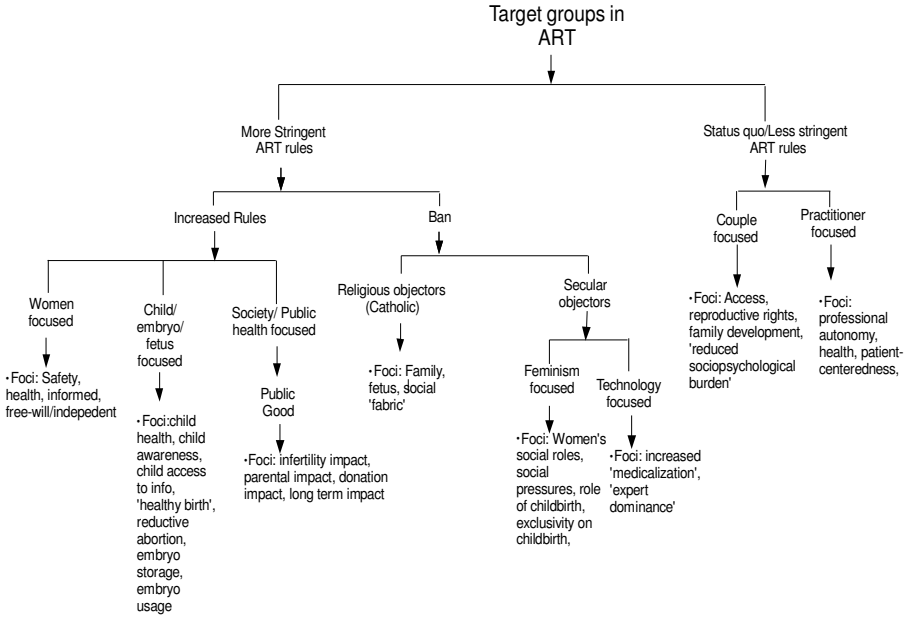


Figure 5: Identified target groups in the ART policy arena

The final classification group of 'society/public health' is considered to be separate from the other concerns of 'women' and 'children', though they are very closely related. For example, in this classification system, the concern over the impact of widespread donor gamete distribution could be considered a concern of the 'child' group, in that they may have less knowledge of their genetic origins, but here it is classified as a 'societal' concern over the inability to maintain clear lines of genetic relationships, thereby

increasing the potential for overlap of similar genetic backgrounds. These concerns also include such issues as the long term outcomes of ART, from a population perspective. An example of such would be the tracking of morbidity associated with ART-related births. While this too could conceivably fall under the auspices of the previous two categories, data related to birth morbidity is currently collected under the auspices of public health, though not necessarily tied back to ART.

The second stage of this classification analysis was to identify potential agents expected to play a part in the management of ARTs, and can be seen in figure 6. This system is NOT intended to be a flowchart of the organizational chain of command, only a general means of classifying the level of governance involved. Furthermore, it is currently made up of only those organizations that have previously participated in policy-making. There may be other organizations that could fulfill a similar position in regulating this industry that have not previously been involved, such as the intervention of the FTC on the advertisement of success rates.

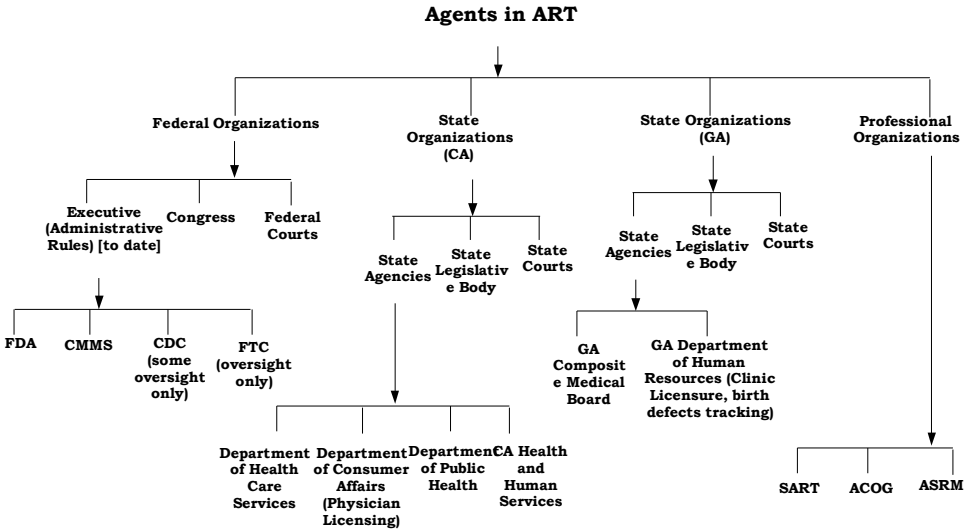


Figure 6: Actors identified to be key in the solution action

The purpose of this classification analysis was to inform and add structure to the frame analysis of section 5.2. Given the breadth of the topic of ART and its policy arena, it is believed that this analysis did fulfill the five principles of classification analysis outlined in Dunn (p. 99-100). Alternative 'opinion' classification systems, such as a prevention/solution/ban division or medical/social/religious, may have served a similar purpose, but either would have expanded the scope of the project (the former) or created too many logical overlaps for the purpose of our frame analysis.

4.2 Frame Analysis

For the frame analysis, 48 federal level, 17 state level bills from Georgia, and 48 state level bills from California were collected using a common set of terms, which can be found in Appendix B. As can be seen in **Error! Reference source not found.**, the federal level bills were collected for the widest range of dates. California and Georgia had a relatively similar range of dates that bills were available for, with California having online records available for two years more. This complicates the inter-frame comparison slightly, particularly between federal and state levels, because bills were not available for all incidences on the timeline of Figure 16. However, because I was also doing an intra-frame comparison, these bills were left in the sample. Even further, in additional analysis, through which I coded for frames using Nvivo (QSR, International, 2009), eight Federal level bills were excluded due to size/import error that could not be overcome.

Table 2: The breakdown of data collected for the frame analysis

Level of bills	Number Available	Number Passed	Available Range of Dates	Range of Dates Used
Federal	40 (48)	1	1989-Present	1989-2010 [2009-2010 legislative year]

Table 2: The breakdown of data collected for the frame analysis

Level of bills	Number Available	Number Passed	Available Range of Dates	Range of Dates Used
Georgia	17	4	1995-Present	1995-2010 [2009-2010 legislative year]
California	48	27	1993-Present	1993-2010 [2009-2010 legislative year]

For bounding purposes, the set of search terms used were narrowed to only those that directly referenced ARTs or specific ART technologies. It is acknowledged that not only is this set of search terms laden, but it also excludes several potentially promising samples. Examples of excluded terms included 'infertility', which resulted in the inclusion of several bills that would have broadened the scope significantly. This broadening in scope also had tradeoffs, in that it may have caused a significant divergence in topic away from the original research question, which would have stretched this project beyond both time and resources.

The hypothesis in Chapter 3 is that frames containing historically negatively constructed actors will result in failure of passage whereas those containing historically positively constructed actors will result in successful passage. For purposes of analysis, the frames with historically positively constructed actors will be designated ‘traditional’ frames and those that contain historically negatively constructed actors will be referred to as ‘alternative’ frames. Given the history of 'reproductive rights' and the medical institution in the U.S. outlined in Chapter 1, I propose, as can be seen in the frame descriptions of Appendix C, that traditional frames contain the patient (or couple or spouse) and the physician, and any private professional or consumer organizations, such

as in the 'status quo' part of the classification analysis above, Figure 5. Therefore, it is proposed that those bills that involve state or federal level government action, monitoring or program development will be less successful. This is particularly the case if the solution frame does not provide for agency of the ‘traditional ART frame' group, particularly the more powerful actors such as physicians. The following four figures are models of the hypotheses. Figure 7 is the general framework expected to be in play. Figure 8 is the expected case for the identification of an ‘alternative frame’ group as a recipient of benefits or the identification of a ‘traditional frame’ group as the cause of a problem. Figure 9 is the expected case for the exclusion of ‘traditional frame’ actors from the development and management of a solution. Similarly, Figure 10 is the expected outcome for cases in which a traditional actor is identified for participation in the solution definition, but additional burdens are placed upon them, outside of self-management.

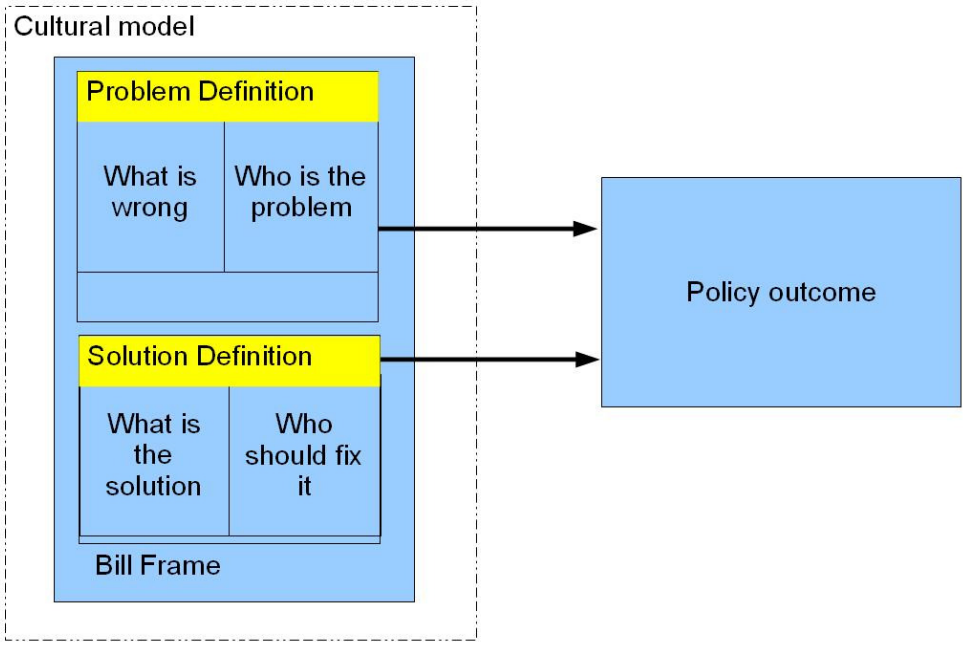


Figure 7: Overall framework for Hypothesis 1, for the purpose of explaining the cases in which a frame will or will not result in passage. Modification of the political context model found in *Blackwell's Companion to Social Movement*, p. 70 (Kriesi, 2004)

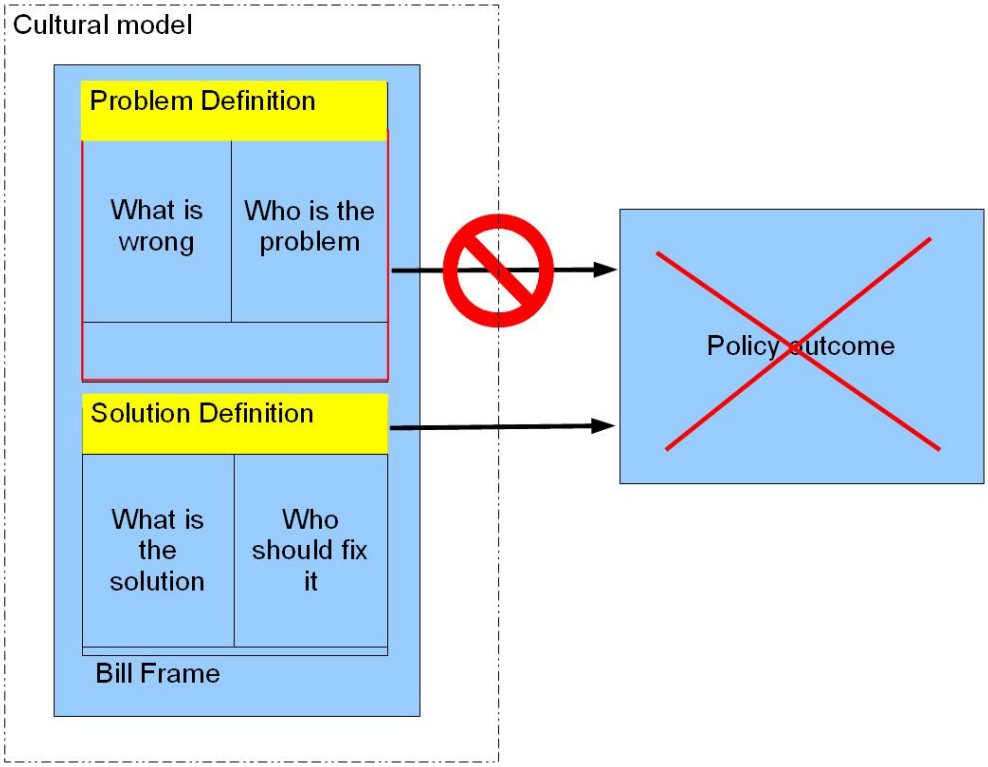


Figure 8: The case in which an alternative actor is identified as the beneficiary of the problem frame or a traditional actor the cause of it. Modification of the political context model found in *Blackwell's Companion to Social Movement*, p. 70 (Kriesi, 2004)

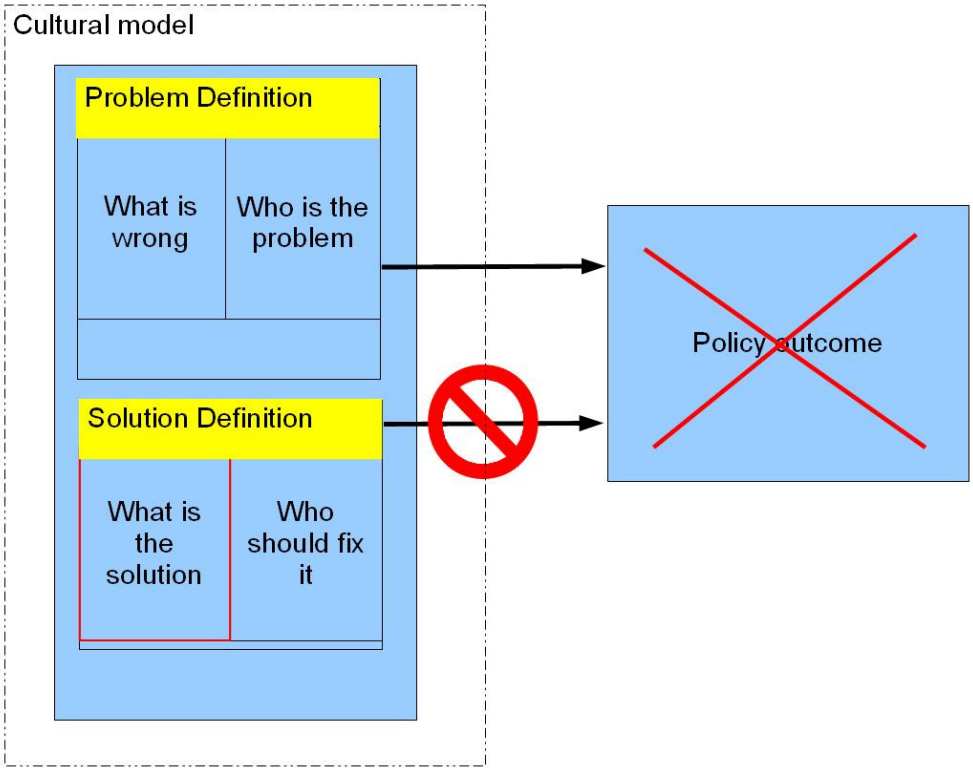


Figure 9: The case in which a bill identifies a solution that removes the option for primarily self-management on the part of dominant actors. Modification of the political context model found in *Blackwell's Companion to Social Movement*, p. 70 (Kriesi, 2004)

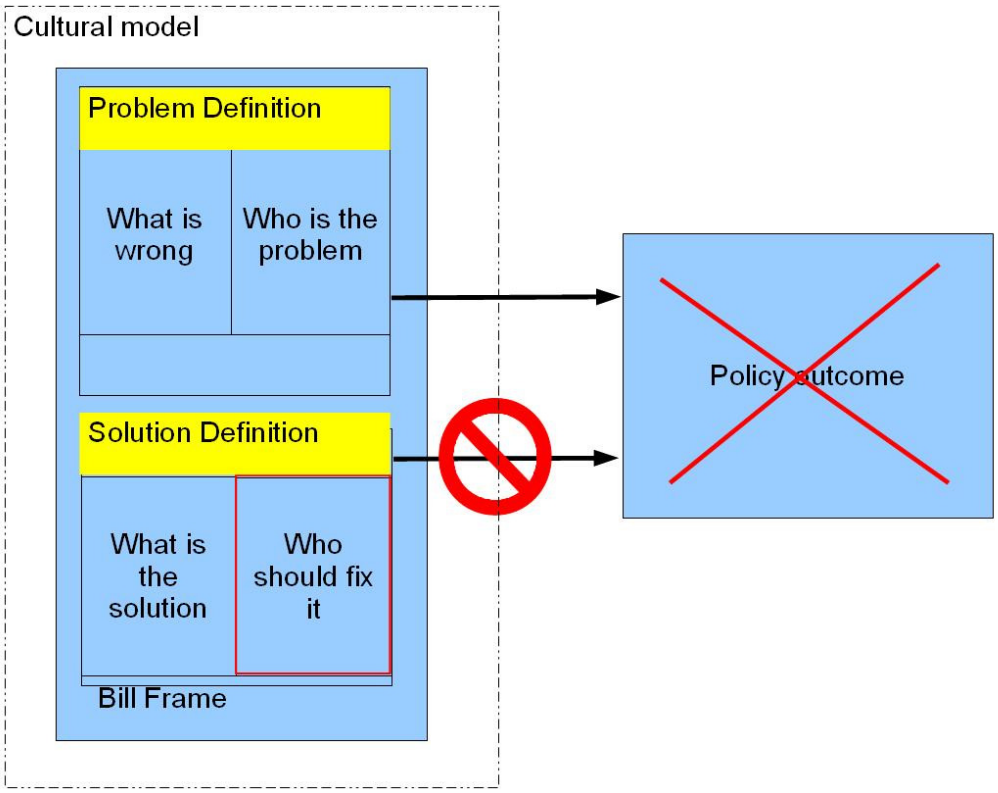


Figure 10: The case in which a bill excludes traditional actors, particularly historically powerful traditional actors, for participation in the development and implementation of the solution. Modification of the political context model found in *Blackwell's Companion to Social Movement*, p. 70 (Kriesi, 2004)

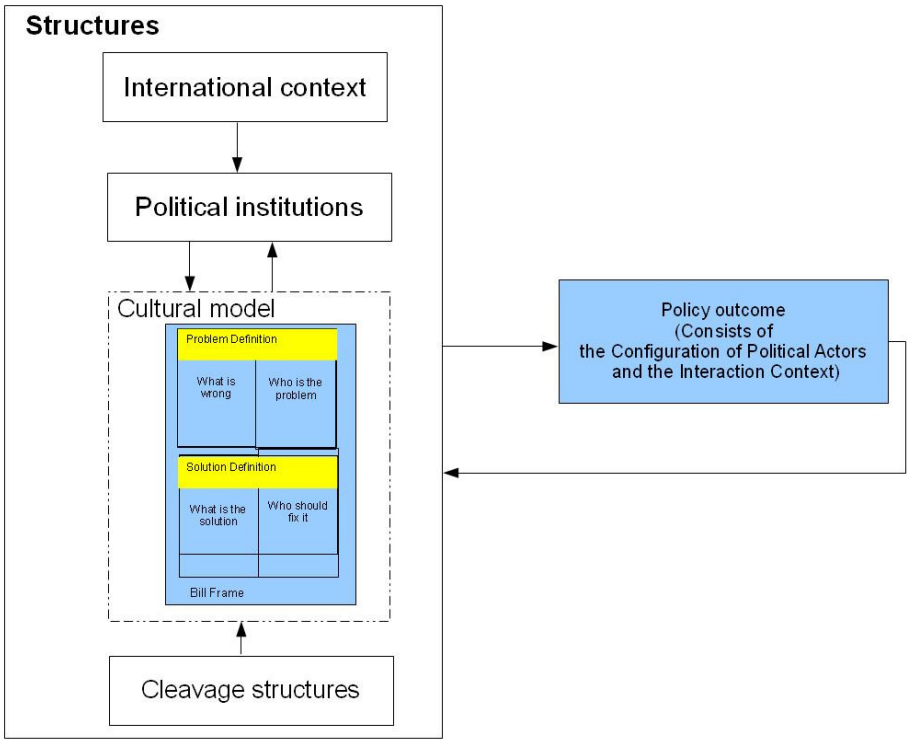


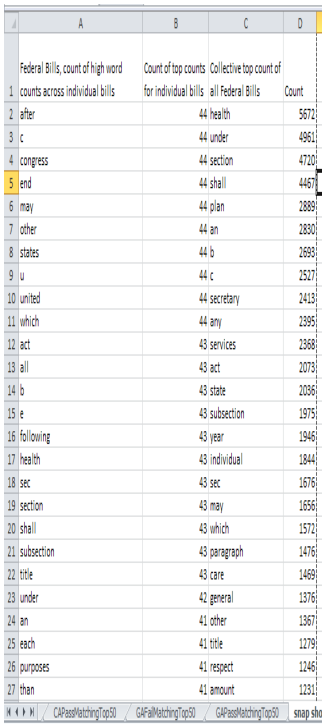
Figure 11: The overall case of frames over time. It is expected that there should be some appearance of feedback. Modification of the political context model found in *Blackwell's Companion to Social Movement*, p. 70 (Kriesi, 2004)

Given that the structure of government bills does not guarantee that the problem definition will be explicitly stated, it was necessary to develop a system of distinguishing problem and solution frames. In this study, the primary means of finding the problem definition stemmed from word counts. The secondary step in the case of a dearth of key words was to use the statement of purpose of the bill. An additional step of identifying the problem definition was to identify whether the actors pointed in the definition were recipient of 'benefits' or 'burdens' within bill. This distribution of benefits and burdens along with the preconceived actor association with frames was then used to determine whether the bill would have been expected to pass or fail. Similarly, the solution definition also used actor location and recipient status to determine whether a bill would have been expected to pass or fail. A list of frames and actors can be found in Tables 9 & 10 of Appendix C.

As has been stated by multiple frame scholars before, the methods of frame analysis have generally been less grounded (Koenig, 2004). Whereas Goffman's original analysis depended largely upon examination of the narrative, it has been pointed out that this method often limits the sample size that can be examined. Following in the footsteps of those that have attempted to perform frame analysis with computer-assisted qualitative data analysis software (CAQDAS), I attempted to use Nvivo for the purpose of this frame analysis. As a result, this part of the analysis was broken down into three steps in order to target the aspects of legislation that this study was interested in. Given that the hypotheses were heavily reliant upon the actors of each piece of legislation and the actions upon those actors, it was helpful to start with a word count for each bill, as well as across each sample set. The second step consisted of condensing these word lists down to just actors or potential actors, given that in the English language, some terms can function as nouns and other parts of grammar. The primary purpose of pulling out actors from the legislation is two-fold: (1) it allowed for the identification of terms used to describe the parties that had already been identified from the literature as potentially important and (2) it provided preliminary results regarding the effectiveness of the frames previously selected. It is important to note that while all bills were run across a common set of actors, the final means of examining the legislation for frames was to group them by successfulness of their passage ('success' of bills) and whether they were produced through a California, Georgia or federal legislative body ('level' of bills).

The initial step of a word search was performed in part so that common words across all bills could be identified and also to provide the researcher with an understanding of the contextual differences between each subset of bills, a subset being

defined as the success (pass/fail) of a piece of legislation at a given level (Federal/California/Georgia). The word count was performed using Nvivo, two times. Once on the bills as a collective across a subset defined by its success and level, and once across each bill within each subset. The top thousand words were collected and the 'non-words' cleaned from the count. Non-words consisted primarily of numerals and numeric ordinals, which were expected to add little to the narrative. As stated above, this word count helped to determine how the use of words may differ between the different subsets being examined. A selection from the word count can be seen below in Figure 12.



	A	B	C	D
1	Federal Bills, count of high word counts across individual bills	Count of top counts for individual bills	Collective top count of all Federal Bills	Count
2	after	44	health	5672
3	c	44	under	4961
4	congress	44	section	4720
5	end	44	shall	4467
6	may	44	plan	2889
7	other	44	an	2830
8	states	44	b	2693
9	u	44	c	2527
10	united	44	secretary	2413
11	which	44	any	2395
12	act	43	services	2368
13	all	43	act	2073
14	b	43	state	2036
15	e	43	subsection	1975
16	following	43	year	1946
17	health	43	individual	1844
18	sec	43	sec	1676
19	section	43	may	1656
20	shall	43	which	1572
21	subsection	43	paragraph	1476
22	title	43	care	1469
23	under	42	general	1376
24	an	41	other	1367
25	each	41	title	1279
26	purposes	41	respect	1246
27	than	41	amount	1231

Figure 12: Federal 'Failed' Bills: An example of the word count comparison between those words that were encountered frequently between all individual bills counts and those that were encountered frequently in a cumulative word count across all bills

From Figure 12, only a few words appear to stand out as potentially important concepts within federal bills that failed to be passed. As stated previously, the word count was run across the aggregate of a subset, as well as across individual bills within a subset. The aggregate count was to determine whether some terms or themes appeared to occur

more frequently overall within a given subset. The individual counts were used in a second count. This second count served as a means of reinforcing the aggregate count by confirming whether a commonly counted word was a theme among many bills or a select few. This can be seen in Figure 12 as the difference in counts between column B and D. Column B contains the twice counted words, which represent how many bills each word was found in. Column D contains the counts of words in aggregate. It is clear from a comparison between these columns in Figure 12, that health is an important focus in this subset, as it occurs across 43 of the 44 bills and is counted highly in the aggregate. From this comparative word count, it could be tentatively argued that most of the bills in this subset may contain at least some aspects of the traditional frames of 'consumer' or 'medical practitioner'. However, given that this is just the first step of this analysis, there is a significant amount of context still lacking.

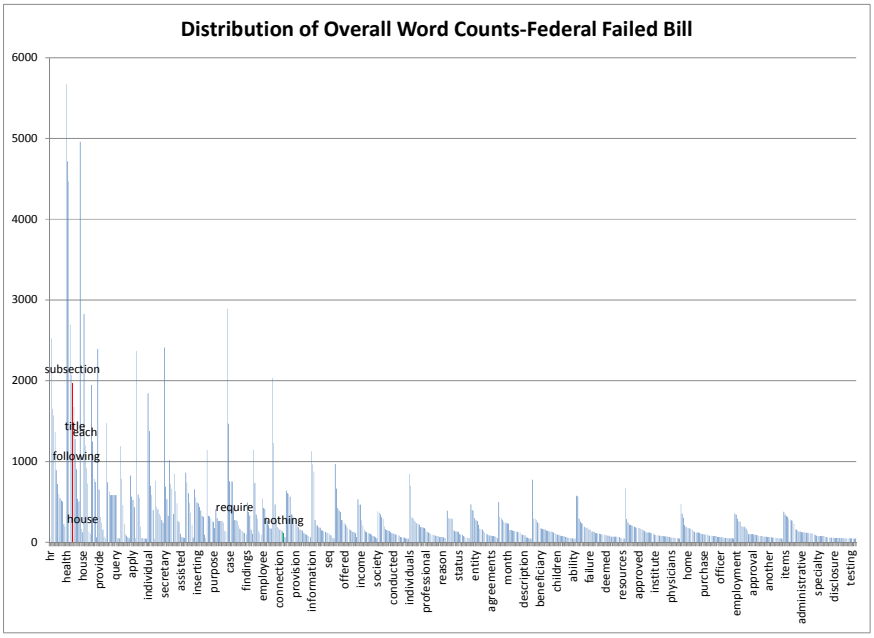


Figure 13: Federal Failed Bills word count distribution

Charts such as the one in Figure 14 below, provided some slight additional perspective to the word counts. It was hoped that by charting the word counts of bill

subsets, a pattern of key words would be distinguishable for the purpose of comparing between subsets, but it largely appeared that highly counted words tended to be random. For clarification, the chart below is the result of charting the aggregate word count, ordered by number of bills occurred in and aggregate count, along the x-axis, while the y-axis represented the aggregate count. This resulted in the pattern seen above, in which each clear peak represents the highest count in a bill count.

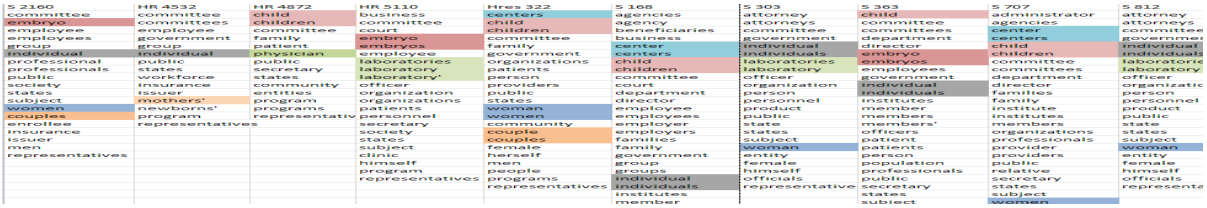


Figure 14: Set of actors contained within a word count of Federal level bills that failed to be passed

An important aspect of performing the word count, beyond just its facilitation of the second step, as will be discussed in the next paragraph, is its usefulness in finding potentially uniform word usage that assisted in the finding of the 'problem definition' and 'solution definition' frames. The default assumption in this study was that the primary purpose of each bill was to outline a 'solution frame'. For example, federal failed bills often (26/44) designated a problem in a section referred to as 'findings'. For California bills, problems were more often labeled by 'existing law' (41/42). Georgia, in contrast to the other two cases under study, appeared to have very little wording to distinguish the problem frame from the solution frame. There was use of 'findings' for a few Georgia bills (5/12), but overall, many of the bills failed to identify the 'problem definition' independently from the proposed solution of the bill.

From Figure 15, the second step used to find frames can be seen, in which the actors from each frame were filtered out of each word count. While it is clear that several words are common across many bills, such as 'state'/'states', it is also apparent from this

initial parsing, that other words are not as heavily used, such as 'unborn'. These word counts were color coded so as to approximate which words would represent potential frames or not. From the sparse usage of such terms as 'unborn' however, it can be inferred that the term may be highly associated with a particular frame, because it invokes specific images regarding (1) reproduction and (2) legitimate actors. However, like the word counts, without the associated narrative, drawing conclusions from these terms alone would be premature. Overall, this above step of a key actor count provides an important boundary identifying step of determining what terms are commonly used to designate actors. Even further, it allows for a clarification in tying commonly used terms to frames, an important step considering that our frames are actor-centered. An important limitation of this step is that the ability to distinguish all actors in a list of words is limited, due to some terms serving multiple functions within language, such as 'relative' (a family member, or a term relating concepts). There is also the fact that pronouns have the potential to mask points of the narrative because they reduce the actor to an even more generic term.

The third step of finding a frame relied upon several matrices in order to compare actor co-occurrences, actors' occurrences within bills, and actors' co-occurrences with terms of interest. Figure 15 below shows a matrix that pinpoints the actors contained within each bill, by subset.

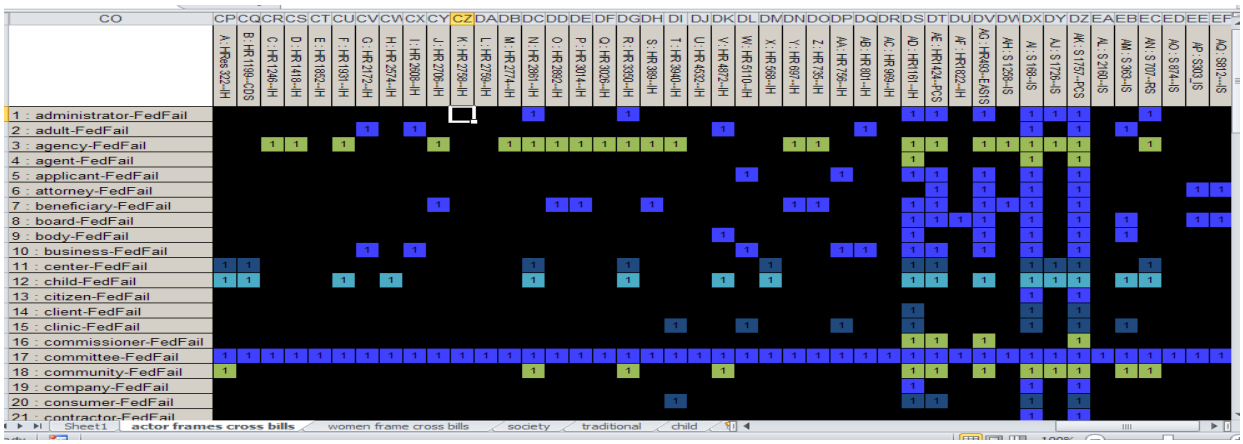


Figure 15: An actors x bills matrix, for federal level failed bills. The purpose of this matrix was to identify which bill utilized which actors.

From the matrices created, the narratives containing actors of interest could be pinpointed.

Overall, word counts provided an important step in the processing of the narrative in this data set. It made it possible to determine how actors appear in bills. Second, it provided insight into standard and non-standard wording of bills. While it does share some similarities with content analysis and 'keying' in the original form of frame analysis (Goffman, 1974, p. 43-44), it is hoped that this means of parsing apart the actors from the remainder of the narrative provides some system through which frame analysis can be more methodically approached in the future. It is noted that an additional aspect to be added in the future may be to also parse out potential verbs and adjectives in order to create a further detailed set of matrices to approach the narrative.

4.2.1 An overview of the contents of federal level bills

The federal level legislation provided its own set of challenges. For example, the keying to identify statements indicating potential problem statements was not uniform across all bills. As mentioned above, twenty-six out of forty-four bills contained the term 'findings', a term that would clearly identify what was determined to be the problem to be

solved. In order to navigate around this issue, it was decided that the purpose statement also could serve as the means to determine the problem frame. This was supplemented by the narrative found with the 'findings' key, as available. Another issue was the fact that there was only a single passed bill, thereby limiting the potential for within-level comparisons. Given that this was expected, it was only possible to disseminate what frames were potentially in play within the legislation and look at the changes from a historical perspective.

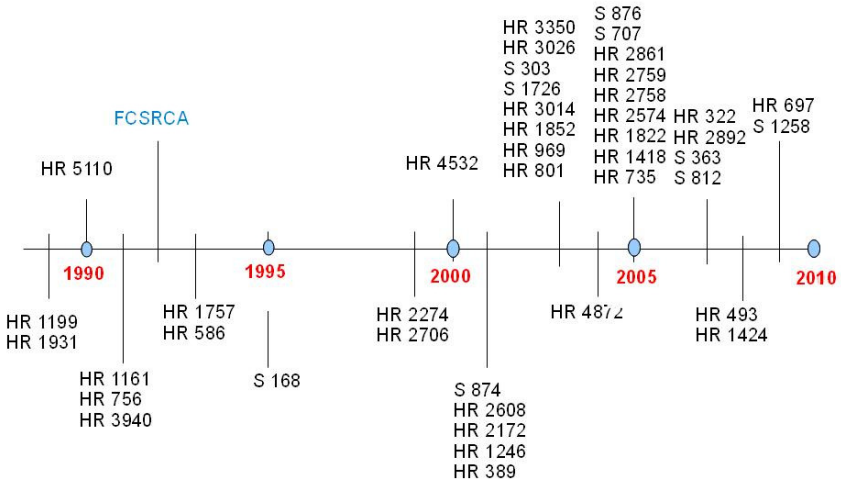


Figure 16: Federal timeline of bills. The blue highlighted bill is the only passed bill at this level.

Figure 16 above shows the time line of federal level bills collected for this study. As can be seen from both this figure and the Chapter 3 outline of data, the number of passed bills at this level is limited to one, FCSRCA. For clarification purposes, the data in the following sections will be ordered in the manner below, as exemplified by Table 3.

The quotes listed in the 'statements of frame' section of the table, will be ordered according to the numbering of the quadrants.

Table 3: Organization of data

bill	purpose	Actor	Scope	
		1	*2*	
		3	*4*	
Statements of frame	Quotes, listed by quadrant			

Figure 16 above shows the time line of federal level bills collected for this study.

4.2.1.1 Federal Successful Bill: FCSRCA

Comparison of all the bills cannot be completed without an understanding of them within their individual subsets. Given that much of the critique regarding policy has been aimed at the federal level, the frames at this level are of primary interest. The limited number of successfully passed federal bills limits what can be said about whether frames affect the ability of a piece of legislation to be passed. However, it may provide some information about the context of ARTs at this level and how they tend to be presented.

The first bill examined for frames was the only passed bill at the federal level, FCSRCA. The structure of this particular bill has no keyword to designate a separate problem statement from its solution statement, so it was concluded that the problem statement was implicit within the statement of the purpose of the bill. FCSRCA states that its purpose is “to provide for reporting of pregnancy success rates of assisted reproductive technology programs and for the certification of embryo laboratories”. Given that the approach of this study was based primarily upon the actors' representation within the frame, it is important to note that the primary actor of this problem statement is 'embryo laboratories', as is noted in **Error! Reference source not found.**, below.

Table 4: FCSRCA frame

Fertility Clinic Success Rate and Certification Act of 1992 (FCSRCA)	Stated Purpose	Actor	Scope	
	"to provide for reporting of pregnancy success rates of assisted reproductive technology programs and for the certification of embryo laboratories"	*Embryo laboratories [target of action]; practitioners of medicine [excluded from action upon]; consumers [implicit]*	*Unclear definitions of ART procedure success rates and inconsistent or unclear procedures taken by fertility clinics in the completion of an ART cycle, EXCEPT for the practice of medicine*	Problem Definition
		Secretary, consumer organizations, professional organizations, 'the state', accreditation organizations	*Secretary: Development of (1) a* model *certification program and (2) a measure of success rates for embryo lab-associated ART programs* *'the State' & accreditation organizations: the implementation of a modified certification program; collection of proscribed data; submission of data and certification reports to the CDC* *consumer & professional organizations: source of consultation for the development of (1) a model certification program and (2) a measure of success rates for ARTs*	Solution Definition
Statements of frame	**1:** "to provide for reporting of pregnancy success rates of assisted reproductive technology programs and for the certification of **embryo laboratories**" "In developing the certification program, the Secretary [or the State] may not establish any regulation, standard, or requirement which has the effect of exercising supervision or control over **the practice of medicine** in assisted reproductive technology programs." "(a) CONSULTATION- In developing the definition under subsection (b), the Secretary shall consult with appropriate **consumer** and professional organizations with expertise in using, providing, and evaluating professional services and embryo laboratories associated with assisted reproductive technologies." **2:** "to provide for **reporting of pregnancy success rates** of assisted reproductive technology programs and **for the certification** of embryo laboratories" STANDARDS- The certification program shall include the following standards developed by the Secretary: A standard to assure **consistent performance of procedures** by each embryo laboratory certified under the certification program or by an approved accreditation organization in a State which has not adopted the certification program. A standard for a quality assurance and a quality control program **to assure valid, reliable, and reproduceable procedures** in the laboratory. A standard for the **maintenance of records (on a program by program basis) on laboratory tests and procedures performed**, including the scientific basis of, and the methodology used for, the			

Table 4: FCSRCA frame

	tests, procedures, and preparation of any standards or controls, criteria for acceptable and unacceptable outcomes, criteria for sample rejection, and procedures for safe sample disposal. A standard for the **maintenance of written records on personnel and facilities** necessary for proper and effective operation of the laboratory, schedules of preventive maintenance, function verification for equipment, and the release of such records to the State upon demand....” **3:** “the **Secretary** shall, in consultation with the organizations referenced in subsection (c), define pregnancy success rates and shall make public any proposed definition in such manner as to facilitate comment from any person (including any Federal or other public agency) during its development.” “the Secretary shall consult with appropriate **consumer and professional organizations** with expertise in using, providing, and evaluating professional services and embryo laboratories associated with the assisted reproductive technology programs.” “A **State** may qualify to adopt the certification program if the State has submitted an application to the Secretary to adopt such program and the Secretary has approved the application.” “A State which has adopted the certification program may use **accreditation organizations** approved under section 4 to inspect and certify embryo laboratories” **4:** “Such an application shall include-- assurances satisfactory to the State that the embryo laboratory will be operated in accordance with the standards under subsection (d), a report to the State identifying the assisted reproductive technology programs with which the laboratory is associated, and...” “The certification program shall include the following standards developed by the Secretary: A standard to assure consistent performance of procedures by each embryo laboratory certified under the certification program or by an approved accreditation organization in a State which has not adopted the certification program. A standard for a quality assurance and a quality control program to assure valid, reliable, and reproduceable procedures in the laboratory. A standard for the maintenance of records (on a program by program basis) on laboratory tests and procedures performed, including the scientific basis of, and the methodology used for, the tests, procedures, and preparation of any standards or controls, criteria for acceptable and unacceptable outcomes, criteria for sample rejection, and procedures for safe sample disposal. A standard for the maintenance of written records on personnel and facilities necessary for proper and effective operation of the laboratory, schedules of preventive maintenance, function verification for equipment, and the release of such records to the State upon demand. A standard for the use of such personnel who meet such qualifications as the Secretary may develop.”

However, a further reading of narrative of the bill reveals references to other actors that can be directly tied to the problem statement, thereby providing further context. For example, the mandate for the creation of a model certification program states explicitly that the Secretary and the state,

> "In developing the certification program...may not establish any regulation, standard, or requirement which has the effect of exercising supervision or control over the practice of medicine in assisted reproductive technology programs."

In stating that the practice of medicine may not be infringed upon, the U.S. Congress is clearly excluding the consideration of a potential actor as part of the problem, i.e. those that 'practice medicine'. Even further, it indicates that despite the tie between the practice of medicine in ART programs and the embryo clinics of interest, only some of the actors in the entity referred to as 'fertility clinics', are under scrutiny: 'embryo laboratories'. This statement further excludes the attached body of ART programs from sanctions, i.e. the monitoring and certification that is being applied to embryo laboratories. An even less explicit actor of this activity are consumers of the fertility clinic. Within the bill, they are mentioned a mere two times, both as a term to describe other organizations that may be 'consulted' in the development of a model certification program. An important point of note regarding these three actors in this bill is the fact that, while they all may play a part in how the problem is defined, their roles are significantly different. The mentioning of the embryo clinics as the explicit actor clearly identifies them as the means of solving the perceived problem (Rochefort & Cobb, 1994, p. 23). The expression that sanctions could not be extended to those that practice medicine in assisted reproductive technology implies something not only about the practitioners, but also about the embryo laboratories. From Ingram and Schneider's social construction of actors matrix, it can be hypothesized that both entities practitioners and laboratories may be perceived as 'contenders' in the policy arena, i.e. actors considered to be stronger but also undeserving of benefits. In the language of Schneider and Ingram's social construction framework, these actors are considered to be contenders (1997, p. 116-120), because of their power

within the policy area as well as the fact that they are not necessarily positively constructed. As such, it is clear that the distinction is made between 'embryo labs' and 'practice of medicine' as the point on which to apply burdens. Regarding the consumer of the fertility clinic, it is not quite clear in which quadrant they reside with regard to the Schneider & Ingram social construction of actors matrix, of which a model of can be seen in Figure 19 of Appendix C. On the one hand, it appears that they are a dependent, given that, from the language of the bill, the primary function of this legislation is to correct for an information asymmetry through publication of information on fertility clinics. On the other, they also are given the opportunity to structure the certification process, thereby creating a more costly policy structure, according to the framework (p. 112, 123).

The second part of the frame is the solution definition. The most prominent, explicit actor is the Secretary of Health and Human Services, acting through the Centers for Disease Control (CDC). However, it also important to note that the implementation is carried out through 'the state' and accreditation organizations. Also important in the development process are the professional and consumer organizations, which are designated as consultants for the development of the program. Again, their role within the solution becomes an important aspect of understanding the solution frame. As stated by the bill, the Secretary is the primary actor for development and delivery of the model certification program, as well as the actor to whom reports are due regarding the data collection aspects of the bill. However, the Secretary defers adoption and implementation of the programs, as well as immediate data collection and management of the certification programs, to 'the state' or accreditation programs. Moreover, states can choose not to become an actor in this particular bill, seemingly resulting in their inclusion in the

solution definition being more rhetorical and not creating action on the part of the state. Similarly, the professional and consumer organizations are also voluntary participants to the process, but they are given 'authority' in the sense that they enter into the development process as experts on how the model certification program should function. Even further, there are the embryo laboratories, which are saddled with the burden of certification and observation.

Overall, as mentioned before, the embryo laboratories appear to function as contenders in the sense described in Ingram and Schneider's matrix of actors, which can be seen in Figure 19. By this, I mean that they are an extension of the fertility clinic, as are the medical practitioners. Given the relationship between the different actors, it is then necessary to look at the scope, in order to understand how the social construction plays out. In this particular bill, the scope of inclusion of each actor is different. The Secretary exists in a broad scope of action, but constrained in that action by actors on which he may not act. As such, given that his function is more as a tool than a socially constructed actor, it is necessary to look at how the constraints to action affect the other actors of the bill. Given that the medical practitioner is both not being acted upon and receiving the option to manage (through consultation) the burden that is placed on it, it appears to function also as a contender, primarily through the fact that it is exempted from action and called upon to 'self-manage' through consultation. The embryo laboratories also function as contenders, in the sense that they are an extension of the practice of medicine, and therefore tied directly to those creating the rules. Even further, however, is the fact that little direction action against the embryo laboratories for not obtaining certification, is expressed within the wording of the bill. Given that the primary

loss of not obtaining certification would be being listed as being 'not certified', there is only slight incentive but no requirement to adhere to the newly created rules. Without further examples of passed bills to compare these actors, these constructions are merely implied through the set up of the bill, but not conclusive.

Given that there are no other passed bills for points of comparison, little can be said regarding the frames' effect on the ability of the bill to be passed. However, regarding the existence of frames themselves, it seems as if there is evidence of a more traditional frame encompassing 'doctors' and 'consumers/couples'. The doctor frame is 'more visible', in the sense that there is a provision to not impinge upon the practice of medicine in ARTs and the requirement that the Secretary consult with "appropriate...professional organizations with expertise in using, providing, and evaluating professional services and embryo laboratories associated with the assisted reproductive technology programs." The consumer frame used within the bill primarily falls within the problem definition and the implicit indications that consumers are the actor for whom action is being taken. Non-traditional frames are not present at all.

An important note to make at this point is that the 'society'/'state' frame appears to have no standing in this form of narrative. Given that the federal government and 'the state' are inherent actors in this bill, the government frame becomes illogical. Additionally, the embryo clinic, while it appears to have received a burden, also seems to function as an extension of the doctor frame. The following bills will be necessary to confirm such a pairing, but from this limited analysis, this appears to be the case.

4.2.1.2 Federal Failed Bills

The forty-four federal failed bills provided additional insight into the structure and composition of bill frames, as well as providing further insight into which actors tended to receive problem definitions on their behalf, which actors were constructed as 'problematic' and which actors tended to result in constraints to government action. A small selection of the failed federal bills can be seen in Table 5, below.

Table 5: Examples of frames for two federally failed bills

HR 1852	Stated Purpose	Actor	Scope	
	"To assure equitable treatment of fertility and impotence in health care coverage under group health plans, health insurance coverage, and health plans under the Federal employees' health benefits program."	*Health insurance issuers [acted upon]; Federal employees [action on behalf of]*	*Inequality on the part of health insurers, regarding treatment for impotence and infertility*	Problem Definition
		Health insurance issuers, actors of ERISA, actors of the Public Health Service Act	*Assuring that policies covering impotence treatment also cover infertility treatment* *Does not allow for constraints to be placed upon the general practices of insurance companies, such as placing restrictions on restricting which drugs receive benefits under which plan*	Solution Definition
Statements of frame	**1:** "To assure equitable treatment of fertility and impotence in health care coverage under group health plans, **health insurance coverage**, and health plans under the **Federal employees' health benefits** program." **2:** "(a) IN GENERAL- A group health plan, and a health insurance issuer offering group health insurance coverage, that provides for coverage of impotency medications such as viagra shall also provide coverage of fertility treatments." **3:** "(b) INDIVIDUAL HEALTH INSURANCE- (1) Part B of title XXVII of the Public Health Service Act is amended by inserting after section 2752 the following new section: `SEC. 2753. EQUITY IN FERTILITY COVERAGE. `(a) IN GENERAL- The provisions of section 2707 (other than subsection (c)) shall apply to health insurance coverage offered by a health insurance issuer in the individual market in the same manner as it applies to health insurance coverage offered by a health insurance issuer in connection with a group health plan in the small or large group market. `(b) NOTICE- A health insurance issuer under this part shall comply with the notice requirement under section 714(c) of the Employee Retirement Income Security Act of 1974 with respect to the requirements referred to in subsection (a) as if such section applied to such issuer and such issuer were a group health plan.'. (2) Section 2762(b)(2) of such Act (42 U.S.C. 300gg-62(b)(2)) is amended by striking `section 2751' and inserting `sections 2751 and 2753'. (c) FEHBP- Section 8902 of title 5, United States Code, is amended by adding at the end the following the following new subsection: `(p) A contract may not be made or a plan approved which does not comply with the requirements of section 2753 of the Public Health Service Act.'." **4:**			

Table 5: Examples of frames for two federally failed bills

<table>
<tr><td></td><td colspan="4">"`(a) IN GENERAL- The provisions of section 2707 (other than subsection (c)) shall apply to health insurance coverage offered by a health insurance issuer in the individual market in the same manner as it applies to health insurance coverage offered by a health insurance issuer in connection with a group health plan in the small or large group market.
`(b) NOTICE- A health insurance issuer under this part shall comply with the notice requirement under section 714(c) of the Employee Retirement Income Security Act of 1974 with respect to the requirements referred to in subsection (a) as if such section applied to such issuer and such issuer were a group health plan."'</td></tr>
<tr><td rowspan="3">HR 3940</td><td>Stated Purpose</td><td>Actor</td><td>Scope</td><td></td></tr>
<tr><td rowspan="2">"To provide for the certification of embryo laboratories."</td><td>Embryo laboratories</td><td>Insufficient availability of information regarding the selection of embryo clinics</td><td>Problem Definition</td></tr>
<tr><td>American Fertility Society (AFS); the College of American Pathologists (CoAP); appropriate consumer organizations; embryo labs; Secretary of HHS; the states; accreditation organizations</td><td>Consultation with AFS, CoAP and consumer organizations, the development of a model certification program based upon standards set by the Secretary of HHS,to be carried out by the states. It is also to be monitored by (1) an accepted accreditation organization approved by the Secretary of HHS or (2) a state AND the Secretary of HHS. The states are required to qualify to administer a program through application to the Secretary of HHS for approval. The penalty for failure to maintain certification standards is the revocation of the embryo lab's certification.</td><td>Solution Definition</td></tr>
<tr><td>Statements of frame</td><td colspan="4">1:
"To provide for the certification of embryo laboratories."
2:
"IN GENERAL- Not later than 2 years after the date of the enactment of this Act, the Secretary shall develop a model program for the certification of embryo laboratories to be carried out by the States."
3:
"CONSULTATION- In developing the certification program under subsection (a), the Secretary shall consult with the American Fertility Society, the College of American Pathologists, and appropriate organizations representing consumers of embryo laboratory services."

"PUBLICATION- The Secretary shall, in consultation with appropriate private organizations involved with embryo laboratories, not later than 3 years after the date of the enactment of this Act and annually thereafter publish and distribute to the States and the public information showing pregnancy success rates, as defined by the Secretary under subsection (e)(2), achieved by each in vitro fertilization program in association with embryo laboratories in the United States. Such information shall prominently disclose which States have implemented the certification program of the Secretary and which laboratories have been certified under such program."
4:
"PUBLICATION- The Secretary shall, in consultation with appropriate private organizations involved with embryo laboratories, not later than 3 years after the date of the enactment of this Act and annually thereafter publish and distribute to the States and the public information showing pregnancy success rates, as defined by the Secretary under subsection (e)(2), achieved by each in vitro fertilization program in association with embryo laboratories in the United States. Such information shall prominently disclose which States have implemented the certification program of the Secretary and which laboratories have been certified under such program."</td></tr>
</table>

Table 5: Examples of frames for two federally failed bills

	"CERTIFICATION BY STATES- A State may qualify to administer the certification program established by the Secretary under section 2(a) within the State if the State has an application to the Secretary to take such action approved. Such an application shall include--" "ADMINISTRATION- A certification program in a State shall be administered by the State and shall provide for the certification of embryo laboratories by the State or by an accreditation organization approved by the State." " a) IN GENERAL- A certification issued by a State or an accredition organization for an embryo laboratory shall be revoked or suspended if the State or organization finds, on the basis of inspections and after reasonable notice and opportunity for hearing to the owner or operator of the laboratory, that the owner or operator or any employee of the laboratory-- ◦ has been guilty of misrepresentation in obtaining the certification, ◦ has failed to comply with any standards applicable to the certification, or ◦ has refused a request of the State or accreditation organization for permission to inspect the laboratory, its operations, and records. • EFFECT- If the certification of an embryo laboratory is revoked or suspended, the certification of the laboratory shall continue in effect for 60 days after the laboratory receives notice of the revocation or suspension. If the certification of an embryo laboratory is revoked or suspended, the laboratory may apply for recertification after one year after the date of the withdrawal or revocation."

With the federal level bills, the lack of availability of contrasting 'passed' bills resulted in no point of comparison to determine whether the frames in use were different than those passed. Undoubtedly, at this level, having a broader selection of legislation would have clarified the results immensely. That being said, given the results of just this level of bills, some interesting results regarding legislative frames become apparent. For one, the concept of a 'women' frame and 'society' frame, do not hold up well in the context of legislation. This may be because the terms are highly generalized, such that the terms would inevitably be used in some form. The society frame is also so close to the 'government' frame, that distinguishing actions on the part of 'society' or 'the public' is drowned out by action being taken in general. Both of these frames could possibly benefit from further adjustments to identify whether there are additional actors terms that could be used to identify these frames or whether they would benefit from the addition of verbs and adjectives. However, the overall legislation presented at this level did present some

indications of variation of frames that could potentially affect the success of those frames in passage.

For the problem definition aspect of the frame, the bills typically identified couples and/or consumers as important actors in the bills. The occurrence of 'couple' as a term occurred in thirteen of the forty-four bills. Sometimes, these individuals were identified as 'the infertile', a term that, from some discourse perspectives, has been considered a term indicating dependency (Farquhar, 1996, p. 83). It is important to note that 'couples' were rarely targeted in the solution of the frame. The form that they were targeted was primarily for the purpose of denying coverage of IVF. For example, a bill addressing veterans' benefits only targeted couples in the sense that it e*xcluded* the use of IVF as a potential health plan covered treatment for infertility.

> (1) The Secretary may--
>
> > `(A) provide to an eligible veteran (and, if necessary, the veteran's spouse) qualifying procreative services, and
> >
> > `(B) subject to paragraph (2) of this subsection, reimburse an eligible veteran for qualifying adoption expenses incurred by the veteran...
>
> `(4) For the purposes of paragraph (1) of this subsection, the term `qualifying procreative services' means procreative services that are reasonable and necessary to overcome the effects of a service-connected disability described in paragraph (3) of this subsection, but such term does not include--
>
> > `(A) procedures to conceive a child using gametes of an individual other than the veteran or the veteran's spouse; `(B) procedures to conceive a child through in vitro fertilization; or
> >
> > `(C) the services of a surrogate gestational mother. (HR 1931)

Therefore, for all intents and purposes, the couple appears to remain a dependent population. Other populations' inclusion in the problem definition of the bills varied.

Given the limitations of the approach to these pieces of legislation, the solution definition appeared to have the most interesting results regarding the hypotheses proposed by this study. For one, one common actor/ tool often featured is the Secretary of Health and Human Services (HHS). Also featured in similar positions were the Secretary of Veterans' Affairs and the Comptroller General. For the most part, with the exception of the three bills that appear functionally similar to FCSRCA, the function of these individuals was often to define terms under which to give benefits like ART treatment for infertility (Secretary of HHS) or affirm it (Secretary of Veterans' Affairs). Another example of a frequent actor of the solution definition was physicians, who often had the standing of 'expert' within the wording of the bills, as expected. This often took the form of a requirement for verification in order to access some service:

> "(5) For purposes of this subsection-- `(A) the term `infertility' means--(i) the inability to conceive a pregnancy after 12 months of regular sexual relations without contraception or to carry a pregnancy to a live birth; or (ii) the presence of a demonstrated condition determined by 2 physicians (at least 1 of whom specializes in infertility) to cause infertility;".(HR 1418 IH)

> (1) The term `infertility treatment services' means, with respect to an individual entitled to benefits by reason of section 226(b), diagnosis and treatment (described in paragraph (2)) by a physician (as defined in subsection (r)(1)). (HR 2758)

> `(ii) the procedure (including any retrieval incident thereto) is performed at medical facilities that conform to the standards of the American Society for Reproductive Medicine, the Society for Assisted Reproductive Technology, the American College of Obstetricians and Gynecologists, or

> any other similar nationally-recognized organization, or a Federal agency that promulgates standards for infertility procedures; (HR 1246)

Similarly, professional organizations also served to fulfill the role as 'expert', particularly as points of consultation for the government official or office tasked with implementing the legislation. With regard to the implementation of action, many of the failed pieces of legislation clearly exemplified the traditional frames, which were hypothesized to *support* passage of legislation. For some bills, such as those preceding FCSRCA on the issue of embryo laboratory certification, a significant amount of intrusion by the government into the practice of medicine and the function of the fertility clinic may have contributed to the failure of these pieces. For example, in FCSRCA, an explicit limitation exists for the Secretary of HHS:

> SECRETARY- In developing the certification program, the Secretary may not establish any regulation, standard, or requirement which has the effect of exercising supervision or control over the practice of medicine in assisted reproductive technology programs. (P.Law 102-493)

In contrast, the three bills addressing the same topic and with similar construction of the problem (HR 3940, HR 5110 & HR 756), appear to have no explicitly worded limitations. Even further, a point of interest may be the exact means through which the Secretary could exact penalties in these bills. For example, all three of the failed, similar bills allowed for the Secretary, the state or both, to exact fees in the certification process:

> FEES- The Secretary and a State may each require payment of fees for the issuance and renewal of certificates in such amount as they may determine is necessary to carry out their respective responsibilities under this Act. (HR 3940)

> FEES- The Secretary shall require payment of fees for the issuance and renewal of certificates in

such amount as the Secretary may establish to carry out this Act based on the volume and scope of the services being performed by the embryo laboratories. (HR 5110)

FEES- The Secretary shall require payment of fees for the issuance and renewal of certificates in such amount as the Secretary may establish to carry out this Act based on the volume and scope of the services being performed by the embryo laboratories. (HR 756)

FCSRCA did not allow this to be the case, a potential example of an aspect of a solution definition that could be considered burdensome to the privileged actor of the traditional frame. In the remaining bills, because there is no clear bill for comparison, the ability to attribute frame to their failure is limited.

Overall, the general conclusions to be drawn from the frames found in the failed legislation solution definitions appeared to represent three different ways that possibly could prevent their passage, according to the previously presented 'traditional frame': (1) prevention of access to IVF [burdensome on the 'infertile couple'], (2) the placement of a burden upon physicians, or (3) the exclusion of privileged actors from their own management system. An additional important note is that, out of the forty-four of bills for analysis, only five appeared to have any non-traditional frames (i.e. society frames, women frames, or children frames): HR 2861, HR 3350, S 1726, S 707, and HR1161. All five of these bills were directly addressed to the issue of “infant health” or “women's health”, thereby seemingly removing them from having a fully traditional frame. However, according to the coding by actors, a different story is told. In fact, by that coding, HR 1161 contains many of the traditional frame actors, as well as all of the 'society'/'government' actors, while using a limited number of the child and female actors. This may indicate either (a) that the actor association with each frame is a weak one or

(b) that no frames exist within legislation. Given the lack of a point of comparison, in the form of successfully passed bills, either one is difficult to conclude.

4.2.2 An overview of the contents of the California level bills

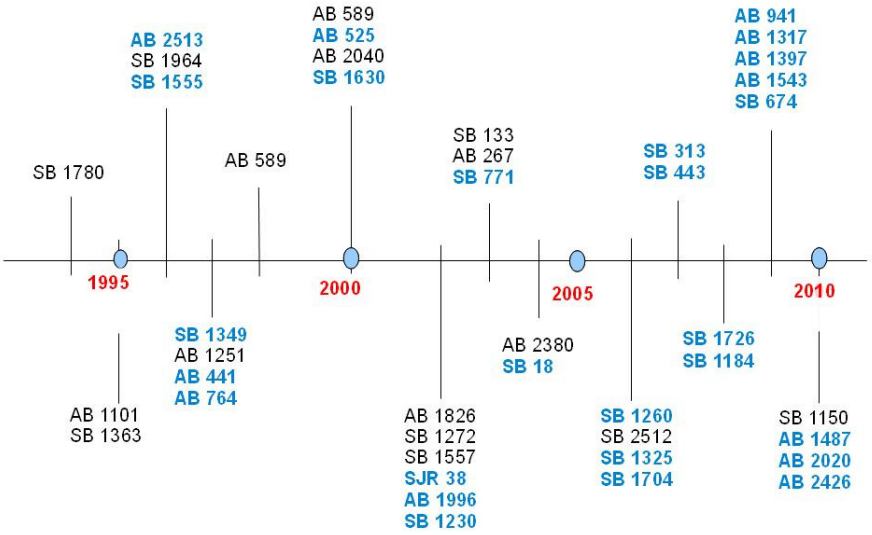


Figure 17: A time line of California bills. The blue highlighted bills are passed bills

The next sample set examined was California legislation. The legislation from California, as compared to the federal level legislation, required significant sifting through the narrative in order to understand which actors were being addressed for the problem and solution definitions. While forty out of forty-two of the bills had a clear key term to designate what the defined problem was ('existing law'), the density of the narrative complicated the distillation of the important actors and actions from general defining terms. The one bill that did not use the 'existing law' term was a resolution and therefore had a different structure. Some important structures that made the California data set significantly different from both the federal data set and the Georgia data set is

the fact that while one version of a California bill might contain one of the ART terms searched for, not all iterations necessarily contained it. Given that this study looked primarily at the final version of all bills, this significantly trimmed the number of bills examined for frames of interest. Of the 42 bills collected, only 27 of them contained the original search terms. Another point of interest that makes this subset different from the other two is that the passage of the legislative body did not necessarily result in it being signed into law. While this had the potential to happen in any of these subsets, neither Georgia nor the federal level legislative bodies passed any legislation that did not get signed into law, whereas in California four of the 27 bills that passed the legislative body failed to become signed into law. Given that the primary interest of this study was whether the bill could manage passage through the legislative body, these bills were counted among the 'passed' bills. However, this explains why there may be proposed legislation that failed to pass, but has similar or the exact same requirements as a 'passed' version that predates it.

4.2.2.1 California Passed Bills

On the surface, the passed bills in California appeared to contradict the hypotheses completely. For one, while they did appear to draw heavily upon the traditional frames of 'physician', 'couple', and 'family', the bills did not appear to apply solutions to the social constructions as would have been expected. For example, some bills implement clear penalties for transgressions by powerful actors. An instance of this is bill AB 2513, which implements a definitive civil penalty of a fine if it is found that a physician or surgeon is found to have conducted themselves unprofessionally:

> This bill would require a physician and surgeon who removes sperm or ova from a patient to

> obtain a prescribed written consent from the patient before the sperm or ova are used for a purpose other than reimplantation in the same patient or implantation in the spouse of the patient. The bill would provide that violation of the requirement constitutes unprofessional conduct. The bill would provide that the misdemeanor provision does not apply to a person who violates the requirement. This bill would require a physician and surgeon who fails to obtain the required consent a 2nd time to be assessed a civil penalty of not less than $1,000 and not more than $5,000, plus court costs, to be paid to the individual whose required consent was not obtained. (AB 2513)

However, without further analysis of the success of this action, it is not possible to determine whether this action is enforceable or is primarily rhetoric aimed at placating a dependent set of actors. This could be argued to be the case given that some of the bills that permit penalties for such powerful groups managed to get passed through the legislature but then failed to become law. Other bills clearly utilize non-traditional frames, even when couched with traditional frames of physician and infertile couple. For example:

> (b) (1) No later than January 1, 2002, the department, after consultation with the appropriate national medical specialty societies, shall develop a standardized written summary in laymen's language and in a language understood by the patient or oocyte donor regarding health and consumer issues relating to ART and oocyte donation. The summary shall be printed and made available by the board to physicians and surgeons and shall include, but not be limited to, the following disclosures:
>
> A) The potential risks to both the mother and the fetus posed by the drugs, medications, and hormones used in ART.
>
> B) The potential risks of implanting multiple embryos, including multiple births.
>
> C) The potential risks to both the mother and the fetus from multiple births.
>
> D) The potential risks of oocyte donation, including the risk of decreased fertility and the risks associated with using the drugs, medications, and hormones prescribed for ovarian stimulation during the oocyte donation process.

Even further, there is a significant amount of intervention by government bodies on behalf of different actors and even the public. Some actors, such as the couple or consumers, are still constructed in a similar manner to how they are constructed in the federal level bill. However, the presence of additional actors and social constructions in these bills, such as 'child', provide evidence that other frames orientations exist within legislation and also have the potential to be passed. The passage of legislation penalizing physicians and other medical professionals for transgressions appears to be more acceptable, but examples such as passed bill SB 674, provide a contradiction to the acceptability of such legislation because, while they state the following, they also fail to become law:

> (1) Existing law provides for the licensure and regulation of various healing arts practitioners and requires certain of those practitioners to use particular designations following their names in specified instances. Existing law provides that it is unlawful for healing arts licensees to disseminate or cause to be disseminated any form of public communication, as defined, containing a false, fraudulent, misleading, or deceptive statement, claim, or image to induce the rendering of services or the furnishing of products relating to a professional practice or business for which he or she is licensed. Existing law authorizes advertising by these healing arts licensees to include certain general information. A violation of these provisions is a misdemeanor.

Whether this action is rhetoric or even intended to target other professional groups outside of those powerful groups providing ARTs comes into question. However, it does provide some explanation as to why the types of regulation vary so drastically around the country.

Overall, the social constructions within the California passed legislation include more actors in addition to providing different constructions for them. The social construction of infertile couples appears to remain the same, i.e. they are dependent

actors to whom offering the benefits of political action may or may not be optimal. However, there are additional dependents within this case that were not present in the federal failed case, primarily children, but also women, as the example above shows. Another example of an alternative frame appears in the laws mandating testing precautions on behalf of a gamete/embryo recipient with regard to testing and informed consent. However, there are also bills in which constraints are applied to these new actors' participation. For example, the laws relating to oocyte donation require that the donors undergo counseling and informed consent before undergoing the procedure and are informed that compensation for egg donation is not always provided. For example, the wording of AB 1317 is as follows:

> 125325. (a) The person or entity posting an advertisement seeking oocyte donation associated with the delivery of fertility treatment that includes assisted oocyte production and a financial payment or compensation of any kind, shall include the following notice in a clear and conspicuous manner:
>
> "Egg donation involves a screening process. Not all potential egg donors are selected. Not all selected egg donors receive the monetary amounts or compensation advertised. As with any medical procedure, there may be risks associated with human egg donation. Before an egg donor agrees to begin the egg donation process, and signs a legally binding contract, she is required to receive specific information on the known risks of egg donation. Consultation with your doctor prior to entering into a donor contract is advised."

While the informed consent and counseling aspects of this bill are for the benefit of the donor, they also act as a constraint on their participation in this transaction, reducing their agency. By Schneider and Ingrams' framework, these new actors could be considered to be dependents or deviants depending on one's perspective of informed consent and compensation.

4.2.2.2 California Failed Bills

The failed bills in California, unlike the passed bills, appear to have slightly less variation of frame. While the number of failed bills presented here is a much smaller number as a result of excluding bills not addressing ARTs within their body, it becomes apparent that the failed bills do not have quite the same amount of variation in actors as in the passed bills. For example, within the six California failed bills examined for frames, the primary actors in these bills are physicians, insurers and the 'infertile'. Also featured were donors and researchers. An interestingly missing frame, which appeared heavily in passed bills, is the child frame. Similarly, the woman frame does not appear to feature as heavily. However, regarding language and construction of the featured actors, there appears to be little difference between passed and failed legislation. Passed bills do place some constraints upon actors that have real enforcement mechanisms, but this is also found in failed legislation. The only difference between passed and failed is the representation of insurance actors, who appear to represent a greater fraction of the actors targeted in failed bills than in successful bills. However, there are also significantly fewer pieces of failed legislation, which means that the possibility that there will be one bill that does or does not contain one actor over another increases.

Regarding the frames that were presented in this subset, the primary actor for whom policy action was being taken appeared to be consumers. This is the case for two bills focusing on insurance coverage and one on the structure of advertising. The failed legislation addressing advertising primarily focuses on physicians. Gamete donation does not appear to target a particular group, instead imposing penalties on anyone making the attempt to sell or buy human tissue. As such, the social construction of each of these actors would appear to also be contenders. While the generic terminology to describe

actors within the gamete donation bill may make it appear that these actors would be classified under the deviant construction, a closer look at the text of the legislation appears to limit the punishment to only civil action in the form of a fine, similar to those applied to physicians in both the passed bills and failed bills of California legislation. An example can be seen below.

> This bill would provide that any person who clones a human cell, or purchases or sells an ova, zygote, embryo, or fetus, for the purpose of cloning a human being, shall be punished by a
>
> **criminal** fine ~~, by imprisonment in a county jail for~~
>
> ~~not exceeding one year, or by both a fine and imprisonment~~ (AB 1251)

> This may also be because the issue is considered to be tied directly to medicine, given that the billcontains a clause relating to professional conduct, as in the example below:
>
> It would make a violation an act of unprofessional conduct under the Medical Practice Act. The bill would also require the revocation of the local business license of any business that violates this provision. By creating new crimes, this bill would impose a state-mandated local program.

Overall, it can be seen that the construction of actors within both California failed and passed bills radically differed from the hypothesized relationship between actors and actions. While the social constructions are similar to those found in the federal level bills, their influence over the ability of bills to get passed is not evident at all. Another distinguishing factor of California bills is the inclusion of several non-traditional frames, even though they were couched within a more traditional frame such as family. More generally, California bills exemplify the limitations of frame on the ability to get bills passed and also suggest limitations to the applicability of social construction in legislative action.

4.2.3 An overview of the contents of the Georgia level bills

Figure 18: Time line of Georgia Bills. The passed bills are highlighted in blue.

Of the legislation examined for this study, Georgia had the smallest subset over that shortest period of time. As can be seen from the time line above, a majority of legislation has occurred after 2005, with three bills occurring before 2005. As can be seen, the only ones that managed to pass occurred in 2007 and 2009. As mentioned earlier in this section, Georgia bills presented an interesting challenge for analysis. For one, Georgia bills appeared to have no key term identifying the present state of policy and the goal to be accomplished by new policy. This is similar to the status of approximately half of the pieces of federal level legislation. Therefore, the purpose statement was used as a proxy for the present state of policy, just as with the federal level bills.

4.2.3.1 Georgia Passed Bills

As can be seen in the Figure 18 time line, both of the passed bills occurred after 2005. Even further, it can be seen that one of the passed pieces of legislation is a resolution rather than a bill and therefore functions in a different manner than the other. Of the passed legislation, the first was passed for the purpose of establishing a committee "on Rights Relating to Reproductive and Genetic Technology". The composition of this committee provides a clear example of what concepts are closely associated with ARTs, as can be seen in the excerpt below:

> ...the Senate Study Committee on Rights Relating to Reproductive and Genetic Technology to be composed of seven members of the Senate. The chairpersons of the Senate Judiciary Committee, Senate Health and Human Services Committee, and Senate Science and Technology Committee shall each be a member, and the other four members shall be appointed by the Lieutenant Governor. (SR 280)

It is clear from this that the primary conceptual associations with ARTs are health and science. Given this to be the case, it is clear that the constructions that can potentially be applied to this area are potentially perceived to be limited. The other piece of legislation dealt with the adoption of embryos (HB 338). From the structure of HB 338, it is clear that the child frame is an important aspect of this bill, despite the fact that the bill's underlying structure is derived from a more traditional frame. An even more interesting aspect of this frame is its general recognition of the embryo as an actor with its own interests, as opposed to an object, as is found in many of the other bills utilizing the term. This can be seen in such statements as the one below:

> (5) 'Recipient intended parent' means a person or persons who receive a relinquished 24embryo and who accepts full legal rights and responsibilities for such embryo and any 25child that may be born as a result of embryo transfer. (HB 388)

Given this case, it is clear that keying, in the Goffman sense, has occurred because the entity has undergone a transformation from an object to an actor, in some sense. Even further, this bill heavily utilizes the child frame and subsumes the traditional frame of family through its language, by emphasizing the embryo and the potential future child to be born of that embryo, while removing the distinguishing factors of a more traditional frame like 'family', which would be expected to emphasize parenthood and parent-child relationships. Alternatively, it also does not utilize a 'couple'/'consumer' frame at all, instead placing an emphasis upon the embryo/child guardianship. In effect, this bill is an example of utilizing terms to address an alternative frame.

4.2.3.2 Georgia Failed Bills

As can be seen from the time line in Figure 18, the number of failed bills in Georgia far outnumber the passed bills. The primary actors of interest within these bills consist of couples, insurers, and physicians, similarly to the previous subsets. However, Georgia failed bills utilize the child frame far more heavily that previous subsets. For instance, in one failed bill, the term 'unborn' is used: presumably to reference that the entity in question is an actor only limited by its lack of birth. This example from HB 1358, can be seen below:

> Inheritance rights shall not flow to the in vitro human embryo as a legal person unless the
> 1in vitro human embryo develops into a fetus and is born in a live birth or at any other time
> 2when rights attach to an unborn child in accordance with law. As a legal person, the in
> 3vitro human embryo that is born in a live birth as a result of embryo adoption to another
> 4couple shall not retain its inheritance rights from the biological parents." (HB 1358)

The heavier use of the child frame may be an example of frames causing the failure of legislation, though it can be seen in both passed and failed Georgia bills, that this particular frame is more favored. Regarding the other actors, 'physician' is used in half of the bills, in which it acts as primarily a source of authority with regard to the 'couple' and other actors within. For example, in HB 1073, the physician is the authority through which a commissioning couple may enter into a surrogacy contract, and makes arrangements for embryos in the case of unforeseen circumstances such as divorce. However, as the authority in the ART transaction, the physician also appears to be given the burden of 'safekeeping' of embryos and other parties involved, as can be seen in the wording of HB 1358, below:

> Any physician or medical facility that causes fertilization of a human ovum in vitro shall 1be directly responsible for the safekeeping of the in vitro human embryo. (HB 1358)

4.2.4 Comparisons between frames and conclusions

Across all bills, it becomes apparent that some frames are more easily teased out than others. A primary example of an easily distinguished frame would be the 'child' frame, which was apparent in both California and Georgia legislation. Other frames, such as 'society', were not as easily distilled. It is not clear whether this was the case because 'society' frames are assumed to occur with any state action, or because the instrument with which to identify the frame requires refinement. Similarly, the 'women' frame also proved difficult to distill from the legislation presented here. In part, it could also be argued that the frames were constrained by the overarching metanarrative of 'health', which would automatically place some actors in positions of prominence, while limiting or excluding others.

Through this exercise of distilling frames from the many subsets of narrative, a few concepts hopefully have become apparent. For one, physicians and other health professionals continue to dominate this particular policy arena. This limits the potential policy options, as shown previously by Harris (2010). Their heavy involvement over their own management, as shown by the frequent use of the individual physician or the professional organization representing physicians, provides evidence that they act as contenders, according to the Schneider and Ingram social construction classification. Even further, it becomes apparent that while it has been argued that their political power has waned with the advent of managed care, it is clear that as a group they are still perceived favorably enough to act as a trusted expert in activities related to the practice of medicine.

It is also important to note the emphasis placed upon the consumer/couple as a dominant actor to receive benefits, in the form of increased access to the treatment through mandates on insurers, or through increased access to information through application of certification and screening processes. However, despite the application of legislation on their behalf, it does not appear that they carry much political power, which is why they have been designated here as being a socially constructed 'dependent' group. Even further, some of the legislation that has been formulated on their behalf appears to be primarily rhetorical, for example, the mandate upon embryo laboratories certification found in FCSRCA (1992).

The other remaining actors' role in the framing of legislation relating to this issue provide an interesting contrast between the cases under study, for example the emphasis on the child frame as the dominant alternative frame in Georgia, whereas the dominant

California alternative frame was more heavily focused upon women or the public. However, what is clear from the small sample set presented here is that the use of alternative frames is limited, and requires further study as to what may determine the application of frames in a particular policy arena.

CHAPTER 5

CONCLUSIONS

5.1 Contribution to theory

Overall, it is believed that this study has shown the existence of frames within legislation. It is hoped that future study will attempt to provide further means through which to more systematically approach the study of frames, particularly within legislation. While this study only examined those bills that directly reference the topic of interest, it is believed that a broader selection of bills could be used to refine the methods of systematic frame analysis, for the purpose of use with large data sets. Moreover, the examination of multiple iterations of policy could also be of interest in understanding the process of frame development. This multiple iterations method could also shed further light on the development of ART-related policy, particularly in clarifying the appearance and cutting of ART terms from different iterations of bills.

Regarding the contributions to the literature, it is believed that this study brings multiple aspects of frame analysis to the forefront. First, the attempt to parse out the social construction of actors as a means of developing the frame itself provided a different way of viewing the actors and their activities within legislation. This is in contrast to some of the publications of the MAGEEQ project, which used frame analysis for the purpose of evaluating the means by which gender issues were incorporated in European Union policy (Verloo, 2004; Lombardo & Meier, 2006), and developed a frame based off of four concepts: the diagnosis of what's wrong, attribution of causality to whom, the prognosis of what should be done, and the call for an actor to do something (Verloo, 2004). Using this initial frame, it was the intent of this study to utilize the social

constructions of actors, per the definitions provided by Ingram and Schneider in *Design for Democracy*, to determine the frames of legislation (1997). The purpose of uniting these two frameworks for the examination of legislation was to capture the interaction between the proposed problem and solution within legislation, thus attempting to distill both explicit and implicit actors within legislation.

Even further, it was the purpose of this paper to extend previous work on applying CAQDAS to frame analysis. The attempt to use a process of distilling word counts was only partially successful in describing the narrative of the legislation. It is believed that this process could be further improved by further distilling the word counts into other grammatical features, and running a matrix analysis across the actors along with these additional grammatical features. This could potentially provide further systematization to the process of frame prediction and discovery, thus guiding the frame analysis method towards a more empirical analytic process.

5.2 Limitations and contribution to ART policy literature

Overall, while it may appear that the data set of this study was far from small, it is the belief of the author that it would further benefit from a larger selection of legislation in future study, so as to better clarify whether the lack of frames such as those relating to women and children at the federal level, or women at the state of Georgia level, is a result of the frame not occurring or a limiting factor of the overall metanarrative. Similarly, an analysis of the multiple iterations of legislation could also be beneficial in better understanding the role, existence and persistence of frames within legislation.

Additionally, it is believed that this study provided some clarification of the social constructions around different ART actors. While it is limited in the conclusions that can

be drawn, it is clear that most of the social constructions are persistent in each of the cases studied, despite the fact that they are implemented slightly differently. While some social constructions are non-existent in certain cases, such as women and children at the federal level, this may be due to jurisdictional issues as much as a lack of mobilization of such frames.

5.3 Policy implications

The overarching policy implications tie primarily back to the concept of mobilization in social movement theory. It is perceived here that, at the federal level, there is little mobilization of non-traditional frames. This may be a function of the previously observed fragmentation of actors, as presented by Goggin and Orth (2004). However, it could also be argued that this is the result of structural factors such as federalism and power distribution. Given the observation that there is persistence of some social constructions and frames at all levels, it would appear to indicate that some organization may occur beyond just historical structuring. Even further, given the historical power balance, as presented in the historical analysis of Chapter 1, the development of such a structure should be neither surprising nor its persistence unexpected. Without the mobilization of an alternative metanarrative, particularly with regard to reproduction, the ability to 'change course' with regard to policy would seemingly be difficult, thereby resulting in the current regulatory scheme found in the ART policy arena today.

APPENDIX A: TABLES OF REPORTS

Table 6: EAB Report Recommendations

Major Ethical Issues	
Moral status of the Embryo	"'Profound respect...but....not...full legal and moral rights attributed to persons." "Embryo loss associated with attempts to assist otherwise infertile couples bear children of their own...may be regarded as ethically acceptable from an ethical standpoint, under certain conditions (emphasis own)"
Safety of mother and offspring	"it is concerned, as well, about the physical and mental health of the children born following such a procedure and about their legal status. Many women have told the Board that in order to bear a child of their own they will submit to whatever risks are involved....Department should not interfere with such reproductive decisions, it has a legitimate interest in developing and disseminating information regarding safety and health so that fully informed choices about reproduction can be made."
Adverse effects of technological intervention	"...broad prohibition of research involving human in vitro fertilization is neither justified nor wise. Among the developments warned against by some who testified before the Board, a few (e.g. , the cloning of human beings and the creation of animal/human hybrids) are of uncertain or remote risk." "Other abuses may be avoided by the use of good judgment based upon accurate information of the type collected by the Board and now being disseminated in this report."
Federal funding	"The Board concluded that it should not advise the Department on the level of Federal support, if any, of such research; but it concluded that Federal support, if decided upon after due consideration of all that is at issue, would be acceptable from an ethical standpoint."
Overall Report Conclusions	
Support of in vitro fertilization/ embryo transfer research to better understand the fertilization process	More data would be beneficial to draw additional conclusions from regarding the rate of abnormal embryo creation and further experimentation in animal models
Ethically acceptable to conduct research involving human in vitro fertilization	With 2 caveats and 5 sub-caveats: (a) human research without embryo transfer involves: (1) research that complies with all provisions governing research with human subjects; (2) research is designed to establish safety and efficacy and obtain acquire information for that purpose that is not otherwise attainable; (3) gametes are obtained from informed persons on their use and that have consented to that used; (4) embryos will not be held beyond normal implantation period; (5) advisement of the public will

Table 6: EAB Report Recommendations

Major Ethical Issues	
	occur in the discovery of a higher than normal risk of abnormal offspring production (b)research involving the transfer of gametes through IVF only be conducted with married couples
Ethically acceptable for the department to conduct or support IVF research, but chooses not to address the level, if any, funding	Assuming the caveats of conclusions 2 are met

Table 7: OTA 1988 Report Recommendations

Policy issue	Potential congressional action	Policy options
Should the Federal Government improve collection of data on reproductive health?	"The Federal Government has an interest in collecting data in three areas of infertility: factors contributing to infertility, its prevalence, and the outcome of certain treatments."	"Option I: Take no action."
		"Option Z: Appropriate funds for the Secretary of Health and Human Services to make grants to State public health departments for the establishment of a national surveillance system on chlamydial infection."
		"Option 3: Direct the Secretary of Health and Human Services to enhance the collection of data on infertility."
		"Option 4: Establish a systematic method for registering the birth of IVF babies and for following the development and health of these infants."
Should efforts toward prevention of infertility be enhanced?	"The Federal Government supports no identifiable activities expressly directed toward prevention of infertility. It supports several activities allied with prevention of infertility, such as NCHS collection of descriptive data about infertile couples, contraceptive research funded by NIH and the Agency for International Development, and programs of the Centers for Disease Control that aim to prevent sexually transmitted diseases."	"Option 1: Take no action."
		"Option 2: Amend the Public Health Service Act to extend the program of grants for prevention and control of sexually transmitted diseases to include prevention of infertility secondary to sexually transmitted diseases."
		"Option 3: Evaluate Federal efforts to prevent infertility."
		"Option 4: Establish a demonstration project for identification of risks for infertility."
		"Option 5: Enhance education in reproductive health."
Should the Federal Government ensure that consumers of selected infertility services have the information to make informed choices?	"Congress generally does not regulate medical practice, with the exception of drawing broad criteria for care delivered at Veterans'	"Option 1: Take no action."
		"Option 2: Encourage the use of a consensus review or conference on the use of IVF, gamete intrafallopian

Table 7: OTA 1988 Report Recommendations

Policy issue	Potential congressional action	Policy options
	Administration hospitals or reimbursed by Federal insurance programs. Nor are medical techniques subject to consumer protection legislation, with the notable exception of Food and Drug Administration regulations for testing drugs and devices, and for regulating advertising of their indications and efficacy. Rather, quality assurance and consumer protection issues are left to State legislatures, professional societies, consumer groups, and word-of-mouth."	transfer, and other innovative treatments for infertility."
		"Option 3: Extend consumer protection laws to selected infertility services."
Preexisting mechanisms for gaining access to infertility diagnostic and treatment services adequate?	Currently, those who can afford to pay for infertility services out-of-pocket have the greatest access. To consider use of newer medical technologies, infertile individuals need to be able to pay anywhere from several hundred dollars to more than $22,000. Individuals with some private insurance coverage generally can expect to have a large portion of their expenses covered during the diagnostic phase, with considerable variability of coverage for infertility treatments."	Option 1: Take no action.
		Option 2: Direct the Health Care Financing Administration of the Department of Health and Human Services to review and report on the extent of existing coverage for infertility diagnosis and treatment services under the Medicaid and Medicare Programs
		Option 3: Amend the existing Federal Medicaid Program to add a new reimbursement category for services related to the diagnosis and treatment of infertility.
		Option 4: Amend Title 5 of the U.S. Code to provide that any carrier offering obstetrical benefits under the health benefits program for Federal employees shall also provide benefits for medical procedures to overcome infertility, including procedures to achieve pregnancy and to carry pregnancy to term.
		Option 5: Facilitate adoption, a social alternative to infertility treatment.
Should the Veterans' Administration provide infertility diagnosis and treatment?	For the VA to provide care to a veteran, at least four conditions must be met: the veteran must have a disability, the VA care must be for that disability,the care must be necessary, and the care must constitute hospital care (including	Option 1: Take no action.
		Option 2: Direct the Administrator of the Veterans' Administration to interpret disability to include the inability to procreate.
		Option 3: Amend Title 38 of the U.S. Code to specify that infertility

Table 7: OTA 1988 Report Recommendations

Policy issue	Potential congressional action	Policy options
	medical treatments). These provisions mean that veterans currently obtain only limited treatment for infertility from the VA.	treatments including but not limited to IVF, gamete intrafal]opian transfer, and artificial insemination may be provided by the Veterans' Administration
Should the transfer of human gametes and embryos be regulated?	Sperm are sold by commercial sperm banks throughout the United States and have been for many years. Donation of unfertilized ova is today occurring at a number of infertility clinics. A few have begun to pay women to undergo hormone stimulation and ovum retrieval, sometimes in the course of voluntary sterilization by tubal ligation. Ovum banking using frozen ova has yet to become available, but considerable research is under way to make this feasible Embryos that remain after IVF procedures are not yet sold, as clinics and hospitals have chosen instead to give parents the choice of having them frozen, destroyed, or donated.	Option 1: Take no action. Option 2: Mandate national standards for protection of paid ovum donors. Option 3: Mandate national standards for protection of recipients and offspring. Option 4: Ban commercial sales of embryos.
Should anyone accepting or transferring human gametes keep nonidentifying genetic records on behalf of the potential child?	Donation of human gametes is usually accompanied by an oral patient history including important genetic information that can become a formal written record. Such information is routinely obtained by those who operate sperm banks as they screen donors. Currently, however, the type of information that is collected and the ways in which it is maintained and transferred vary greatly. This variation is particularly significant because the predictive value of genetic history may increase in coming years.	Option 1: Take no action. Option 2: Mandate that operators of sperm, ova, and embryo repositories, or anyone who transfers these materials, maintain written records detailing the non-identifying genetic history of all gamete donors and that this information be available to the recipients of gametes or embryos and the eventual offspring.
Should commercialized surrogate motherhood be regulated by the Federal	Surrogate motherhood is an infrequent but increasingly	Option 1: Take no action. Option 2: Review developments in State

Table 7: OTA 1988 Report Recommendations

Policy issue	Potential congressional action	Policy options
Government?	popular arrangement used by infertile couples, singles, and homosexuals as an alternative to adoption and perhaps infertility treatment in their efforts to form a family. Surrogacy arrangements are based upon principles of contract and family law, and therefore are largely within the traditional domain of State legislative activity.	law related to surrogate motherhood.
		Option 3: Facilitate development of State legislation related to surrogate motherhood
		Option 4: Facilitate interstate cooperation and harmonization of State laws.
		Option 5: Mandate national standards for surrogate motherhood arrangements or commercial intermediaries
		Option 6: Facilitate international agreements concerning transnational surrogacy arrangements.
		Option 7: Ban commercialized surrogate motherhood.
Do some areas of reproductive research require additional support?	Federal support of human reproductive research is concentrated in two agencies of the Public Health Service: NIH (in particular, the National Institute of Child Health and Human Development and the National Institute of Environmental Health Sciences) and CDC (in particular, the National Institute for Occupational Safety and Health and the National Center for Health Statistics).	Option 1: Take no action.
		Option z: Expand Federal support for research in male infertility.
		Option 3: Expand Federal support for research on the psychology of participants in assisted conception.
		Option 4: Direct the Secretary of Health and Human Services to review, solely for scientific merit, research involving human sperm, eggs, and early embryos.
		Option 5: Mandate the appointment of an Ethics Advisory Board within the Department of Health and Human Services.
		Option 6: Direct the Secretary of Health and Human Services to implement (and update as needed) the 1979 recommendations of the Ethics Advisory Board.
		Option 7: Direct the congressional Biomedical Ethics Board to develop guidelines for federally funded research with human sperm, eggs, and embryos.

Table 8: PCB Report Recommendations (specifically regarding ARTs)

General conclusions	

Table 8: PCB Report Recommendations (specifically regarding ARTs)

A.1. Institutional governance	a) There is minimal direct governmental regulation of the practice of assisted reproduction and b)extensive, voluntary professional self-regulation of the practice of assisted reproduction.
A.2. Substantive areas of concern	a) There is no comprehensive mechanism for data collection, monitoring, or oversight of the effects of ARTs on children or gestational mothers, b) there is no uniform law of access, c) there is no oversight of novel practices once moved into clinical practice, d) there is no uniform system of public review and deliberation regarding human or social significance of ARTs
E. Commerce	There is no comprehensive mechanism for regulation of commerce in gametes, embryos, and ART services

APPENDIX B: LIST OF SEARCH TERMS

List of Search terms used to find ART bills

- in vitro fertilization/invitro fertilization
- IVF
- assisted reproduction
- assisted reproductive medicine
- assisted reproductive technology
- medically assisted reproduction
- infertility treatment
- fertility treatment
- human reproductive technologies
- gamete intrafallopian transfer
- zygote intrafallopian transfer
- artificial insemination

EXLUDED TERMS

- infertility [alone]
- fertility [alone]
- infertility drugs [not in conjunction with other terms]
- reproductive HARM
- reproductive health/care [alone]
- reproductive toxicity
- interpregnancy care
- fertility drugs
- fertility preservation

APPENDIX C: FRAMES & SOCIAL CONSTRUCTIONS

Table 9: Frames

	Position	Diagnosis	Attribution of Causality	Prognosis	Proposition
Alternative Frame	feminist	• Changes female role • alters value of female body • creates incentive to 'loan out' one's body • allows for the (re?)construction of the female body as 'mother' rather than 'woman'	'ART technologies', 'medicine', government	• Ban technologies	
	Right-to-life/ child/ embryo/ fetus/ future person	• Alters value of child • There is a lack of representation of the child in the process, outside of the parent • alters value of embryo • creates the possibility of abortion • increases the health hazards for the resulting child	'parents', medical professionals, drug companies, government	• Collect data on additional animal models • Require informed consent • Collect data on the resultant children of IVF • Evaluate the psychological wellbeing of both child and parents • Create rules on the number of embryos that may be implanted	Legislators, religious bodies, child advocates,
	woman	• Little provision of 'sufficient' drug testing • representation of woman is as 'desperate dependent' • insufficient animal modeling	'drug companies', 'doctors', 'scientific establishment'	• Collect longitudinal data on fertility treatments and users • Recognize and target information specifically to women • establish woman-focused infertility counseling • create additional programs for *preventing* infertility	Legislators, 'feminist' organizations
	society	• Long term fertility impact • Creates a need for new legal definitions • Provides new avenues for 'civil conflict' (wrongful birth)	'policy makers', 'parents'	• Collect longitudinal IVF birth data • Create legal clarification of 'familyhood' • create rules on the exchange and use of gametes,	Legislators, administrative branches of government

Table 9: Frames

	Position	Diagnosis	Attribution of Causality	Prognosis	Proposition
		• Differential access/ economic costs (Creation of a disparity between haves and have-nots with regard to reproductive access) • Potential 'misuse' (eugenics, sex-selection, cloning) • Social structure changes (older parents, older gametes) • 'Market' for human parts (gametes) and bodies (surrogacy) • The potential for an increase in disabled babies • The potential for unclear genetic lineages (siblings that have grown up with different 'parents') • Insufficienct 'responsibility' for the medical professional • Altered previously accepted social structures (minor?)		surrogates • create clear rules on the use(s) of PGD • create limits on age access and use of IVF • institute strict rules on cloning • collect clear genetic data, provide a database of 'potential siblings' •	
	religion	• Circumvents nature/ God's will • 'Defeating' the purpose of 'procreation' • Creates the possibility for the destruction of embryos	'doctors'	• Ban IVF use	legislators
	socio-technological	• Allows for too much technological intervention • Creates 'paradigm' of medical/ technological intervention	'unclear'	• Ban IVF use	legislators
Traditional Frame	Traditional couple	• Insufficient access • High cost	Government	• Institute requirements for	Doctors, patient

Table 9: Frames

	Position	Diagnosis	Attribution of Causality	Prognosis	Proposition
		• Inaccurate success rates • Telling the child their parentage • Positive versus negative right to genetic reproduction		insurance to cover access to IVF treatments • Create rules requiring clear, concise information on 'live birth rates' • Otherwise create rules making the right to make reproductive decisions a *positive right*	advocates
	Physician	• Too much intervention by the government • Sufficient governance at the professional level	Government	• Maintain professional autonomy • reduce, limit government intervention in data collection • Limit rule making in	Doctors, patients, insurance companies

Table 10: List of actors distilled from all bills

1 : administrator	31 : donor	61 : organization
2 : adult	32 : embryo (2)	62 : owner
3 : agency	33 : employee	63 : parent
4 : agent	34 : employer	64 : participant
5 : applicant	35 : entity	65 : partner
6 : attorney	36 : family	66 : patient
7 : beneficiary	37 : female	67 : people
8 : board	38 : fetus	68 : person
9 : body	39 : government	69 : personnel
10 : business	40 : group	70 : petitioner
11 : center (2)	41 : guardian	71 : physician
12 : child	42 : gynecologist	72 : policyholder
13 : citizen	43 : holder	73 : population
14 : client	44 : hospital	74 : product
15 : clinic	45 : human	75 : professional (2)
16 : commissioner	46 : husband	76 : program
17 : committee	47 : individual	77 : public
18 : community	48 : institute	78 : recipient
19 : company	49 : institutions	79 : representative
20 : consumer	50 : insurance	80 : school
21 : contractor	51 : insurer	81 : secretary (2)
22 : coordinator	52 : juvenile	82 : society
23 : corporation	53 : laboratory	83 : spouse
24 : counsel	54 : life	84 : stakeholder
25 : county	55 : member	85 : state (2)
26 : couple	56 : mother	86 : surgeon
27 : court	57 : nonprofit	87 : unborn
28 : department	58 : obstetrician	88 : woman
29 : director	59 : office	89 : workers
30 : disabled	60 : officer	

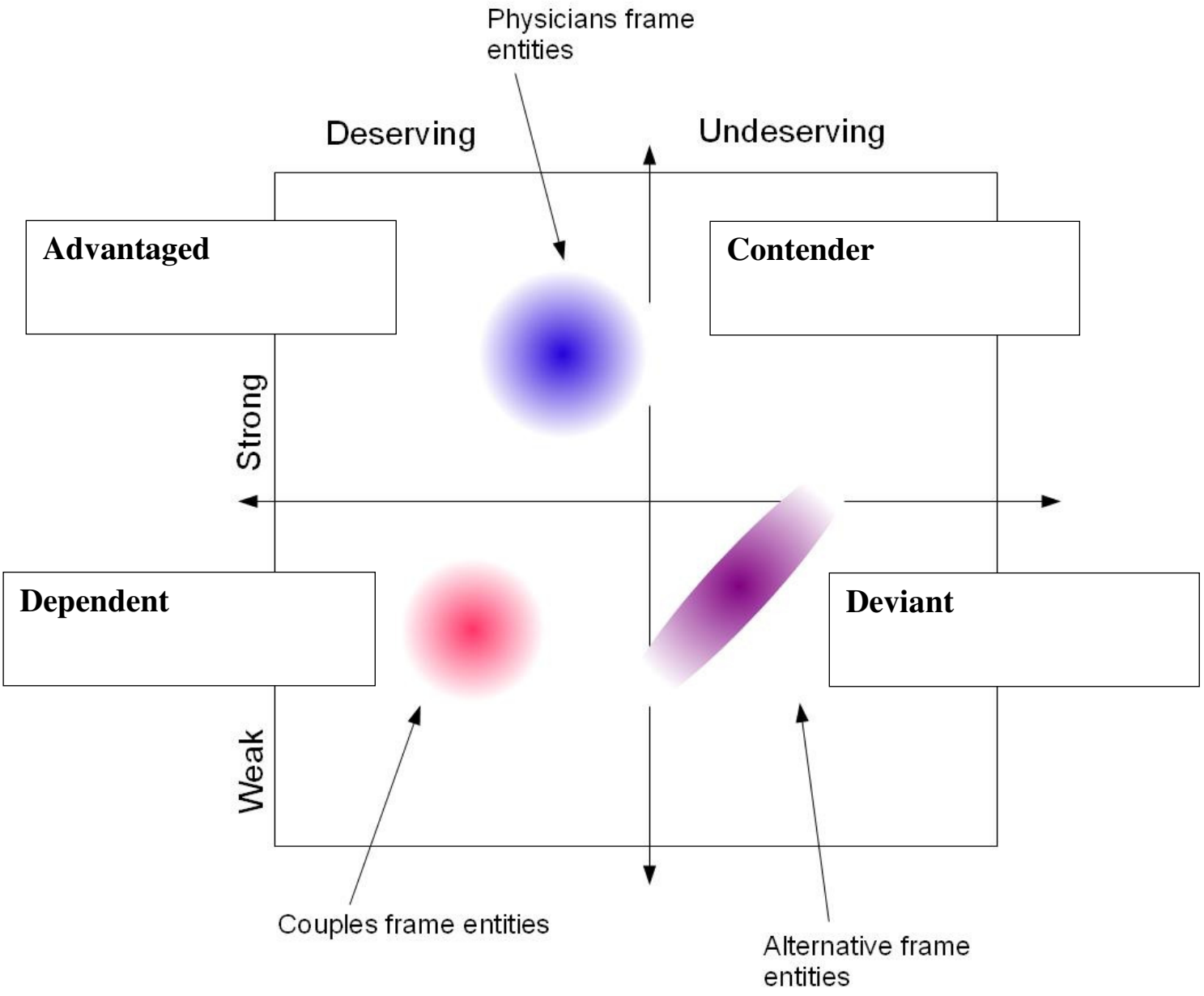


Figure 19: Social constructions of actors from frames. Modified from Ingram & Schneider (1997, p. 113-4)

Table 11: Nvivo stop terms

stop words				
if	s	into	on	as
will	such	no	or	these
and	that	in	with	
not	the	for	was	
but	Their	by	to	
and	Then	be	they	
are	There	at	this	

APPENDIX D: BILLS

Table 12: The bills

Federal	HR 1931: `Childless Veterans Assistance Act of 1989'.	1989
	HR 1199: no title	1989
	HR 5110: `Fertility Clinic Success Rate and Certification Act'	1990
	HR 1161: `Women's Health Equity Act of 1991'.	1991
	HR 3940: `Fertility Clinic Success Rate and Certification Act of 1991'	1991
	HR 756: `Fertility Clinic Success Rate and Certification Act'.	1991
	HR 4773`Fertility Clinic Success Rate and Certification Act of 1992'.	1992
	S 1757: `Health Security Act'.	1993
	HR 568: `Contraception and Infertility Research Centers Act of 1993'.	1993
	S 168: Affordable Health Care for All Americans Act''.	1995
	HR 2774: no title	1999
	HR 2706: `Family Building Act of 1999'.	1999
	HR 4532: `Equity in Fertility Coverage Act of 2000'.	2000
	S 2160: `Fair Access to Infertility Treatment and Hope Act of 2000'.	2000
	S 874: `Fair Access to Infertility Treatment and Hope Act of 2001'.	2001
	HR 2608: `Cloning Prohibition Act of 2001'.	2001
	HR 2172: `Cloning Prohibition Act of 2001'.	2001
	HR 1246: no title	2001
	HR 389: `Family Building Act of 2001'.	2001
	S 303: `Human Cloning Ban and Stem Cell Research Protection Act of 2003'.	2003
	S 1726: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2003
	HR 3350: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2003
	HR 3026: no title	2003
	HR 3014: `Family Building Act of 2003'.	2003
	HR 1852: `Equity in Fertility Coverage Act of 2003'.	2003
	HR 969: `Medicare Infertility Coverage Act of 2003'.	2003
	HR 801: `Cloning Prohibition Act of 2003'.	2003
	HR 4872: `Retinoblastoma Awareness and Prevention Act of 2004'.	2004
	S 707: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2005
	S 876: `Human Cloning Ban and Stem Cell Research Protection Act of 2005'.	2005
	HR 2861: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2005
	HR 2759: `Equity in Fertility Coverage Act of 2005'.	2005
	Hr 2758: `Medicare Infertility Coverage Act of 2005'.	2005
	HR 2574: ''Respect for Life Embryonic Stem Cell Act of 2005''.	2005
	HR 1822: `Human Cloning Ban and Stem Cell Research Protection Act of 2005'.	2005
	HR 1418: `Infertility Coverage for Federal Employees, Military Personnel, and their Families Act'.	2005
	HR 735: `Family Building Act of 2005'.	2005

Table 12: The bills

	S 363: `Hope Offered through Principled, Ethically-Sound Stem Cell Research Act'	2007
	S 812: `Human Cloning Ban and Stem Cell Research Protection Act of 2007'.	2007
	HR 2892: `Family Building Act of 2007'.	2007
	HRes 322: not title	2007
	HR 1424: `Paul Wellstone Mental Health and Addiction Equity Act of 2008'.	2008
	HR 493: `Genetic Information Nondiscrimination Act of 2008'.	2008
	S 1258: `Family Building Act of 2009'.	2009
	HR 697: `Family Building Act of 2009'.	2009
California	SB 1780: Health insurance: infertility treatment coverage.	1994
	AB 1101: Health care coverage: contraceptive drugs: family planning: reproductive health.	1995
	SB 1363: Personal rights: human tissue.	1995
	SB 1964: Discrimination in employment and housing.	1996
	SB 1555: Sperm, ova, or embryos: use and implantation without authorization.	1996
	AB 2513: Physicians and surgeons: assisted reproduction	1996
	SB 1349: Committee on Business and Professions. Vocations: Pharmacy Law: sanitizers.	1997
	AB 1251: Human cloning.	1997
	AB 441: Tissue donors: sperm donors.	1997
	AB 764: Food and drug inspections.	1997
	AB 589: Health care coverage: clinical practice guidelines.	1998
	AB 2040: Parent and child: assistive reproductive technologies.	2000
	SB 1630: Assisted reproductive technology.	2000
	AB 525: Health benefits: reproductive health care.	2000
	AB 1826: coverage: infertility treatment.	2002
	SB 1272: Stem cells: human tissue: research.	2002
	SB 1557: Human cloning.	2002
	SJR 38: Stem cell research.	2002
	AB 1996	2002
	SB 1230	2002
	SB 133: Human cloning.	2003
	AB 267: Cloning: humans.	2003
	SB 771: Human cells: embryo registry: egg cell donation.	2003
	AB 2380: Parent and child relationships.	2004
	SB 18: Reproductive health and research.	2004
	AB 2512: Fetal pain prevention.	2006
	SB 1260: Reproductive health and research.	2006
	SB 1325: Adoption.	2006
	SB 1704: Health care benefits.	2006

Table 12: The bills

	SB 313: Adoption.	2007
	SB 443: Tissue donors: sperm donors.	2007
	SB 1726: Adoption.	2008
	SB 1184: Public Health	2008
	AB 941: Adoption.	2009
	AB 1317: Assisted oocyte production: advertisement: information.	2009
	AB 1397: Tissue donation.	2009
	AB 1543: Medicare supplement coverage.	2009
	SB 674: Healing arts.	2009
	SB 1150: Healing arts.	2010
	AB 1487: Tissue donation.	2010
	AB 2020: Family law.	2010
	AB 2426: Surrogacy facilitators.	2010
Georgia	HB 1073	1996
	SB 451	1998
	HB 1012	2003
	SB 537	2006
	SR 280	2007
	HB 1384	2008
	HB 1358	2008
	SB 330	2009
	SB 204	2009
	SB 169	2009
	HR 5	2009
	HB 489	2009
	HB 351	2009
	HB 1	2009
	SR 156	2009
	HB 338	2009
	HB 228	2009

Table 13: Time line

Federal	Human Embryo Transfer	1985
	Alternative Reproductive Technologies: Implications for Children and Families	1987
	Federal Employee Family-Building Act of 1987	1987
	Consumer Protection Issues Involving In Vitro Fertilization Clinics	1988
	Federal Employee Family-Building Act of 1987	1988

Table 13: Time line

	Medical and Social Choices for Infertile Couples and the Federal Role in Prevention and Treatment	1988
	HR 1931: `Childless Veterans Assistance Act of 1989'.	1989
	HR 1199: no title	1989
	HR 5110: `Fertility Clinic Success Rate and Certification Act'	1990
	HR 1161: `Women's Health Equity Act of 1991'.	1991
	HR 3940: `Fertility Clinic Success Rate and Certification Act of 1991'	1991
	HR 756: `Fertility Clinic Success Rate and Certification Act'.	1991
	Fertility Clinic Services	1992
	HR 4773`Fertility Clinic Success Rate and Certification Act of 1992'.	1992
	S 1757: `Health Security Act'.	1993
	HR 568: `Contraception and Infertility Research Centers Act of 1993'.	1993
	S 168: Affordable Health Care for All Americans Act''.	1995
	HR 2774: no title	1999
	HR 2706: `Family Building Act of 1999'.	1999
	HR 4532: `Equity in Fertility Coverage Act of 2000'.	2000
	S 2160: `Fair Access to Infertility Treatment and Hope Act of 2000'.	2000
	S 874: `Fair Access to Infertility Treatment and Hope Act of 2001'.	2001
	HR 2608: `Cloning Prohibition Act of 2001'.	2001
	HR 2172: `Cloning Prohibition Act of 2001'.	2001
	HR 1246: no title	2001
	HR 389: `Family Building Act of 2001'.	2001
	S 303: `Human Cloning Ban and Stem Cell Research Protection Act of 2003'.	2003
	S 1726: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2003
	HR 3350: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2003
	HR 3026: no title	2003
	HR 3014: `Family Building Act of 2003'.	2003
	HR 1852: `Equity in Fertility Coverage Act of 2003'.	2003
	HR 969: `Medicare Infertility Coverage Act of 2003'.	2003
	HR 801: `Cloning Prohibition Act of 2003'.	2003
	HR 4872: `Retinoblastoma Awareness and Prevention Act of 2004'.	2004
	S 707: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2005
	S 876: `Human Cloning Ban and Stem Cell Research Protection Act of 2005'.	2005
	HR 2861: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2005
	HR 2759: `Equity in Fertility Coverage Act of 2005'.	2005
	Hr 2758: `Medicare Infertility Coverage Act of 2005'.	2005
	HR 2574: ''Respect for Life Embryonic Stem Cell Act of 2005''.	2005
	HR 1822: `Human Cloning Ban and Stem Cell Research Protection Act of 2005'.	2005
	HR 1418: `Infertility Coverage for Federal Employees, Military Personnel, and their Families Act'.	2005
	HR 735: `Family Building Act of 2005'.	2005

Table 13: Time line

	S 363: `Hope Offered through Principled, Ethically-Sound Stem Cell Research Act'	2007
	S 812: `Human Cloning Ban and Stem Cell Research Protection Act of 2007'.	2007
	HR 2892: `Family Building Act of 2007'.	2007
	HRes 322: not title	2007
	HR 1424: `Paul Wellstone Mental Health and Addiction Equity Act of 2008'.	2008
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	S 1258: `Family Building Act of 2009'.	2009
	HR 697: `Family Building Act of 2009'.	2009
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	SB 1363: Personal rights: human tissue.	1995
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	AB 2513: Physicians and surgeons: assisted reproduction	1996
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	AB 1251: Human cloning.	1997
	AB 441: Tissue donors: sperm donors.	1997
	AB 764: Food and drug inspections.	1997
	AB 589: Health care coverage: clinical practice guidelines.	1998
	AB 2040: Parent and child: assistive reproductive technologies.	2000
	SB 1630: Assisted reproductive technology.	2000
	AB 525: Health benefits: reproductive health care.	2000
	AB 1826: coverage: infertility treatment.	2002
	SB 1272: Stem cells: human tissue: research.	2002
	SB 1557: Human cloning.	2002
	SJR 38: Stem cell research.	2002
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	SB 1230	2002
	SB 133: Human cloning.	2003
	AB 267: Cloning: humans.	2003
	SB 771: Human cells: embryo registry: egg cell donation.	2003
	AB 2380: Parent and child relationships.	2004
	SB 18: Reproductive health and research.	2004
	AB 2512: Fetal pain prevention.	2006
	SB 1260: Reproductive health and research.	2006
	SB 1325: Adoption.	2006
	SB 1704: Health care benefits.	2006

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	SB 1184: Public Health	2008
	AB 941: Adoption.	2009
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	AB 1397: Tissue donation.	2009
	AB 1543: Medicare supplement coverage.	2009
	SB 674: Healing arts.	2009
	SB 1150: Healing arts.	2010
	AB 1487: Tissue donation.	2010
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	AB 2426: Surrogacy facilitators.	2010
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	SB 451	1998
	HB 1012	2003
	SB 537	2006
	SR 280	2007
	HB 1384	2008
	HB 1358	2008
	SB 330	2009
	SB 204	2009
	SB 169	2009
	HR 5	2009
	HB 489	2009
	HB 351	2009
	HB 1	2009
	HB 338	2009
	HB 228	2009

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THE IMPACT OF FRAMING ON POLICY PASSAGE: THE CASE OF ASSISTED REPRODUCTIVE TECHNOLOGY

A Thesis
Presented to
The Academic Faculty

by

Heather Smith

In Partial Fulfillment
of the Requirements for the Degree
MSPP in the
School of Public Policy

Georgia Institute of Technology
December 2011

THE IMPACT OF FRAMING ON POLICY PASSAGE: THE CASE OF ASSISTED REPRODUCTIVE TECHNOLOGY

Approved by:

Dr. Roberta Berry, Advisor
School of Public Policy
Georgia Institute of Technology

Dr. Richard Barke
School of Public Policy
Georgia Institute of Technology

Dr. Juan Rogers
School of Public Policy
Georgia Institute of Technology

Date Approved: August 23, 2011

ACKNOWLEDGEMENTS

I wish to thank the School of Public Policy faculty for answering my many questions that I had while working on this paper. I also wish to thank my committee and my advisor for helping bring this paper to completion despite the logistics and many challenges of this summer. I would like to thank Dr. Elizabeth Berliner for her insightful comments on earlier drafts, and my colleagues for listening to my many revisions to the concepts. I would especially like to thank Dr. Roberta Berry for the extensive amount of time and work she has put into guiding this paper to its final form. And finally, I would like to thank my mother and father for being patient with me in this journey to a final paper. Your support and love has given me the strength to reach the end.

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AFA	American Fertility Association (formerly, American Infertility Association [AIA])
AID	artificial insemination by donor
AMA	American Medical Association
ART	assisted reproductive technology
ASRM	American Society for Reproductive Medicine
AATB	American Association of Tissue Banks
CDC	Centers for Disease Control
CMMS	Centers for Medicaid and Medicare Services
CPDF	comparative policy design framework
DHHS	Department of Health and Human Services
EAB	Ethics Advisory Board
FCSRCA	Fertility Clinic Success Rate and Certification Act
FDA	Food and Drug Administration
GIFT	gamete intrafallopian transfer
HEW	Department of Health Education and Welfare
ICSI	intercytoplasmic sperm injection
IVF	*in vitro* fertilization
NICHHD	National Institute of Child Health and Human Development
NCOART	National Coalition for the Oversight of Assisted Reproductive Technologies
NRC	National Research Council
OTA	Office of Technology Assessment
PCB	The Presidential Commission for the Study of Bioethical Issues

SART	Society for Assisted Reproductive Technology
ZIFT	zygote intrafallopian transfer
PROST	perionatal oocyte and sperm transfer

SUMMARY

In the last 30 years, in vitro fertilization (IVF) has created a significant amount of controversy around the world. Within the U.S., policy movement has been limited, occurring primarily at the state level, which has created a fragmented system of rules to manage the technology. However, there appear to be indications that how the issue is presented, and which actors are chosen to be represented in legislation, may impact the passage of policy, thereby also providing a reason for why little policy movement has occurred. In this study, pieces of federal, California and Georgia legislation were examined for the occurrence of differing frames, as identified by the actors presented, in order to determine whether different frames occurred in passed legislation than those found in failed legislation. It was determined that, while actors did not differ significantly between passed and failed legislation, there were some slight differences between actors used at the federal level, as well between the different state levels. Even further, the presentation of actors and their interests did appear to differ slightly between passed and failed legislation.

CHAPTER 1

BRIEF INTRODUCTION TO ASSISTED REPRODUCTIVE TECHNOLOGIES AND THE POLICY REGULATORY ISSUES

In the United States, the clinical application of assisted reproductive technology (ART) has been understood to enjoy freedom from governmental intervention, particularly in contrast to many other developed countries. Although the research aspects of the technology (embryo research, cloning, etc.) have undergone extensive scrutiny and been subject to a number of policy restrictions, the clinical aspects have largely remained free of government policy constraints (Bleiklie, et al., 2004, p.83). In fact, the clinical application and use of ARTs have widely been observed to be largely exempt from governmental oversight, data collection and regulation, particularly at the federal level (Goggin & Orth, 2004, p. 83; DeMelo-Martin, 1999, p.65). In Bleiklie, Goggin and Rothmayer's *Comparative Biomedical Policy*, Goggin's chapter on the U.S. ART policy observes that the U.S. has little in policy with relation to access to ARTs. Even further, both the chapter by Goggin and a white paper by Rebecca Harris recognize the emphasis upon professional self-regulation as the primary rule type related to ARTs (Goggin & Orth, 2004, p.92; Harris, 2010). Harris also points out that the traditional means of managing medicine seems to be the dominant model of managing ARTs in the U.S., stating that "[t]he model for medical regulation has been professional self-regulation, with licensing and liability torts as the primary tools of compliance. This places power squarely in the professional societies and medical practitioners (as well as medical malpractice insurance companies)." (Harris, 2010).

The few policy studies of the ARTs, such as those using Bleiklie, et al.' s Comparative Policy Design Framework (CPDF) and the white paper by Harris, make attempts to explain facets of the policy problems of the ART arena. Neither one,

however, appears to capture the full story of the lack of policy change within the U.S. policy context. The CPDF's particularly extensive study of institutional structure, actor coalitions, and policy designs (p. 5-13), informed the approach of this study, particularly the understanding of the coalition groups in existence. The Harris study provided some insight into the power situation of the arena. However, these earlier studies tend to appear highly static in nature, particularly ignoring the dynamics and history of the interactions they are studying. This study is an attempt to understand the policy arena as a dynamic system with strong policy currents that maintain the political policy structures.

This study views the policy making in a given arena as a dynamic, iterative process and focuses on how problem definition and policy framing affect the development and successful passage of ART policies on the federal and state levels. Some barriers to policy creation that have been pinpointed are due to the fragmentation of opposition groups (Rothmayr, et al., 2004, p.228), but this study proposes that additional constraints are due to the problem constructions (and solutions) found within the policies themselves and are influenced by the historical institutional structures of medical governance.

1.1 A general overview of the technologies and the approach of this study

ARTs have held a relatively unique position in the U.S. policy world. Since their debut on the world medical stage in the late 1970s, they have been hailed as the solution to infertility problems faced by numerous 'traditional' couples each year. With the birth of Elizabeth Carr in 1981, the first 'test-tube baby' born in the U.S., hundreds of infertile couples in the U.S. found that they would now have the opportunity to have children to whom they were genetically related, just as other more fertile couples had been doing for generations. Further, numerous 'non-traditional' couples/parents would also be able to have children of their own. Through the years, ARTs have not escaped scientific scrutiny and appear to be both safe and effective.

Despite this, these technologies as a treatment for infertility have not been free of criticism from other scholarly disciplines. Many of these critiques have stemmed from the fields of ethics and law, since many of these technologies either interfere with previously accepted ethical norms and beliefs, or because many of the controversies relate to complex, interrelated rights issues of the parents, their expected children, the practicing professionals, or other impacted groups, such as surrogates. For example, consider the argument outlined by Robert Blank and Janna Merrick in their book *Human Reproduction, Emerging Technologies and Conflicting Rights* (1995), about the lenses through which one can view reproductive rights: (1) the right not to have children, (2) the right to have children and (3) the right to determine the quality or characteristics of said children (1995, p. 5). Alternative bodies of critique also have developed in parallel to these mainstream arguments, such as in feminist law, in the sociology of medicine, in feminist ethics, and from the religious and pro-life communities.

These critiques often focused upon the impact of ART on the 'pillars' of society, such as family, health, and the research possibilities created through the use of these technologies (de Melo-Martin, 1999). Even further, questions have arisen regarding the ethical and economic incentives that arise due to the availability of such technology, such as embryo sex-selection and the transfer of excess embryos (Schonfeld, 2003; Collopy, 2004). Moreover, some doubt has been cast on the effectiveness of evaluation methods such as health technology assessments, due to possible applications of socially constructed biases embedded in the assumptions of these methods (de Melo-Martin, 1999). Examples of arguments over the impact of ART use include the altered role of women in society (Wilker, 1986; Kerian, 1997), the long-term effects of fertility drugs used in conception (Rutnam, 1991), the incentive to postpone conception (Heitman, 1995), and the advent of gamete donation and surrogacy (Robertson, 1996; Kierien, 1997). It has also been noted by scholars that there has been little federal policy development, despite the number of critiques. The sole exception to this is the *Fertility*

Clinic Success Rate and Certification Act of 1992 (FCSRCA), which publishes whether fertility clinics have a standardized process for transfer that falls within professional standards, and their success in accomplishing live births through their transfer process (Goggin & Orth, 2004, p.90).

Despite the fact that critiques of this technology are far from scarce, federal policy regarding their management has been limited in the last twenty-plus years that it has been in use (Eggen, 1991; de Melo-Martin, 1999). In fact, the management and regulation of ART practice has often appeared to gain saliency in public and political discourse only in the case of high-profile developments, such as the controversy surrounding 'octomom', or in cases of ethical conundrums, such as the price of egg donation. (Kolata, 1999; Kolata, 1998; Naik, 2009). Even during these developments, passage of policy has not necessarily occurred. The reasons for the saliency of these issues have not always been clear. For example, the saliency of the 'octomom' event may have been derived from the fact that she relied upon public assistance to support her family, almost as much as the fact that she was the first to give birth to surviving octuplets (Bowe, 2009). Alternatively, the saliency of egg donation in New York appears to have been more focused on the ethics of economic incentives (Kolata, 1999; Kolata, 1998). While major reports such as 2004's *Reproduction and Responsibility* by the President's Commission on Bioethics pinpointed several areas of ethical concern and provided subsequent policy recommendations, little policy appears to have materialized (PCB, 2004).

In part, the lack of policy at the federal level has been argued to be a false indicator of policy movement and that a majority of regulatory action occurs at the state level (Adamson, 2002). It is important to note that this position of deferring to federalist principles is not unusual in the U.S., particularly with regard to medical policy (OTA, 1988; PCB, 2004). According to Goggin & Orth, the states have been far more proactive in establishing oversight of ARTs than what is found at the federal level (2004, p. 92). An additional facet of regulation is the role of professional organizations, which are argued

to provide a number of self-imposed rules and which collect a significant amount of data. They are also recognized to play a significant role in the engagement of non-medical members of the community in oversight (Adamson, 2005; Aronson, 2000). This system of rules has largely been argued to suffer from significant fragmentation, which exemplifies how much the U.S. regulatory structure still differs from its counterparts and how little comprehensive oversight occurs (Rothmayr, et al., 2004, p.231).

With regard to public scrutiny, some highly publicized cases have reached mainstream media attention (Kolata, 1999; NYT, Feb. 12, 2009), but the issue of additional ART oversight appears to be pursued more heavily in scholarly and legal forums rather than public forums. There has been little exploration as to why this is the case, but it has been proposed that social construction within the policy arena may have a significant impact on how policy plays out (Rothmayr, et al., 2003, p.251). This may also be the case for the public forums. However, the intersection of ethics, law and policy on this topic has proven to be fertile ground for discussion, and has instigated a number of debates, including the role of ethics in policy analysis (Amy, 1984; Kenny & Giacomini, 2005), and the extent to which policy may intervene in the lives of private citizens (Kenny & Giacomini, 2005).

To some extent, this debate between scholarly communities can be traced to the dispute over whether ART use is a private, health-related decision or a public and social health concern. In the sight of many, particularly medical professionals and consumers, it has been argued that ART applications are a matter of couples exercising their reproductive rights (Robertson, 1996). Key to this argument is the establishment of negative reproductive rights through the federal courts, examples of which include *Roe v. Wade*, among others (*Roe v. Wade*, 410 U.S. 113 (1973)). At points, there have even been attempts to extend this argument towards the positive right to reproduce, as evidenced by the disputes regarding coverage of procedures by employers, private insurance and publicly funded healthcare plans (Gordon, 2005). This concept of a right to reproduce has

been heavily relied on to trump many arguments for additional oversight, as additional oversight, data collection or monitoring could have the potential of interfering with privacy (Robertson, 1996).

In contrast to the reproductive rights argument, there is a diverse number of arguments against the open policies currently governing ART use, including considerations of the long-term impact upon women, the rights of the children produced, and cost to society overall. Examples of oppositional positions include the impact of health history knowledge on the part of children produced via donors (Daniels, 2000), the long term repercussions of drugs used in fertility treatments on the women using them (Jennings & Callahan, 2001), and the longitudinal data on children produced via IVF (Green, 2004). Beyond the argument about the need to institute policies to protect potentially vulnerable actors (such as women, children, or the infertile couple) and society, questions have also arisen regarding the effectiveness of internal, professional oversight in an industry that clearly benefits from the continuance of limited external oversight (Charo, 2002). Given the findings that infertile 'couples' may have altered perceptions of risk and that the physician holds some 'self-interest' within the transaction, questions regarding the clarity and objectivity of decision-making in these transactions have arisen also (Grobman, et al., 2001).

Social constructions have also been argued to play a role in the debate, both in how actors are targeted through policy and which actors are able to gain political legitimacy and access to the political arena (Goggin & Orth, 2004, p.93-96). The effects of actor social construction in this arena, as well as knowledge social construction, have not been heavily researched previously and therefore, the implications for policy have been unclear. As proposed by Helen Ingram and Anne Schneider, social constructions can play a role in policy power dynamics (Ingram & Schneider, 1997, p. 192-3), but can also potentially restrict policy solutions and even which problems are considered (Ingram & Schneider, 1997, p. 106). For example, the social construction of doctors as 'experts',

'uninfluenced by market forces', 'ethically above self-interest', have been argued to not only contribute to the ways through which they are targeted in policy, but also the historical means through which they can wield power politically (Stevens, 2002, Varone, Rothmayr & Monpetit 2006). As such, the role of social constructions is not minor in the study of this policy arena.

The purpose of this study is to understand the role and effects of frames in this policy arena, with frames here referring to the wording and rhetoric used to refer to the wording and structure of problems and solutions in a particular policy area. The institutional arena has been somewhat defined by previous studies (Bleiklie, et al., 2004; Varone, Rothmayr & Monpetit 2006), as have some of the power balances that may define the boundaries of the arena (Harris, 2010, Varone, Rothmayr & Monpetit 2006). This study hopes to shed further light on the role of frames in explaining the persistence of actor social constructions. A more tangential focus of this study is the historical constructions of actors, such as medical professionals, the historical development of reproductive rights and how the relationship between these two things yielded certain policy frames that gained traction early in the establishment of the ART policy arena[1]. Therefore, the initial focus of analysis will be on the history of specific actors of medicine and reproduction in ART. The following chapter will contain a breakdown of relevant groups and organizations for the purpose of finding frames and the final portion will consist of an examination of federal and state level legislation pertaining to the use of ARTs. The remainder of this chapter focuses on the state of the technology, an outline of past and current policies, the critiques of both the technology and its management, and will address the historical structures present. The subsequent chapters will address the

[1] Feedback is an important aspect of the effects of historical constructions on policy creation, but is outside of the scope of this current study. Even so, the author does acknowledge that history can be viewed as constraining the available views on a particular policy problem through factors such as power balances, status quo bias and institutional availability.

theoretical and methodological approaches of this study, followed by the results and conclusions.

1.1.1 What ARTs are and How They Work

As defined by the Centers for Disease Control (CDC), assisted reproductive technologies are "all fertility treatments in which both eggs and sperm are handled" (CDC, 2009). This definition does refer to many of the technologies often utilized for treatment of infertility/involuntary childlessness, and it also neglects several treatments or technologies often included in the broader classification of 'reproductive technologies', such as artificial insemination (by donor [AID] or by husband [AIH], hereafter referred to solely as AID) and fertility-enhancing drugs (Blank & Merrick, 1995, p. 96-98). While IVF and its associated techniques are the only technologies managed by the CDC through FCSRCA legislation, it is important to note that the other two forms of reproductive enhancement also are controversial and closely related in nature.

Currently, the most common technologies used in assisting reproduction, as reported in the 2007 *Assisted Reproductive Technology* report published by the CDC, are IVF, with or without intracytoplasmic sperm injection (ICSI), gamete intrafallopian transfer (GIFT) and zygote intrafallopian transfer (ZIFT). Developed in 1978, IVF is the oldest of the three techniques mentioned above, with ZIFT and GIFT being developed in 1984 as a means of improving the success rates of ARTs (Asch, 1994, p.75-76). IVF and ZIFT are the most similar to each other, both involving the creation of an embryo outside of the body prior to implantation, whereas GIFT involves the implantation of individual gametes into the fallopian tubes, at which point fertilization is expected to occur (Asch, 1994, p. 75). ICSI, in contrast with the other three techniques mentioned, only acts as a mechanism to assure fertilization, through the injection of sperm into the ovum rather than incubating the gametes together within a culture medium (Asch, 1994, p. 76; CDC ART Report, 2007, Appendix B).

1.1.2 Drawing the line & limiting the scope

While IVF with or without ICSI, GIFT, ZIFT, AID and fertility-enhancing drugs all have ethical issues associated with them, their management is largely separate. The U.S. Food and Drug Administration (FDA) has clear jurisdiction over the management of fertility-enhancing drugs. It has some control over aspects of AID and ART through the regulation of use and testing of human tissue (Adamson, 2005; Adamson, 2002). The CDC however, monitors ART data in ways that AID are not managed, for example, tracking of success rates. Little evidence of AID management outside of the FDA's management of human tissues exists. For the purpose of maintaining clarity and consistency, this study will accept the limits of the CDC's definition of ARTs. While sources will not be excluded based on the inclusion of AID management, legislation solely directed at AID will not be considered. As a result, it is acknowledged that this may bias the study as a means of understanding policy frames in this area. However, it will also provide the necessary exploratory boundaries to assure a clear explanation of how frames affect policy direction in technology. It is also important to note that the examination of policy frames will be limited to legislation; while public media may play a role in ART political development, they will not be considered a primary source of data in this study.

1.2 The History of ARTs in the U.S.: : Inconsistency and Challenges to Underlying Norms

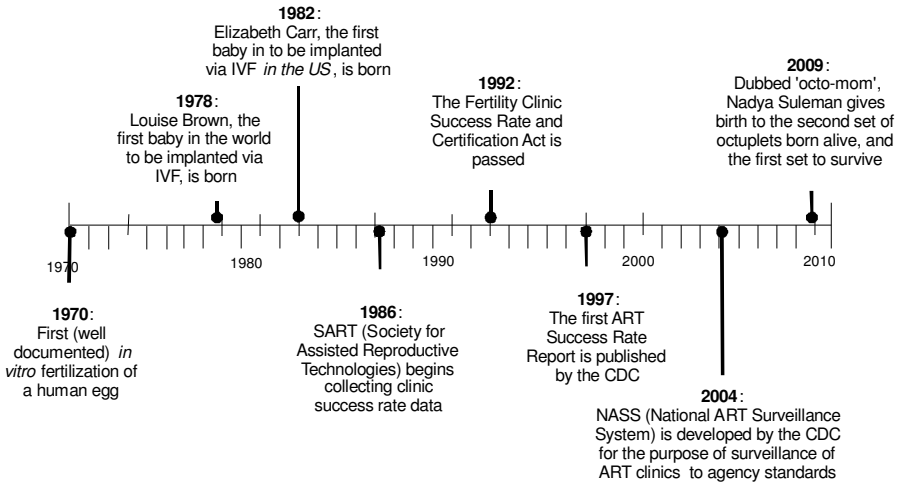

Figure 1:A general overview of the history of ARTs

1.2.1 What ARTs are and How They Work

Policy movement targeting ARTs was limited prior to the birth of Elizabeth Carr in 1981 (Cohen, et al. 2005). In fact, the 1978 Ethical Advisory Board's (EAB) evaluation of the ethical acceptability of ART is one of the few public policy actions of the 1970s (deMelo-Martin, 1998, p. 65-66). Other examples include the National Research Council's Committee on Life Sciences and Social Policy's technology assessment (HEW, 1979) and a 1975 regulation issued by the Department of Health, Education and Welfare (HEW), under which funding for IVF was banned until the EAB had reached some conclusions on the ethical acceptability of the technology (Grobstein, 1983). Much of the scrutiny of ART did not occur until after the birth of the first IVF baby (Grobstein, 1983). Even with the advent of ethical approval, however, which was included in EAB's 1979 report to the HEW (de Melo-Martin, 1999; EAB, 1979), public funding was not released due to the expiration of the EAB prior to giving approval of funding. Following the expiration of the board's charter in 1980, little policy action appeared to be taken based upon the report's recommendations, and further federal examination of ART did not occur until the Office of Technology Assessment's (OTA) reports on it in the 1980s

(Bonnicksen, 1986). The segment of the time line of in which the above policy action took place can be seen in Figure 2: A timeline of ART from 1970-1984 below.

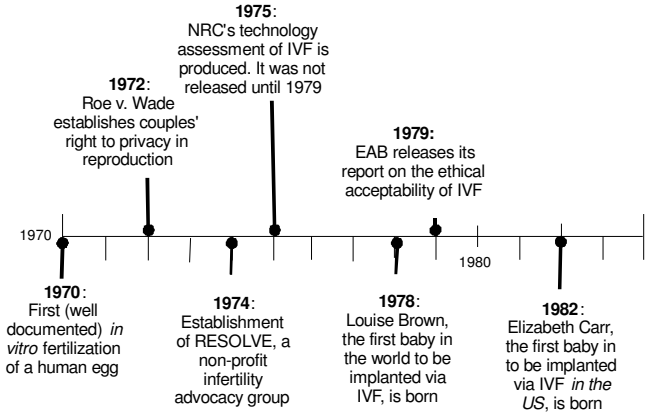

Figure 2: A timeline of ART from 1970-1984

As acknowledged above, there are a number of technologies that play a role in treating infertility, such as AID. Many of these technologies are not currently regulated under the same standards as ARTs. AID, as a means of treatment for infertility, was a technique utilized since early in the twentieth century to assist some infertile couples in reproduction (Smith, 1968). While this technology predates and provides the scientific foundation of many of the techniques now generally referred to as ARTs, it is governed by laws based upon the handling of materials, and is not covered by FCSRCA. It is not clear as to why AID is distinguished from other ARTs because, as can be seen throughout the literature (Beller & Weir, 1994; Walters & Singer, 1982), many of the ethical and social issues that arise from IVF (or GIFT) also occur with AID, with the exception of embryo experimentation (Asch, 1994).

ARTs were introduced for commercial use in the U.S. in the early 1980s, with the birth of Elizabeth Carr, but they debuted on the world stage as a means of treating infertility in 1978, with the birth of Louise Brown. The introduction of IVF as a technique available within the U.S. would not come for another four years, but its introduction as a technique potentially to be used on humans raised a number of questions

based on the potential for ethical conflict. In 1979, the EAB released its initial report to the HEW (later the Department of Health and Human Services (DHHS)) for the purpose of establishing whether IVF was ethically acceptable (EAB, 1979). This early policy report provided insight into the potential for ethical and safety issues, and also laid the groundwork for the possibility of public funding of the technology. The EAB determined several important points with regard to the management of IVF[2] and established that proceeding with IVF research in the U.S. was an ethically sound and acceptable course of action (Studdard, 1981). As a result of this report, doctors and scientists led by Howard Jones at Eastern Virginia Medical School, were able to successfully culminate the first U.S. IVF baby in Elizabeth Carr in 1981 Studdard, 1981).

It is important to note that this early report covered an exceptional amount of ground on the ethics of new biomedical technologies and provided an interdisciplinary perspective on the challenges facing the technology. It managed to include opinions from legal, ethical, social science and medical scholars in its attempt to understand the multidimensional implications of ART use. From a legal standpoint, the report determined that the right to privacy as it relates to reproduction and marital relationships, or 'reproductive rights', most closely applied to IVF clinical use (EAB, 1979, p. 65). However, legal arguments divided their understanding of ART use between clinical and laboratory applications of the technology (EAB, 1979, p. 68). Other ethically based arguments on ART also make this distinction. As such, this study addresses only the management of clinical aspects of this technology (EAB, 1979, Ch. 4; Studdard, 1981).

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[2] The points include (1) risks to mother and potential child were not clearly established and a review of additional animal models could improve understanding of the health risks and effects; (2) further technology research involving humans *was* ethically acceptable given that (a) human subjects guidelines were followed, (b) research was designed to determine safety that could not otherwise be determined through other models, (c) the people involved would be explicitly informed of the use of their gametes, (d) the embryos would not be sustained abnormally longer than the normal time of completion for implantation, and (e) that the public as well as 'interested parties' would be informed of the outcome if the procedures showed evidence of higher than normal abnormalities in offspring; (3) it did not address the issue of funding of such research.

1.2.2 Policy treatment of ARTs from the advent of commercial use to the establishment of FCSRCA

By the time the first IVF baby was born in 1981, policy recommendations and legislation on clinical use and application of ARTs were limited. However, with the availability of ART to treat infertility, scholarly, public and political debate erupted, focusing on the use and monitoring of these new technologies (Hyer, 1978; Lee, 1986). As ARTs became more available, the reality of social impacts began to reach the forefront of the debate. The concepts of property, parenthood, legitimacy and family had all shifted, and it became apparent that new rules and definitions would have to be developed, as the previous ones no longer clearly applied. (EAB, 1979; Wadlington, 1983)

A primary point of interest during this decade of ARTs was the safety and efficacy of the technology (EAB, 1979; Kurinczuk, 2003). As explained in the third paragraph of section 2.1, following the ethical approval of IVF by EAB, research proceeded that culminated in the birth of Elizabeth Carr in 1981. From this work, a number of new IVF and similar techniques were developed, including GIFT, Perionatal Oocyte and Sperm Transfer (PROST) and ZIFT. The birth also provided a catalyst for policy development in the ART arena (Bonnicksen, 1986). Between 1981 and 1992, the management and analysis related to ARTs fell within the domain of OTA. During this period, they published one study addressing policy development pertaining specifically to infertility and ARTs and several others that addressed the role of new biotechnologies in society and medicine. (OTA, 1988a; OTA, 1988b; OTA, 1987). The 1988 infertility report provided a number of insights into the ethical[3], legal[4] and policy[5,6] issues

[3] The right to reproduce, the moral status of the embryo, the relationship between parents and children, the patient's right to know (regarding experimentation), confidentiality and honesty, and the responsibility of one generation for the one(s) after it.

[4] Transactions relating to the transfer of gametes, embryos and neonates, as well as what the definition of parenthood is within the legal context (as compared to the genetic/scientific context)

underlying both clinical and laboratory use of ARTs (OTA, 1988b). Overall, a number of policy options were addressed, including additional regulation. However, the report also reinforced the idea that much of the power of governance for ARTs lay at the state level, through professional licensing and jurisdiction over health issues and family law. (OTA, 1988a, p.172) As a result, few federal government options found in the report were implemented. Congress also held several hearings on issues of the implications, access, and consumer protection related to these technologies, but they too resulted in little policy action (Blank & Merrick, 1995).

In contrast to the federal level, state level and professional organizational level policy movement was not insignificant. On the professional side, the Society for Assisted Reproductive Technology (SART) began collecting success rates for member clinics in 1985, through a system that would later provide the framework for measures implemented by the CDC in its oversight capacity (CDC, 2009). Given this action, and work done by the American Fertility Society (now known as the American Society for Reproductive Medicine [ASRM]), a number of professional measures were put in place for practitioners of ARTs (Blank & Merrick, 1995, p. 96;). Since this time, regulation in the U.S. has mostly consisted of self-regulatory guidelines established at the professional level (Adamson, 2005). These professional organizations, along with consumer organizations such as RESOLVE and the American Fertility Association (AFA, formerly the American Infertility Association) also dominated much of the discourse on ART, through coalitions such as National Coalition for Oversight of Assisted Reproductive

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[5] This section clearly articulates costs (of infertility as well as infertility treatment), issues related to quality of product, and the breakdown of the affected population(s). It also, briefly addresses the state of management of that technology as it related to policy product at that time, which was largely considered to be an issue to be dealt with at the state level (with regard to clinical practice), given that it was considered a 'medical issue' and a consideration for family law, both state level matters.(OTA, 1988, p.10)

[6] The OTA report on IVF also identified nine areas in which potential policy options existed, including: (1) data collection, (2) infertility prevention measures, (3) consumer information/ awareness, (4) infertility treatment access, (5) assessing the reproductive health and well-being of veterans, (6) gamete and embryo transfer, (7) keeping of accurate records, (8) surrogacy, and (9) research related to reproduction. (p. 15)

Technologies (NCOART) and legislative advocacy (Adamson, 2005; SART, 2010). They also played significant roles in the management and implementation of FCSRCA through both provision of oversight and acting as a facilitator for the collection of additional clinic data.

With regard to state policy action during this period, some states were quite active in creating legislation related to ARTs. At least 11 states created policy mandating either insurance coverage or the offer of coverage for infertility treatment. Two of these states, California and New York, specifically excluded the coverage of IVF (NCSL, 2009). Even further, several states instituted restrictions on insemination, ranging from a ban on self-insemination to a requirement that insemination be conducted by a physician (Blankenship 1993). Overall, while state policy action was not stagnant during this period of time, it also was fragmented, creating a number of different types of policies.

The key policy move of the decade at the federal level, however, was the development and enactment of the FCSRCA of 1992. In the late 1980's and early 1990's, a few clinics were cited for false advertisement of success rates, a term often used to refer to live-birth rates, by the Federal Trade Commission (FTC) (FTC, 1990, p. 26). As a result, Congress moved to implement legislation to 'protect' the ART consumer from false advertisement. Once during the second session of the 101st Congress (1989-1990), and twice during the first session and once during the second session of the 102nd Congress (1991-1992), a bill was introduced with the intent for providing a system of certification for fertility clinics and a reporting/tracking system for their success rates (H.R. 756; H.R. 3490; H.R. 5110; Pub.L. 102-493). The final introduction of the bill in 1992 passed both houses of Congress and was enacted. This piece of legislation is the single example of successful ART legislation at the federal level in the U.S.

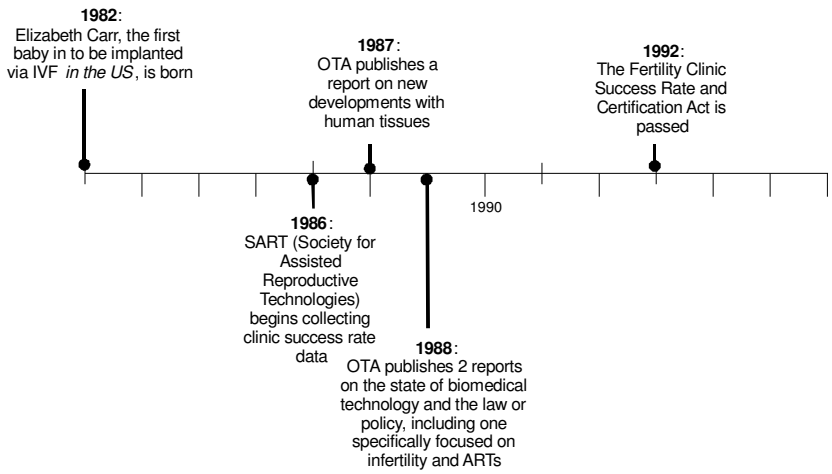

Figure 3: A timeline from 1982-1995

1.2.3 Policy treatment of ARTs from FCSRCA to present

After the passage of FCSRCA in 1992, one might expect that this represented a change in attitude towards centralized ART policy. However, much of the successful policy change since FCSRCA has been in areas of access more so than oversight. As acknowledged in the fifth paragraph of the last section, part of the reason behind the implementation of FCSRCA was a response to an FTC violation on advertisement of success rates (Adamson, 2005). Whether FCSRCA has been successful at correcting for this issue is less clear and evaluative study of its effectiveness appears to be limited. With regard to other aspects of ART policy, however, the CDC has published the results of their current oversight activities publicly since 1997 (CDC, 2005). Further, the PCB revisited the issues facing ARTs in 2004 (PCB, 2004). The report states many of the points made by earlier reports from the EAB and OTA regarding potential means of managing ARTs, such as a need for additional data from which to draw conclusions and the need to create additional infertility prevention measures (EAB, 1978; OTA, 1988a). With regard to changes in management strategy, a few high profile cases have created short-lived turmoil in the policy arena and, yet again, little has morphed into public policy change. Changes in professional self-regulatory guidelines, on the other hand,

have been far more dynamic, often responding to public outcry (Adamson, 2005; Adamson, 2008). However, not all of this change has been transparent, with guideline access largely being restricted to members of ASRM (ASRM, 2010). Overall, policy change within the last 18 years has largely been limited to state regulation and professional self-regulation.

At the state level, the legislative action has been varied. Some states, such as Louisiana, Pennsylvania and New Hampshire, have been very active in creating laws to govern ART use within their states (PCB, 2004; Adamson, 2005). Some states have implemented rules not only on the status of the embryo (Havins, 1999), but also the requirements, rights and responsibilities of all parties that are directly involved, including establishing an owner or guardian of embryos once they are created (Havins, 1999). Moreover, states have taken some action regarding informed consent and other measures to improve the outcomes for the consumer, on top of those provided by FCSRCA (Rosato, 2003). Even given this policy action, however, a number of gaps are still acknowledged to exist, one of which has been the lack of uniformity of policy across states. However, this lack of uniformity has generally been explained by the structure of the U.S. government, which creates fragmentation through its separation of powers and federalist structure (Blank & Merrick, 1995).

1. The state of the law and legal structures in ARTs

The judicial regulatory history impacting ARTs begins with judicial decisions made about the right to reproduce or not reproduce. *Griswold v. Connecticut* established a right to reproductive choice about contraception within the context of marriage (*Griswold v. Connecticut*, 381 U.S. 489, 1965; de Melo-Martin, 1999, p. 64). *Roe v. Wade* established the right to privacy in reproductive choice about abortion (*Roe v. Wade*, 410 U.S. 113 (1973)). *Skinner v. Oklahoma* guaranteed the right to reproduce without interference (*Skinner v. Oklahoma*, 316 U.S. 535 (1942)). While all of these cases were

key in establishing what are known as negative reproductive rights, the rights of individuals to be free of governmental interference in their reproductive choices, many argue that a more essential right in the assisted reproductive world is a positive right to reproduce, which would guarantee not only the right to be free from government intervention in one's reproductive choices, but also that it is the responsibility of the government to provide infertile couples with the means to reproduce, including the provision of services like ART. (de Melo-Martin, 1999, p. 65)

Beyond the judicial decisions regarding one's right to use ART for the purpose of reproduction, there have also been some rulings regarding the outcomes of the procedure or steps within the procedure. These include cases establishing familial and property rights and concerning physicians' discretion to provide treatment (Ekstut, 2008). For example, several rulings have been made regarding establishment of parentage of a resultant embryo, in the case of surrogacy or gestation and gamete donation, and establishment of parenthood by parties (Eckstut, 2008; K.M. v. E.G., Cal. 2005; UPA, 2002) or in the case of changes in the relationship between gamete donors (or 'parents') (Eckstut, 2008; UPA, 2002), and the ability of the embryo/child to inherit with postmortem implantation (Eckstut, 2008; UPA, 2002). In the case of surrogacy contracts, gamete donation and establishing parentage, it can clearly be seen that the norms defining parenthood that formerly informed family law have changed, not only due to a division of genetic and physical parenthood, but also because of the potential financial incentives offered to surrogates and donors (Levine, 2010). A number of ethical concerns arise due to these new incentives, such as the commodification of women's bodies and human gametes, coercion, and risk discounting (Collopy, 2004; Redshaw, Hockley & Davidson, 2007; Levine, 2010). There is also great potential for discrimination in the provision of services, particularly against non-traditional couples and single parents, based on the wording of some judicial rulings and statutes (Eckstut, 2008). Yet another emerging area is embryo status. Ownership/property status, adoption status and postmortem birth all are

examples of situations in which the norms that underlay family and property law, no longer clearly apply. Ideas of consent, parentage, and legitimacy for the purposes of inheritance are now confused due to the shift in when activities can temporally take place, as in the case of a pregnancy achieved after the death of one of the parents, or adoption of an embryo though it often lacks the legal status of a post-natal child (OTA, 1988, p. 224).

However, a number of states also have made attempts to clarify statutory confusion due to ART practice, ranging from establishing ownership or guardianship of embryos at insemination, creating legislation to determine the parentage of the child produced, and establishing the timetable for legitimacy in the case of inheritance (Moses, 2006, p. 33). As such, many have argued that ARTs are not 'free' from regulation (Adamson, 2005). The counter argument to this point however has often been that since regulatory statutes and judicial rulings are not consistent across states, the industry remains effectively unregulated (Valverde, 2007; Moses, 2006).

These cases reveal the legal challenges posed by ARTs, as they render the prior regulatory structures irrelevant or unclear. The norms governing previous rulings have now been altered by the new possibilities in reproduction and parenting, as well as access to services (Moses, 2007). What is clear is that the consequences of using ART are much broader than just the positive or negative right to reproduce and the decisions made regarding them are likely to be far reaching.

1.3 Policy, regulatory and other critiques

The issue with ARTs is not only that regulatory oversight is insufficient but also that there are a number of ethical, scientific, and social implications of these technologies. According to physicians and consumer groups for the infertile, ARTs provide a way to ease the suffering associated with the inability to produce children in the traditional manner (Adamson, 2005). Even further, these technologies provide new

avenues of research to cure diseases suffered by thousands of people every day, such as diabetes and Parkinson's, through cell-based therapies (NIH, 2009). However, the critiques of the use and management of these technologies also are significant. The U.S. policy development on this issue has been limited, resulting in a permissive regulatory structure in the industry. At the federal level, this manifests as a structure that is limited in both oversight and rule development (Bleiklie, et al., 2003). Even further, as discussed in section 2.4, much of the decision making power exists at the state and professional levels (Moses, 2005). This structure has been one of the targets of critique, given that it is relatively unique amongst the developed countries that utilize ARTs (Bleiklie, et al., 2003). But regulatory structure is not the only source of critique of ARTs. There have also been questions on the scientific safety of these technologies, as well as their social impact. This section will briefly address some of the science critiques that question the safety of ARTs, and social critiques, which object to the use of ART for reasons beyond science. The final part of this section will address the regulatory critiques, or those critiques that propose means to address the problems pinpointed by these social and/or science critiques.

1.3.1 The state of the law and legal structures in ARTs

Within the science of ARTs, there is a limited amount of questioning of the safety and outcomes of the technology as it is currently used. Often these critiques do not argue that use of IVF be banned, but often they do point out the problems with how it is applied and how well the implications are understood. The latter is often expressed in terms of the long and short term health impacts. For example, it has long been acknowledged that pregnancies achieved through ART show an increased risk of multiple births (Doyle, 1996; CDC: Assisted Reproductive Technology, 2010) and ovarian hyperstimulation syndrome (OHSS) (Keith & Oleszczuk, 1999). There have also been indications that there is an increased risk of morbidity for both mother and resultant child through the

ART process (Grobstein, et al., 1983; CDC, 2010). A number of health complications for singleton children of ART have also been reported. For example, low birth weight has been reported for both singletons and multiples, and previous studies have linked it to a number of long term health issues for children conceived through ART (Omblet, et al., 2006; McDonald, et al., 2009). The issues relating to health impacts on children conceived via ART appear to be confirmed through the CDC's ten year surveillance program of ART outcomes (CDC website, 2009). However, it has also been pointed out that the conditions suffered by IVF children cannot be conclusively linked to ART usage because of the possibility that the result may be due to the subfertility of the parents (McDonald, et al., 2009).

There are also the psychological aspects of ART to consider. Foremost is the indication of greater acceptance of risk by couples undergoing ART in order to reach their optimal number of children (Collopy, 2004). There have also been questions regarding the long term health, development and welfare of children produced from ART. Specific examples include the bonding process between parent and child when donor gametes are used for conception and the valuation of children due to the economic and physical costs associated with achieving conception (Little, et al., 2006).

Alternatively, even in light of the questions, it is also unfair to characterize the use of this technology as being without merit. Responses to some of the critiques include the argument that these technologies ameliorate some of the psychological suffering caused by infertility (Jordan, 1999; Schmidt, 2006), making it possible for non-traditional couples and individuals to build families (Liu, 2009), and create new avenues for research and disease treatment (citation). Moreover, it is pointed out that many of the early issues that plagued ARTs, such as high percentages of multiple births and low live-birth success rates, have steadily decreased in prevalence as the technology has matured (Toner, 2002). Therefore, it is postulated that many of these issues will be resolved given time, without government intervention or oversight (Adamson, 2002). Even further, this

line of argumentation proposes that proposed solutions would in fact hamper the development of the technology (Gleicher, 2005; Moses, 2005). For example, the proposition to limit the number of embryos transferred, in order to minimize the occurrence of multiple births, (1) would be a one-size-fits-all solution for a problem that requires case-by-case evaluation; and (2) would increase the cost of treatment to achieve a single birth because it could increase the number of cycles involved (Little, et al., 2006).

1.3.2 Social/social science critiques

Regarding the social impacts of ART, beyond those impacted by current law, as discussed in this chapter there are also a number of ethical and sociological issues to be addressed regarding ARTs. For example, there are questions not only about the health of the mother and child during and after the procedure, but also about the impact of the technology itself on the valuation of these individuals in society (Schonfeld, 2003). It has been argued by a number of feminist writers that these technologies change the role of the woman from 'person' to 'womb', and this change in social norms thereby devalues the position of women in society that they have worked so hard to redefine (Kerian, 1997). This section will be split into three parts, and although some aspects of these parts overlap in discipline, the arguments presented are distinct.

1.3.2.1 Sociological & Political Science Critiques of ARTs

Within the sociological scholarly community, ARTs have received a wealth of attention, particularly within the study of the sociology of medicine. Given the role of ARTs in changing social and physiological norms that have previously existed, as addressed in section 1.4 of this chapter, it is clear that there is a social component to the practice and outcomes of ART. Much of the motivation for this study stems from the arguments regarding 'medicalization' within this field. As defined by Peter Conrad, medicalization is the process through which a problem becomes defined by medical

terms, utilizes a medical frame for its understanding, or involves a medical intervening force for the purpose of 'correction' (Conrad, 1992). His definition provides one perspective from which to view the critiques that will be presented here.

Medicalization, particularly of childbirth and reproduction, has been a prominent lens through which critiques of ARTs have developed. A primary point of interest in this set of critiques is the development of 'involuntary childlessness', a socially constructed status expressing want, into 'infertility,' a disease or disability requiring treatment (Finkelstein, 1990). The medicalization process as a lens through which to view ARTs and their use has featured heavily in feminist critique, as will be addressed in section 1.3.2c. However, more general medicalization critiques also play a role in the understanding of ART, such as Conrad and Leitner's examination of the role of 'infertility as a disease' in the debate over insurance reimbursement, coverage and litigation regarding coverage (Conrad & Leitner, 2004). Even further, this critique extends into the effects of medicalization on people's decision-making, primarily it's role in their pursuit of some technologies, such as IVF or surrogacy (Richard, 1990). Overall, the medicalization critique focuses not only upon the role of medicine in defining expertise as it relates to concepts such as infertility, but also its role in the pursuit of certain treatments such as ARTs.

Another prominent point that has been made about ARTs is its creation of new families by expanding the option to reproduce not only to the 'biologically infertile', but also the 'socially infertile'. Groups included in this definition of socially infertile are those who could not reproduce due to choices regarding sexual and interpersonal relations and those who choose not to reproduce by traditional means, for example, because of lifestyles or potentially devastating genetic problems they would prefer not to risk passing onto their offspring (Shultz, 1990). While not objectionable on face value, these new reproductive options have often been pointed out to create new areas of concern because of the involvement of external partners such as surrogates and gamete donors.

This has not only complicated previous legal understandings of parenthood, as addressed in section 1.2.4, but also the cognitive and social perceptions of 'parenthood', 'family', and the fundamental understanding of relationships (Robertson, 1996). Therefore, the division of previously indivisible 'stages' of parenthood (genetic, gestational, and social), has created a loss of information for both the individual and society as a whole that has not been successfully reacquired.

The additional sociological considerations on ARTs to be addressed in this paper fall within the following two categories of ethical critiques and feminist critiques. While it is acknowledged that this current outline only touches upon a fraction of the critiques associated with ARTs, it was determined that these were of the most importance to this study. Other critiques, such as the impacts of social construction on non-traditional couple access, while important in the larger study of ART, are not among the subjects of interest in this study.

1.3.2.2 Ethical Critiques of ARTs

By far the largest body of critique and support for ARTs appears in the ethics literature. A number of ethical arguments have been made in favor of minimal government intervention in ART practice, based upon the implications of these technologies for the well-being of both biologically and socially infertile couples (Shultz, 1990) as well as the protection of procreative liberty (Robertson, 1996). However, others have pointed out important countervailing ethical considerations, including the rights of the embryo and the resultant child (Clements, 2009), how well informed the party undergoing the procedure is with respect to the risks and long term implications (Grobman, et al., 2001), and the utilization of multifetal reduction to address the transfer of multiple embryos (Coleman & DeBuono, 1999). Further considerations involve the right of children to know the means of their conception and, if necessary, access their genetic information. The former issue of understanding the means of one's conception, in

part conflicts with the rights of the parents' privacy regarding their own reproductive choices (Robertson, 2004). However, it also relates to the argument in favor of the collection of longitudinal health data on children conceived by IVF, which has been suggested as a means to gain a better understanding of the potential health and health policy issues that may arise due to IVF (Fastoulis, 1999).

Beyond the ethical implications related to the embryo however, are the issues related to social pressures upon couples to have a child, thereby forcing a less than optimal choice selection, and the implications of the reduced risk perception and increased risk discounting of infertile couples (Collopy, 2004). While it has often been noted that physicians have guidelines relating to the provision of clear information to the prospective patients, it has often been suggested that ARTs, like experimental techniques, should require informed consent. In part, this has been argued for the reasons related to their perception of risk, and the social pressures associated with their 'infertile status' (Schmidt, 2006). However, there has also been the suggestion that the implementation of informed consent or some similar documentation would assure the prevention of self-interested parties taking advantage of parties for the purpose of gain, be it the physician of a couple for the purpose of financial gain or the couple of a surrogate for the social gain (Houmard & Seifer, 1999).

Overall, it can be seen that ARTs are not without a number of ethical considerations, not all of which are easily handled by policy. However, as it pertains to our study, the existence of these ethical conflicts provides some insight into the diversity of frames potentially held by the public. It is also important to note that this is not an exhaustive list of all ethical considerations related to ART use or research, but those that relate most closely to our study's interest in public values regarding the clinical application of ARTs. Other tangential considerations not mentioned above include those risks and incentives of surrogates and gamete donors, particularly egg donors, because of the invasiveness of the techniques involved in creating and maintaining pregnancy

through IVF, as well as what incentives are created by allowing for compensation in these cases.

1.3.2.3 Feminist Critiques of ARTs

A number of critiques of ARTs exist under the general umbrella of 'feminism'. Some of these critiques oppose the use of ARTs, based on previous power relations both within and outside the medical establishment, as well as the psycho-social implications (Ettore, 2000). These studies often take the form of historical analyses of the medicalization of childbirth or critiques of the patient-doctor relationship, in which one party is dependent upon the other due to perceived expertise (Birenbaum-Carmeli, 2003). Other critiques focus on the potential consequences for women within society because gestation still remains an aspect of reproduction in which the burden falls upon the woman. This critique often focuses upon the potential for exploitation and commoditization of women as 'incubators' (Kerian, 1997). Alternatively, critiques have also focused upon the likelihood of women bearing most of the burden of ART procedures in the short and long term, through things like hormone injections to increase the likelihood of implantation, the impact of gestation, and other unknown, long-term implications (Luke, et al., 2007). However, additional feminist arguments advocate for use of the technology, as well as expansion of access, since they create the ability of women to procreate independent of men, thereby providing yet another form of procreative freedom for women. Even further, some arguments also cite the psychosocial impact of infertility upon women, not from the perspective of medicalization or social pressures surrounding childlessness, but instead from a perspective of procreative freedom. While the arguments both for and against the use of this technology are expansive, it is more important to acknowledge the existence of the debate than to expound upon the specific arguments at this point. Some of these arguments are addressed within the case studies, as they pertain to the frame analysis.

1.3.3 Regulatory/Policy proposed alternative approaches

The focus of this paper is both the critiques presented above and also the lack of oversight and regulation found within the policy arena, the latter of which has often been the motivation behind a number of the critiques above. A number of regulatory suggestions have been proposed to solve the issues addressed by the critiques listed above. Some minimal regulatory or oversight frameworks have been proposed in the U.S. to date, such as those proposed in the EAB report of 1979, the OTA report of 1988, and the PCB report of 2004 (EAB, 1979, p. 104-108; OTA, 1988, p. 15-31; PCB, 2004, p.183-204). There have also been a number of scholarly regulatory frameworks proposed, many of which overlap with those of the official reports. The primary reason for the interest in these proposed regulative approaches is that they represent alternative lenses through which ART policy frames may be constructed. In this section, the regulatory and oversight approaches proposed in formal reports will be addressed first, followed by those covered in the scholarly literature.

When EAB first confirmed the ethical acceptability of ARTs in 1979, specifically IVF, they included a number of caveats and suggestions for potential oversight regarding ARTs, largely because ARTs involved a number of health risks and other unknowns. One point that they emphasized in their summary was that their approval was based upon the argument that the use of IVF was "defensible but...legitimately controverted" (p. 100). In effect, they established that, while it would be ethically acceptable to move forward with additional IVF research, the ethical arguments against it were neither unfounded nor unwarranted. They advocated for additional animal model research to improve efficacy and provide better data about the risks (p. 104). They also concluded that research involving humans would be ethically acceptable given a number of caveats, as addressed in footnote 1 of section 1.2.1 (p. 106) and that support by HEW would be ethically acceptable within the bounds of those caveats of research involving humans, though they specifically did not address whether this should include federal funding of such research

(p. 108). They also concluded that additional data should be collected by multiple organizations, including the National Institute of Child Health and Human Development (NICHHD), in conjunction with private and international organizations (p. 112), and that the establishment of a 'uniform or model law' should be created for the purpose of further clarifying the legal status of children born of ARTs (p. 113).

Following from this, given that the EAB was not renewed in 1980, the OTA became the primary body for assessment of ARTs. They produced a report focusing specifically upon the ethics and policy options related to the use of ARTs in 1988 (OTA, 1988). They also produced two reports related to AID and the implications of new biomedical technologies on 'rights' around the same time, which provided further context for how politically salient biomedical technologies had become. The issues that they identified in their 1988 report, were as follows: (1) the right to reproduce, (2) the moral status of the embryo, (3) the bonding between parent and child, (4) research involving patients, (5) the confidential aspects of ART use and the extent of 'truth-telling', and (6) inter-generational responsibility (p. 11). The report touched on many aspects of ARTs, including feminist and religious perspectives on ARTs, the legal perspectives associated with it at the time, how it was addressed with regards to federally provided benefits, such as veterans benefits, and how other countries have addressed issues with ARTs. Their conclusions with regard to policy options for ARTs, particularly which aspects of ART were open for congressional action, were data collection on reproductive health, research on preventing infertility, consumer information and awareness, consumer access, veteran reproductive health, gamete and embryo transfer, recordkeeping, surrogacy, and research (p. 15). They further elaborated that there was interest for the federal government in each of these areas, including[7]:

1. extension of federal bills to enhance education regarding reproductive health,

[7] A full list of policy recommendations provided by the OTA report can be found in table 1 of Appendix A

2. enacting comprehensive and less localized, longitudinal studies related to ART use,
3. expansion of healthcare benefits provided by the federal government to include ART procedures,
4. institution of national standards for gamete donation, and
5. expansion of infertility research.

While the list presented here is not a comprehensive list of considerations, the overarching story found in these recommendations is that a number of regulatory and oversight policy options were proposed in response to the issues posed by ART use.

The final major report regarding ART use is that of the PCB, which was released in 2004. They also identified a number of ethical issues to be addressed, including more common considerations such as the implications for potential biological intervention into human procreation and the impacts upon the participants of the procedure, as well as more tangential issues for our study such as disposal, and research on and post-production use of embryos (p. 36). More important than the ethical issues presented in this report, are the direct and indirect ways through which ART were outlined to be regulated by government, in which direct forms of governance include physician licensing for ART procedure performance and location and indirect forms of governance including Investigational New Drugs (IND) restrictions by the FDA at this point in time. Moreover, even with the expansive list of federal, state and non-governmental regulations in place, it was determined that the 'patchwork' regulatory system was inadequate to properly provide sufficient protections for those involved (p. 78). Several policy options were provided, both as alternatives to or augmentations of the current system (Part II, p. 181). Some of these included the creation of a new regulatory agency, additional legislative action and increased monitoring (p. 186, 189, 194). However, this report also recognized the increased costs associated with both its institutional and substantive policy options, as well as uncertainty regarding the implications and decreasing incentives to

alter the current structure (p. 183). With regard to recommendations, the council offered three broad recommendations[8]: Increased federal data collection, reporting, and monitoring regarding use and effects (p. 208), increased oversight by professionals and professional societies (p. 215), and additional, targeted legislation (p. 218).

A number of scholars have also raised additional important regulatory considerations, going beyond these expansive reports. While many of them have mainly emphasized the need for additional oversight (Grobstein, et al. 1983; Cohen, 1997; Islat, 1998), some have also questioned the proposed means of regulation because they are insufficiently reinforced by current mechanisms, such as informed consent for patients (Cohen, 1997). What has also been pointed out is the emphasis within the current system on costs and benefits, which, while important, have largely overwhelmed other concerns (Andrews & Elster, 2000).

Therefore, the overall conclusion beyond those measures proposed by much of the larger reports and further emphasized by many of the scholarly publications is that, regardless of what regulation were to be put in place, a large barrier beyond the cost, which exists for most legislative action, is the breadth of concerns additional regulation would need to address. For example, informed consent would be expected to have minimal impact without additional data collection and publication. Even further, the conflict of social versus economic values is also a consideration which impacts the passage or consideration of new regulation.

1.4 A Short History of Medicine and Reproductive Rights

[8] The full list of recommendations and subheadings can be found in of Appendix 1

In order to flesh out the socio-political relationships of how the frames that are hypothesized to exist in the bills, it is necessary to provide some history on medicine[9] in the United States, as well as reproductive medicine. Not only has this means of governance been suggested to play a role in the understanding of how these technologies may be governed and by who, it may have had some impact on the composition of interest groups and who is considered a legitimate participant in the development of policy.

In the US, the intertwining of the abortion debate and the ARTs debate have often resulted in them being cast as flip sides of the same coin. As such, the mobilization of resources and interest groups therefore is strongly impacted the development of the frames and therefore it is important to introduce how reproductive has been framed and how the actors have behaved.

1.4.1 A General Overview of American Medicine

Medicine, in the modern U.S. context, has a unique history, with the institution of medicine emerging during the early twentieth century (Starr, 1982). The establishment of American medicine as an institution and the implications of it are important to this study; it will be argued that these were key in shaping the legislation related to ARTs practice. In order to contextualize this argument, a brief history of American medicine since the beginning of the 20th century will be the starting point of this analysis. Women's health and reproduction in America as a medical practice is a second important topic that will be

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9 As has been pointed out by numerous scholars, part of the reason that the regulatory structures in areas like assisted reproductive technologies differ so drastically from other developed countries is due to the means through which medicine has been traditionally governed in the U.S. (Wilsford, 1991; Bleiklie, et al, 2004).

proceeded to. From there, a brief overview of the legal aspects of government intervention in the institution of medicine will be given.

1.4.2 American medicine in the 20th century: A brief history of the development of the 'institution of medicine' in the U.S.

The present day system of medicine, with medical doctors occupying the organized and influential positions that they do today, is an artifact of the last century, rather than American history (Starr, 1982). In fact, according to Paul Starr, the development of the current system of medicine was more of the development of an institution rather than the development of medical practice (p. 8). Starr's analysis indicates that a key part of the American medical system is scientific and technological advancement (Starr, 1982 p. 10-12; Wilsford, 15). Moreover, standardization paired with a cultural shift towards health and a reliance upon the professional as an expert in the application of medical care (Starr, p.20; Wilsford, 1991, p. 8).

An early development in the history of 'modern medicine', was the increased standardization of the profession, and its connection with state licensure. Often argued as the key turning point in American medicine, the increased standardization of medicine created the ability for M.D.s to create barriers to entry to their field and effectively an economic monopoly upon the field of medicine (Starr, 1982, p.20). According to a centennial article on the founding and development of the American Medical Association (AMA), it was in 1905 that this organization created a 'Council on Medical Education', with a headquarters, for the specific purpose of providing oversight and a minimum standard of medical education (Fishbein, 1947). In 1906, state licensure boards began to require graduation from a medical school designated by the AMA as meeting minimum requirements (Walker, 1929). The establishment of being an entity responsible to a 'greater good' than the market also provided not only justification for the market barriers,

but also provided an air of distinction to the profession that, in turn, increased its legitimacy and its authority (Starr, 1982, p.20).

Also important to the development of 'modern medicine', was the advancement of science. The advent of pharmaceuticals and devices to treat people's ailments allowed the medical profession to gain acceptance and legitimacy in two ways: (1) it allowed the profession to distinguish itself from competitors within the health market and (2) it provided further justification for monopolization of the market because of the increased complexity of information for the consumer (Starr, 1982, p. 24; Law & Kim, 2005).

Beyond the ground work laid in the 'early' history of medicine in the U.S. providing for physician professional dominance, later actions within medicine also contributed to the current politics of medicine in the U.S. The role of state and federal governments in the management of medicine is distinct in the U.S., with the state holding a majority of the power to regulate. However, early 20th century health related legislation, including the Federal Food, Drug and Cosmetic Act and the Federal Occupational Safety and Health Act, allowed for greater federal intervention. Both of these were enacted under the auspices of “commerce law" over which the federal government has jurisdiction (Starr, 1982, p. 51-54). An alternative example of health policy that was established in the 1960s are the Medicaid and Medicare programs, established under the Social Security Act. While Medicaid involves a joint effort between the state and federal governments both are examples of how the federal government is not absent in historical health policy-making.

The structural limits and domains of medical policy, coupled with early 20th century development of 'professionalization,' have resulted in particularly strong professional autonomy. The organizational/structural changes that have occurred also have contributed a unique facet to the policy-making process, resulting in the development of a powerful interest group with regards to health-related policies.

1.4.3 American medicine in the 20th century: Reproduction in American Medicine

1.4.3.1 Perceptions of Women and Medicine

Another important historical aspect of medical practice, particularly regarding the issue of ART, is the relationship between women and doctors. A number of perspectives have been generated about how the traditions of medicine have impacted the development of medical practice, particularly as it relates to women, womanhood, reproduction and childbearing. The early thoughts on female sexuality and evolution of medicalized child birth play an important role in the understanding of ARTs as well as the opposition to it (Strickler, 1992). The medicalization critique also plays a strong role in the discussion, particularly with regard to infertility and the female body overall. Relatedly, the pro-status quo ART argument hinges on the idea that childbirth and infertility are medical issues to be handled by medical professionals. The historical development of these arguments is key to understanding how 'medical autonomy' matters to the ART debate, and also bridges the gap between medical autonomy and reproductive rights. I argue that the disconnect between these two perspectives on the childbearing process is part of what hinders the development of ART policy.

The starting point of this argument is the mid-nineteenth century, which was the point in time that physicians began to exact more control over the medical market. According to Charlotte Borst, obstetrics as an area of specialty in medicine was initially plagued with licensing issues (Borst, 1992, p. 201), competition from midwives (Borst, 1992, p. 207-208), and a general lack of respect from the wider physician community (Borst, 1992, p. 204). However, obstetrics did develop into a specialty, approximately around the 1930s (p. 201), after altering its focus from surgery to general practice. The impact of this was two-fold. First, it resulted in the expulsion of women-doctors from the practice, largely due to the thought that obstetrics was 'a man's work'. Second, it resulted

in a movement away from (and, at points, an elimination of) midwifery, which had previously dominated the area of childbearing (Borst, 1995, p. 118). In effect, women were largely removed from the act of childbirth, except as the patient.

The relationship between medicine and feminism also has a history dating back to the early 20th century. While some facets of this relationship will be addressed in the next section, it is important to at least preface it as a segment of the relationship between women and medicine.

1.4.3.2 Issues in women's reproductive medicine in the U.S.

Regarding perceptions of reproductive medicine, the development of obstetrics as a 'well respected field' was a long journey. In the early years of its establishment in the U.S., obstetrics was still viewed as a 'surgical science' and it was not until its joining with the association of gynecologists and a shift from surgery to general practice as its base of knowledge that it established itself as a 'legitimate' specialty of medicine (Zetka, 2008). The development of reproductive medicine with respect to women has been an ongoing example of those 'with power' and those 'with less'.

The primary perspective through which the progress of 'reproductive medicine' can be seen is through the change in perspectives on (1) access to contraception and abortion, and (2) pregnancy. The latter has been addressed above, through the examination of the rise of obstetrics and the stances on women as both practitioners and as patients. The former can be seen through the movements to ban contraception access independent of a physician in the early 20th century (Lester & Blakely, 1918). With regard to abortion, it was distinguished from contraception early on (Lester & Blakely, 1918; Ruppenthal, 1919). Whereas a number of states banned both equally, a few distinguished between abortion in the case of a pregnancy posing a threat to the life of the mother and other forms of contraception and abortion (Ruppenthal, 1919). With regard to statutes on birth control in Georgia and California, the two states selected for the case

studies of this paper, Georgia seemingly had no laws on the books regarding birth control. In contrast, California had laws that made it illegal to distribute, sell, compose, publish, print, give or loan [an] 'obscene or indecent writing, paper or book', a concept which included literature on birth control (Ruppenthal, 1919). This was later revised to omit "“or any notice or advertisement for producing or facilitating miscarriage.”" (p. 53).

1.4.4 American medicine in the 20th century: ART, the state and the State

1.4.4.1 Federalism: the role of the State and the state in the management of medical practice

According to Wilsford's comparative analysis between the U.S. and France, a key part of the American medical institution's development was its relationship with the state (p.3). From this perspective, the 'statelessness' of the U.S., paired with many of its traditions, such as a strong sense of individuality and a commitment to the concept of pluralism, contributed to the development of a stronger medical institution in the U.S. than in France (p. 62-72). As Leyerle points out, the development of the American healthcare system and the medical institution that drives it was a structural process. As such, any changes to this institution would also have to be structural (1984, p. 7). Examples such as those given above (the establishment of rules regulating medical education, determination of alternative licensing structures (BMJ, 1891), and other forms of professional standardization), show the effectiveness of the structural development of medicine and its process. It also shows the role of the state in the establishment of these rules and the importance of state power in the development of medicine.

For example, early in the process of the establishment of medical professionals as the preeminent experts in the maintenance of health, it was state boards that demanded adherence to AMA standards and created licensing (BMJ, 1891; Fishbein, 1947) and that began administering licensing exams for the medical profession (Walker, 1929). Given that the general consensus is that the U.S. Constitution grants to the states the power to

manage and govern with respect to health issues and, therefore, medical practice, the federal government has little jurisdiction (Christoffel, 1982, p. 49). While it has managed to circumvent this through the application of law within areas in which it does hold jurisdiction (such as interstate commerce or funding through grants), the constitutionality of such applications has not always been clear (p. 52-55). The takeaway point from this, however, is the importance of structure in the development of medicine and its current management.

1.4.4.2 Medical autonomy

A slightly less prominent but still salient issue in the ART debate is the issue of medical autonomy. While there is evidence to suggest that this autonomy from 'government', particularly federal and other entities, may date back to early in the establishment of the medicine as an American institution, whether this is the case was first argued by authors using the professional dominance model in analysis of the field. Under this model, it was proposed that professionals (such as physicians) manage to exist autonomously through embedding members within bureaucracy, which allows them to maintain control over entry into their field and the appearance of specialized knowledge (Prechel & Gupman, 1995). However, it has also been argued that this autonomy has been slowly eroded away by new organizations within the field of healthcare and by the increased awareness and interest of patients in participating in their own care (Prechel & Gupman, 1995).

1.4.5 Reproductive Rights and politics in the U.S.

The development of rights and law in the U.S. has been a critical part of the assisted reproductive technology debate. A large part of this could be argued to be culturally specific to the U.S., particularly the relationship between what have been termed 'reproductive' rights and the management of ART technologies. In addition to the

rights of the physicians to practice medicine unhindered, the role of reproductive rights also has weighed heavily in the ART policy arena. The ability of the infertile couple to exercise a negative right[10] has been a compelling reason for a lack of policy intervention. However, the contention about whether this right should be extended to a 'positive right'[11] has been less clear. As a result, contractual and family law have also become deeply embroiled in this debate. The following section will provide the key institutions, landmark cases, timeline and major groups that have shaped the reproductive rights debate.

1.4.6 A Brief History of Reproductive 'Rights' in the U.S.

First of all, it is necessary to establish what institutions are instrumental in enforcing and driving these rights--the courts. Rulings such as *Roe v. Wade* and *Griswold v. Connecticut* altered the previous structures regarding both childbirth and reproductive medicine (Starr, 1982, p.391). However, state legislatures have also been very formative in this debate. Moreover, the medical field has also contributed to the discussion, given its role as the 'experts' within this area. Given the possible evidence of a decline in physician autonomy due to third party health organizations, it is important to acknowledge the role of insurance companies and managed healthcare organizations in the development of and access to the products involved in utilizing one's rights to make reproductive decisions. As such, the role of federal level administrative bodies such as the Federal Drug Administration (FDA) and National Institutes of Health (NIH) and other federal level health care bodies have also impacted the ability of individuals to exercise this right (Noah, 2004).

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10 The right by which the government is obligated to refrain from interfering in reproductive choices.

11 The right to government assistance in the pursuit of their goals.

A key conceptual institution in this debate has been the U.S. Constitution. Often, it has been interpreted to guarantee individuals the right to decisional privacy--through the 14th Amendment prohibition on state deprivation of liberty without due process of law--of which the ability to reproduce without interference from the law and the state is an example (Havins, 1999). Alternatively, through the 14th Amendment, the right to reproduce can be constructed as a 'positive' right, at least with regard to insurance coverage. However, the application of this interpretation has been less widespread, as can be seen by the levels of access for infertility/fertility treatment across states and federal legislation regarding the application of federal dollars towards such treatments (Goggin & Orth, 2004, p.83-84).

1.4.7 The relationship between reproductive rights, medical practice and ART management

Reproductive rights, early structural aspects of the development of the medical profession, and the structure of the healthcare system overall, have all played a role in the development of ART management. Given the monopoly on reproductive medicine derived from the rise of obstetrics in the early 20th century and the close relationship between the medical institution and science, the IVF developments in science during the 1940s and 50s and its 1980s applications in medicine should be less than surprising. Even further, given the role of 'specialized knowledge' in the exclusivity of the profession, the monopoly of obstetrics on knowledge relating to reproduction has also been a key part of the development of the construction of 'involuntary childlessness' as 'infertility'.

The structural arrangements within the medical profession, particularly the arrangements of organizations related to specialties, the role of organizations such as the American College of Obstetrics and Gynecology (ACOG), ASRM and SART also have played a role in how ART policy management has developed. Beyond the simple

explanation of the 'power' of the medical institution itself, the role of the 'professional organization' in policy development directly ties back to social movement theory and the issue of the mobilization of bias. Given the creation of ASRM and SART in the 1980s, the development of alternative and oppositional movements could arguably be said to have been hindered in part by the fact that the rules of the 'game' had already been previously established and the bias towards the status quo institution within the arena, primarily the institution of medicine. While the organization and economic resources of ASRM and SART, as compared to other organizations such as right-to-life organizations (RTL) and feminist organizations, undoubtedly play a part in the successful creation of an oppositional movement in this area, the structural aspects of access to discourse and development of legitimacy in that discourse cannot be ignored.

The monopolization of the American medical institution on reproduction (and therefore the constructions of knowledge relating to reproduction), also may explain how this particular issue has been played out in the policy arena. The tie to previous reproductive rights issues clearly has also affected the development of the management of the technology, primarily with regard to (1) the legitimacy of some oppositional groups and (2) the ability to mobilize others. The former can be argued by examining some of the available hearings in Congress and the parties invited to testify. For example, in the case of the hearing before the House Committee on Children, Youth and Families, the testimony consisted of three doctors and a representative from the office of pro-life activities of the National Conference of Catholic Bishops (Alternative Reproductive Technologies: Implications for Children and Families, 1987). The latter has been shown somewhat in previous literature, such as Bleiklie's comparative study and the existence of 'fragmentation' within the action coalitions (2003). While there is less clear historical evidence of barriers to mobilization of groups, it provides a potentially interesting area for future research.

1.4.8 The defining cases & 'historical events'

1.4.8.1 Medical autonomy

In the development of the ART policy arena, there have been particularly poignant cases that have been cited with regard to ART reproductive rights. The primary cases of interest have obviously been *Roe v. Wade* and *Griswold v. Connecticut*, which relate directly to the 'reproductive rights' ties to ART. The basic argument derived from *Roe v. Wade* has been the negative right to reproduction, as stated previously. *Griswold v. Connecticut*, on the other hand, preceded *Roe v. Wade* in establishing the guarantee of the U.S. Constitution to the right to privacy with regard to reproduction. Its landmark decision established the right of couples to access contraception and prevent the establishment of other laws that would infringe upon a couple's right to privacy relating to reproduction. Another often cited reproductive rights case is *Skinner v. Oklahoma*, which abolished the ability of the state to institute compulsory sterilization as part of criminal punishment. This case provides much of the groundwork for later barriers to state intervention in reproductive activities.

More recent examples of key ART legal rulings include the case of 'Baby M' and *Davis v. Davis*, which provided the framework for many states to enact statutes regarding surrogacy and custody/use of embryos in the event of circumstance changes since their development (Davis v. Davis, 842 S.W.2d 588 (1992); In re Baby M, 537 A.2d 1227, 109 N.J. 396 (1988)). These cases have resulted in the breaking of new ground in the areas of both family law and property law, and have even forced some jurisdictions to establish the legal standing of embryos. While most of the recent rulings apply more at the state level than the national level, they still resonate nationally.

Overall, the legal system has played a significant role in the development of ARTs, creating additional structural constraints to a political system already bound by

other structural barriers built by other institutions. In fact, political structures as barriers to types of policy developments abound in this area, as evidenced by history. However, history does not show definitively whether there are in fact any constraints within the legislative policy process.

1.5 Summary of research questions and orientations

The theoretical foundations of this study will include path dependency framework and social movement theory, both of which inform the proposed research questions. I propose that the policy process related to clinical ART practice, as detailed in the preceding sections, has taken the route that it has due to lock-in of policy frames. I believe that this lock-in is due not only to the fragmentation of political coalitions, but also the history of access in the policy arena and past precedent. Through historical and frame analyses, I believe it is possible to 'track' a set of widely used policy frames (held by those that benefit from power asymmetries) through proposed and successful policy, thereby providing evidence of path dependence of these frames.

This is of interest to and contributes to the wider scholarly community in two ways. For one, it could provide a means of empirically studying frames. For another, I argue that it provides insight into how social movements may be stifled by policy processes.

CHAPTER 2

UNDERLYING THEORIES AND FRAMEWORKS

2.1 General Overview of the frameworks and theories

The nature of the debate surrounding this technology has often devolved into one of ethics, and therefore one that cannot be resolved through policy. And though a few authors have made inroads into the way in which policy has progressed on this topic, both in the U.S. and abroad, there are still gaps regarding the political dynamics that have contributed to the policy changes and lack thereof, particularly within the U.S. context. This study seeks to fill one of these gaps by understanding the nature of the policy change, particularly the relationship between this change and the frame of the problem. Key to this discussion of the ART policy dynamics is the concept of problem framing. While several authors, including Goggin and Orth (2004), Rothmayr and Varone (2002), and Montpetit, Rothmayr and Varone (2005) have been very informative in outlining the policy arena of ARTs from a comparative perspective, their analyses largely provided a potential framework, not an explanation of why policy has failed to be implemented, particularly in the U.S. context. This paper argues that problem frames are the drivers and maintainers of the current policy state found in the U.S. It is important to note that I am not arguing that problem framing and problem definition *caused* the policy state, only that given the political structure, they facilitate it's maintenance in the current direction.

Again, a tangential focus of this study is also the directionality of the process, and by this I mean that it is 'path dependent'.[12] It may explain why policy hasn't happen, presenting an effective 'non-event'.

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[12] The concept of path dependency, in short, is that future decision making is severely constrained by past decisions. While it cannot be addressed in this study, the path dependence of this particular policy area could further shed light on the historical barriers to policy making in this area

As mentioned throughout Chapter 1, little federal policy has been made in the U.S. regarding this technology, and it has been hypothesized that this is due in part to the social constructions of actors as well as the fragmentation of collective action coalitions (Bleiklie, et al., 2003, p. 101). Some work has been done on the role of power within the policymaking arena as it impacts the passage of policy, and this work's acknowledgment of the fragmentation within the policy arena has furthered the insight into the power dynamics involved (Harris, 2010).

In this paper, however, the focus is not on power dynamics or the fragmentation found in actual or potential coalition groups, per se. Instead, the focus is on how problems are articulated through framing, which may in turn affect the ability of coalitions to form. Relying on previous work done on social construction and problem definition, I hope to utilize public documents, more specifically legislative bills, to exemplify consistency in framing (Verloo, 2004).

In this chapter, I will cover a small portion of social movement theory for the purpose of explaining how framing plays a role in policy making. Additionally, the elements of policy framing will be discussed.

2.2 Social Movement Theory

In trying to understand the means of both path dependence and problem definition in the problem of ARTs, it is also necessary to understand the role of social movements in creating change. Admittedly, a key aspect of this discussion, addressed by previous scholars looking at the ART arena through both discursive and collective action lenses, is that there is a great deal of fragmentation of oppositional collective action. This can be seen through Farquhar's examination of the ART discourse (1996) as well as in Bleiklie, et al.'s comparative study of ART policy (2003). However, the problem being addressed in this paper regarding ART is why NO policy change has been observed in this particular policy arena at the federal level, essentially a 'non-event'. This becomes a

question of whether the 'non-event' is a case of a problem not addressed or a non-problem. My premise and this study assumes that there is a 'problem', and social movement theory provides some insight into how this could be. For one, the political perspectives of social movement theory provide insight into how politics can constrain or facilitate policy developments (Kiese, 2004, p. 66-90). It also provides insight into the structural aspects of mobilization of bias as a factor in how problems get placed upon the policy agenda.

Social movement theory's primary importance to this study is its justification of the selection of path dependence as the analytic framework. In the political science context of social movement theory, path dependence is somewhat justified. Two key points of the path dependence framework are the role of institutional density and political opacity, which have often been noted to be insufficiently explained. Social movement theory from a political perspective provides some insight into how the institutional density and opacity of politics may create an opportunity for some arenas to be 'path dependent'.

2.2.1 Social Movements & Political Frames

The political 'context' of social movement theory, according to *Blackwell's Handbook on Social Movement Theory*, is based upon two important aspects: cultural model and institutional structure (p.69-79). It is this institutional structure that is the primary focus of this paper, with the cultural model aspect of political context being secondary, but both require some elaboration. The cultural model, as outlined by Kiese, is one in which stable cultural artifacts are of primary importance (p. 72). Kiese points out that it is the cultural institutions that affect the ability of actors to decide to act collectively (p.70-71). Of particular interest is Koopmans and Stathams' discursive opportunity, as presented by Kiese (p.72). As elaborated by him, the ability of groups to create discourse on their issue and create symbolic legitimacy is very important to

successfully mobilize groups within a movement. The ability to create this discursive legitimacy, however, is dependent also upon the structural strategies of political actors for 'dealing with challengers' commonly present in the political system (p.71). This cultural model can provide a great deal of insight into the constraints of ART policy making from a mobilization and message standpoint, particularly with regard to how 'legitimate' parties appear to be. It also has potential in the study of two facets of the debate: (1) 'legitimacy' of access and input on Congressional decision-making, such as who testifies before Congress or gets placed on commissions for the purpose of investigations, and (2) the effects of a fragmented oppositional group on the policy process. As will be addressed in the next section, resource mobilization also plays a role in how cultural models play out.

The second part of the political context framework is the institutional structures aspect. From this perspective, it is argued that the institutional structure strongly influences how the policy arena develops. As explained by Kiese, the openness of a policy making body can both constrain and facilitate actors from participating. As he outlined in his chapter of *Blackwell's Handbook on Social Movements*, in conjunction with cultural models, “opportunity sets” can be developed (p. 72). The institutional structure aspect of policy making, as applied here, is derived from historical institutionalism, i.e. the perspective that historical actions influence future actions and decisions. To summarize, Thelen points out that historical institutionalism looks at the development of institutions as a product of process as compared to the rationalist perspective of coordinated functions (1999). From this perspective, feedback and historical incidences become greater in importance because they determine future interactions and 'structures'. However, in this study, the examination is not of the effects of a 'social movement' but instead on the inability to generate such a movement. Meyer argues that the political context approach is derived from the concept that 'grievances' are not chosen “out of a vacuum”, but are the result of political structure (2004). This continues along the same lines as the historic constructionists, insisting that 'context' (or

'history') matters. His argument continues along the lines of rebutting the common critique of political process theory, by arguing that agency can only be understood within the confines of the "rules of the games" (2004, p. 128).

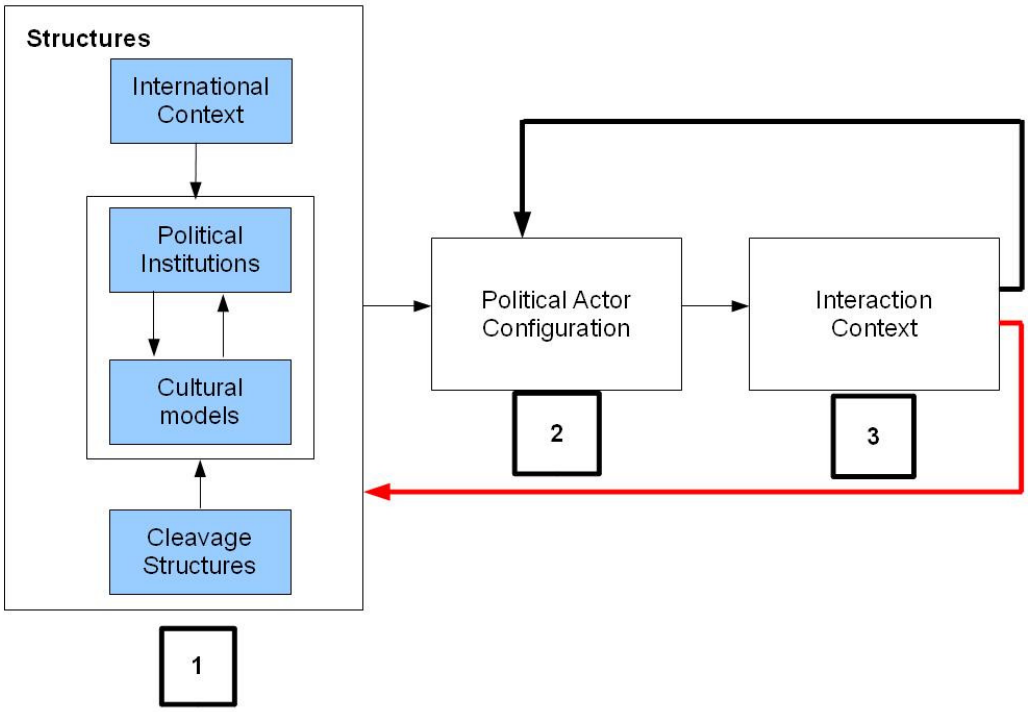


Figure 4: The model of political context, from social movement theory (Kriesi, 2004).

Nonetheless, political context authors are addressing the mobilization of movements, whereas in this study it is the limitedness of mobilization that is of interest. Utilizing the 'opportunity sets' expressed by Koopmans and Statham, provides more insight (1999). Their model of 'discursive opportunities' and 'institutional opportunities' as interacting measures of the ability to mobilize and 'gain legitimacy', shows the interaction between discourse, institutions, and political opportunity from a 'non-event' standpoint. Their model provides four options for movement outcomes: full response, co-optation, preemption, and marginalization (p. 248), in which preemption, co-optation and marginalization all could represent possible examples of 'non-events'. The selection of which, however, cannot be explained fully by the political context theory, but in

conjunction with mobilization of bias. Figure 4, above, shows the political context model as designed by Kiese. The portion of the model that is of most interest to this study is the structures aspect, which is labeled as segment 1 of the diagram. Within this, I am interested in the political institutions and cultural models.

2.2.2 Social Movements & Mobilization of Bias

From the perspectives of power and the policy process, resource mobilization from social movement theory also plays a part. While the political structures and process are integral to this story, the differential impact of being able to properly mobilize resources and 'people' for a particular cause could potentially impact both part 2 and part 3 of the political context model above. With consideration of the Koopmans and Statham model of political opportunity sets, mobilization of bias strengthens the argument for a path dependent framework as well, given that their argument essentially defines the conditions under which groups become marginalized. Mobilization of bias explains the continued lock-in of marginalization in the policy cycle.

From a social movements perspective, mobilization of bias derives from EE Schattschneider's 1975 seminal work on biases in political movements (Strolovitch, 2006). Beyond just the immediate implications of his terming 'mobilization of bias' as an important concept of the political system, his work has also been used to explain the importance of symbols in social movements (Strolovitch, 2006; Cobb, 1998). His work has also inspired the development of several theoretical perspectives, including problem definition and problem framing, which this paper draws heavily upon.

Beyond Schettshneider, however, is the concept that mobilization of bias embodies the importance of power in the discourse on policy and policy action (Bachrach & Baratz,1963). From the perspective of Bachrach and Baratz, this power distribution as the target of research is not based on a 'ruler' model nor a question of whether 'anyone' has power, but instead on how the structure provides for actions and who gains or loses

due to that structure (1963). From there, status quo bias could be analyzed and only from that point could an analysis of participation occur (p. 952).

2.2.3 Social Movement & ART policy arena development

While the question of this paper relates to the 'frames' of policy and how these frames affect policy making, social movement theory provides a great deal of explanation as to why context is necessary. It has been argued that fragmentation of coalitions and power have played significant parts in the development of the ART policy arena (Bleiklie, et al., 2003; Harris, 2010). The role that fragmentation and power play in the greater policy arena has not been clearly expressed, however. Social movement theory provides insight into not only what role fragmentation of oppositional groups plays in the development of policy, but also how this fragmentation may be utilized so as to maintain a particular policy-making process/arena. The political context of social movement theory provides the explanation that structures and history are important, and that politics is not just a matter of resources or the ability to mobilize, but must be understood within the confines of the rules of the political game in which resources or the ability to mobilize are brought to bear. Similarly, the mobilization of bias aspect of social movement theory provides an explanation of the role of power and particularly the role of symbols and discourse in the management of power. Even further, both of these facets of social movement theory tie directly in with the chosen approach: policy frame analysis.

2.3 Social Constructions, Problem definitions and Policy Frames

2.3.1 Social Constructions, Problem definitions and Policy Frames

Social construction of actors also informs the structure of path dependency, by delineating potential group interactions. More specifically, it provides a means of understanding and organizing the power relations that are played out through the implementation of policy. In the case of ARTs regulation, the social construction

framework acts as the object that is being passed down through the path, in the form of a policy frame. Helen Ingram, Anne Schneider and Peter DeLeon offer six propositions that characterize how policy design and process interact with social values (Ingram, et al., 2007, p.98-112). The propositions of Schneider, Ingram and DeLeon are as follows: (1) policy designs determine who can participate in the policy making process through explicit and implicit means, (2) power determines the distribution of benefits and burdens to target groups, in a given policy, (3) policy designs differ according to the social construction of the target group, (4) social constructions created by policymakers are largely dependent upon 'approval or approbation', (5) the shape and structure of public policy is a potent, but not the only force for the change of social construction of given target groups, and (6) the context of policy design matters when predicting policy change (Ingram, et al., 2007, p.98-112). Application of these propositions reveals how social values and constructs can become important to future decision-making. In effect, the group social construction within a policy and the values of a society or a subset of the society interplay through policy feedback loops, as a result of the perceived success of previous policy outputs containing those social constructions (p. 112-113).

Social construction has been argued and understood to play a central role in the ARTs policy arena for a significant amount of time. (Bleiklie, et al., 2003) Although a number of social constructions have been argued to be in play, it has not been clearly documented how these social constructions may exist in policy or what role they play in the policy process. This study is interested in whether early policies can determine the outcomes of later policy debates and, therefore, later policy. The social construction framework allows this to be measured by focusing on the lock-in mechanism. The social constructions of traditional target groups would be expected to be found within successfully passed legislation and the social constructions of alternative target groups would be expected to be found in less successfully passed legislation. In the frames, found in Appendix C, the proposed social constructions of actors can be seen, in

conjunction with the proposed relationship they are hypothesized to have within each frame.

2.3.2 Problem definition & Problem Frames

One of the problems often attributed to path dependency theory is its inability to explain how lock-in occurs. In this study, it will be argued that this is primarily through problem definition and problem framing. David Rochefort and Roger Cobb describe a number of different ways of defining a problem, such as the social construction of conditions, referred to as the 'social construction of reality' (1994, p. 5-6). Problem definition can also affect what are 'valid issues' and whether those issues reach the agenda in order to be considered (1994, p. 8). On a more basic level, even the understandings within society can have an innate problem definition that can color how problems are realized (1994, p. 7). Additionally, problem definition is largely a product of discourse and rhetoric; in effect, the definition of a problem depends on how it was explained, what 'facts' are presented, and the relationship that is presented between ideas (1994, p. 9). Thus, discourse is imperative in understanding how problem definition affects many problems.

With regard to path dependency policy, problem definition not only adds to the complexity and ambiguity of political arenas mentioned by Pierson, but also heavily affects power asymmetries. This interplay among these four concepts of problem definition, social construction, policy frames and political structures can thereby be expected to create path dependency in policy-making, by virtue of limiting (1) agenda access and (2) political arena access, thereby restricting the recognition of potential problems and/or solutions. The theoretical perspectives of political context aspects of social movement theory and the mobilization of bias, introduce an alternative way of thinking about the impact that the introduction of ARTs has had and will be expected to

have, specifically, how pre-existing cultural and political structures can constrain future policy development.

As compared to problem definition, policy frame analysis has slightly more substance with regard to operationalization. Frame analysis has its origins in several areas. For one, it derives heavily from the frame concepts of social movement theory, such as collective action frames (Snow & Benford, 2000; Diani, 1996; Williams, et al., 2001). It also has connections to public opinion frames (Druckman, 2001). There are also connections to discourse analysis. In this context, I have chosen to look at the policy and the frames contained within the policy rather than the frames that create movement through groups and public opinion. The key difference between policy frame and problem definition lies in Snow's paraphrased interpretation of Goffman, in which he defines it as a "'schemata of interpretation that enable individuals to locate, perceive, identify and label occurrences within their life space and world at large" (1986, p. 464). It contains a 'diagnosis' and a 'prognosis' according to Lombardo and Meier (2006). This study, while adhering to the general aspects of the Multiple Meanings of Gender Equality (MAGEEQ) frame analysis, will use the terms 'problem definition' and 'solution definition' to define the diagnosis and prognosis aspects of the frame (Lombardo & Meier, 2006).

2.3.3 Understanding problem definition and policy frames in the context of ARTs

From a discursive perspective, there has been a great deal of controversy regarding how ARTs are discussed. The divisions between people in support of freedom in ART practice, those in favor of a complete ban and even those in favor of allowance but stronger rules are divided often by 'fuzzy' lines. Dion Farquhar, in her book *The Other Machine*, clearly parsed out the main divisions often seen within the realm of ARTs (1996). As she points out, the oppositional groups face more than one issue in formulating their position, including the fact that they might share an interest in the same

outcome as another group in support of a ban on ART, but their underlying reasons differ. However, she provides a clear framework from which to work in understanding and developing 'frames' through which to examine ART policies.

There appears to be very little previous frame analysis regarding ARTs, particularly with regard to policy frames and in the U.S. political context. Our approach to understanding the policy arena of ART is exploratory and unproven, but not unfounded. Given the wealth of literature on perspectives on ART, from 'pro', 'anti' and 'stringent' directions, it is believed that policy frames not only can be developed for ART, but that these frames can provide some insight into stability in the ART policy process.

2.4 The map for here on out

As stated earlier, this study seeks to assess (1) what current policy frames are articulated in the legislation produced relating to the clinical use and practice of ARTs and (2) how alternative policy frames are treated in the case of legislative passage. In the next chapter, the methods will be addressed. It is hoped that these methods will add something to the theory of framing. The fourth chapter is the frame analysis of legislation, which will act as the core of this study and the means of supporting the proposed hypotheses, also to be found within Chapter 3. Finally, the fifth chapter will contain the conclusions drawn from the fourth chapter, as well as address the theoretical and policy implications of the results.

CHAPTER 3

METHODOLOGY

3.1 Study data and research questions

While it is acknowledged that a huge part of the ART debate is based upon ethics, it is possible to understand the lack of policy change through policy theory, and specifically policy analysis. Though it may not be possible to resolve the debate with policy, it is possible to better understand the dynamics of the specific arena and how these dynamics appear to cause policy inaction. As alluded to in Chapter 1, I propose that key aspects of legislative policy movement are dependent upon the frames applied to the issue rather than the distributions of power or institutional arrangements alone. While a key underlying aspect of these frames may be derived from the values that stakeholders hold, I have chosen to examine policy change or lack thereof as explained from the perspective of problem definitions and frames.

In trying to understand ART policy in the US, not many pieces of legislation pertaining to ART are available. FCSRCA and its related policy statements are the primary piece of successful legislation at the federal level. In addition there are a few scattered pieces of successful legislation that exist at the state level. Given that this particular policy problem is very 'ill-structured' from a policy analysis perspective, the analysis in this paper shall be three-fold (Dunn, 2008). The first step was performed in Chapter 1, in which the different problems being 'perceived' by 'stakeholders' were defined through an abbreviated historical analysis, for the purpose of providing perspective on the stakeholders and context of the problems. The second step is the classification analysis, for the purpose of delineating the perceived groups of common problem definition. These two analyses (historical and classification analysis) are expected to provide the necessary frames for the third analysis, which will be a frame analysis of policies.

Therefore, historical analysis will be used to provide the 'backdrop' and context of the technologies within the political system, as well as to contextualize the origins of those frames that are proposed to exist. It will provide some insight into how 'key' stakeholders and all other stakeholders are recognized in this particular problem arena. This historical analysis will also heavily shape the understanding of the second and third segments of the policy context model presented in Chapter 2, figure 4.

Classification analysis and frame analysis were used to develop the applicable frames and analyze the frame differences between successfully and unsuccessfully passed legislation, respectively. For the purpose of the classification analysis, the three main reports on the status and use of ARTs were utilized, supplemented by samples of scholarly literature. As classification analysis is dependent upon logical consistency in order to assess its performance, Dunn outlined five rules to increase the probability of meeting that criterion: (1) substantive relevance, (2) exhaustiveness, (3) disjointedness, (4) consistency, and (5) hierarchical distinctiveness (Dunn, p. 99-100). Hence, this study uses documents that appear to have fully structured the 'problem' of ARTs (the reports), along with supplementary documents to satisfy the exhaustiveness requirement. The purpose of using classification analysis as opposed to other problem structuring methodologies that may reduce the potential for 'solving the wrong problem', is because of the lack of clarity of what the 'problem' with ARTs is. As alluded to with the question this study is based on, it may be the result of different constructions of what constitutes a problem.

For the frame analysis, legislation from the federal level and two state level congressional bodies were collected for the purpose of coding for policy frames by distilling the actors from each piece of legislation and comparing these actors and the narrative associated with them, to the idealized frames created through the literature and the classification analysis. The means through which these actors will be distilled is a three part process of (1) obtaining a word count, (2) distilling the actors from this word

count, and (3) re-matching the actors within their portion of the narrative of each bill. The purpose in performing this action is to (1) separate out the actual wording used to describe actors in legislation, as opposed to assuming that the idealized terms are used; and (2) to get an idea of what words appear to be a central feature of bills the state and federal levels of government bills, overall.

The historical analysis is key to my argument. First, the structure of the U.S. governmental system is an important aspect of why ARTs are managed in the way that they are. The federalist structure in conjunction with the separation of power divides the arenas of access and increases the political complexity and opacity of ART policy problems. While it has been argued that this structure facilitates the ability of groups to access power, by providing multiple arenas of access, it could also be argued that this split in arenas increases the probability of fragmentation of oppositional groups because the means of altering policy are so varied. While this paper does not aim to argue that point, it is hoped that the historical analysis will provide some insight into how the US political system may structurally provide for certain outcomes over others.

Stemming from separation of powers, federalism and bounded rationality is the following argument: Policy arenas in which the primary frames are heavily influenced by federalism and the separation of powers tend to be path dependent in their management. Therefore, the management of the ART policy arena, given that it is heavily influenced by both 'reproductive rights' and 'medical practice' arguments, should be path dependent. The hypotheses are therefore as follows:

H1: Legislative action is dependent upon the frame of the policy problem and the policy solution

H1a: legislative action will be unsuccessful when the diagnostic aspect of the policy frame targets benefits to a group outside of the “traditional ART frame”

H1b: Legislative action will be unsuccessful when the solution definition of the policy frame targets burdens to a group inside the “traditional ART frame” via an outside agent

H1c: Legislative action will be successful when the prognostic aspect of the policy frame targets agency to a group inside the “open ART frame”

and

H2: Early problem definitions created a path dependence of policy management in the ART policy arena by association of dominant frames with 'reproductive rights' and 'medical autonomy'

3.2 Data Collection

In this study, all federal level bills from 1989 onward associated with IVF were collected from THOMAS, a federal database containing congressional documents, hearings and public laws. Associated revisions were also collected. The primary method of determining appropriate word searches was to utilize Congressional subject terms listed with FCSRCA. Additional search terms were developed from the 'keywords' of a diverse number of scholarly writings on ART, including subject words from *Fertility and Sterility*, the main publication of ASRM. While the sample of bills may be biased slightly towards a 'pro-ART' frame, much of the literature on ARTs seems to indicate that a common set of terms largely seems to be understood to apply to their use. Nonetheless, this is acknowledged to be a potential weakness in this bill search technique. The reason for the selection of 1989 as the start year although ART practice in the US had begun in 1982 is that THOMAS only lists full texts of bills from 1989 onward online, and due to time and financial constraints, it was not possible to access bills from the central depository, for the purpose of collecting bills proposed prior to 1989, for the purpose of analysis.

Data was also collected at the state level, limited to two state cases. The state of Georgia was selected because legislation was recently introduced that would have managed ART clinical use and practice in the form of State Bill 169. The second case selected was the state of California, in part because it was the location of the most recent

controversy related to ART, 'octomom'. This selection was also due in part to the fact that it is one of the few states in the U.S. having several pieces of active legislation directly relating to the use and availability of ARTs (NCSL, 2011). The search terms used for collected bills were the same as those used at the federal level, in order to maintain consistency over the two cases for later comparison. As with the sample of federal bills, it is acknowledged that this selection has the potential to bias the outcome of the bill search.

Of the bills collected, not all were utilized because of the narrowness of the topic, focusing on the management of clinical use and implementation of ARTs. While I acknowledge that legislation regulating and monitoring IVF research laboratory techniques and practices is not inherently independent of legislation attempting to regulate and monitor clinical IVF practice, I have attempted to limit the examination of bills to those that specifically address the medical/clinical practice of ARTs. Therefore, any bills that applied specifically to laboratory research protocols and IVF were discarded as they could not be coded within the frames constructed.

A minor part of the data collected was information regarding hearings for a selection of the bills. The primary purpose of collecting this information was to determine the more obvious actors that participated in developing the views related to the policy arena. This was primarily done at the federal level, because these hearings were the most easily accessible. Also for the historical analysis portion of this project, historical writings were used as the primary source of information. Secondary sources, such as scholarly works on the history of medicine and medical policy in the U.S. were also relied upon to build the story of how the history of medical autonomy and 'reproductive rights' influenced the development of frames and perspectives in the debate.

The classification analysis was based on logical divisions as informed primarily by the three large government reports created on IVF and other related technologies. This was supplemented by scholarly articles in discourse analysis, which has done some work on the division of different stakeholder groups in the ART arena; published medical

opinions; feminist critiques; religious critiques; legal writings; and other secular critiques. While this is acknowledged to have its limitations, particularly with respect to whether it successfully addresses the 'right question', per Dunn, it was believed that the main issue to be addressed before any analysis of frames in policy, was a 'clarification of concepts', which does not appear to have occurred in previous policy analyses of ART issues (Dunn, 2008, p. 96).

3.3 Summary of Sources

In total, 105 bills were collected. At the federal level, this included 52 bills of which 44 failed to be passed and one was passed into law. Originally, 52 bills had been collected at the federal level, but due to the use of the computer-assisted qualitative data analysis software (CAQDAS), NVivo (QSR, International, 2009), it was not possible to import all of the bills into the program, therefore the eight federal bills that were not imported were not used. At the state of California level, there were 43 bills collected, of which 18 failed to be passed. At the state of Georgia level, 17 bills were collected of which 13 failed to be passed. Given that we have collected bills as the primary set of data and a limited amount of related hearing information, the primary means of indicating 'failed' bills will just be whether or not they managed to be passed through both the house and senate bodies at the federal and state levels of government. A more detailed description of the legislation collected for this study can be seen in Appendix D. Even further, in **Table 13** of Appendix D, the legislation along with the publications on ART by federal level organizations can be seen. Both of these items are organized by year of the final version of the bill. The green shading indicates the years where a Congressional hearing on the topic of ‘ART’ occurred.

Table 1: The data for the frame analysis

Bill 'level'	Number Available	Number Passed	Available Range of Dates	Range of Dates Used

Table 1: The data for the frame analysis

Federal	44 (52)	1	1989-Present	1989-2010 [2009-2010 legislative year]
Georgia	17	4	1995-Present	1995-2010 [2009-2010 legislative year]
California	42	27	1993-Present	1993-2010 [2009-2010 legislative year]

CHAPTER 4

CLASSIFICATION AND FRAME ANALYSIS

4.1 Classification Analysis

The cleavages of this analysis were challenging, primarily because I have chosen to adhere to the principles of classification analysis outlined by Dunn. Given that he outlined 5 principles of classification analysis: (1) substantive relevance, (2) exhaustiveness, (3) disjointedness, (4) consistency, and (5) hierarchical distinctiveness (Dunn, p. 99-100), it was found that adhering to disjointedness and consistency became problematic because of the possibility of multiple frames existing within a single document. However, I chose to interpret the need for consistency to apply to the unit of measure (in this case, individual word/phrases/concepts) without the whole bills having to consist of a single frame.

The classification analysis can be seen in the figures below. The primary division between groups was one of those who favored 'more stringent' rules for ART use and those that favored 'less stringent' or 'status quo' rules for ART use (hereby, referred to as 'status quo'). In Dion's *The Other Machine*, similar distinctions were classified as liberal discourses and other discourses, of which other included fundamentalist and radical discourses (1996, p.18-25). As can be seen from the diagram in figure 5, the 'status quo' group is divided only between 'couple' and 'practitioner' foci. This division is resultant of two papers by David Adamson, in which he outlines the 'hierarchy of interests' in the ART policy arena to be primarily patients, in which he included gametic materials and future children, and secondarily 'physicians and embryologists', followed by all other interests, including professional organizations (Adamson, 2002; Adamson, 2005).

The divisions found within the 'more stringent rules' group, were initially based upon whether these groups were in favor of the technology within a spectrum of rules to be applied, or in favor of a complete ban. The reason for placing both 'rules' based and 'ban' based groups under the same umbrella of 'more rules' is primarily because prohibition can be seen as yet another form of greater stringency. Within this division, the Catholic Church and secular objectors are those that support no use of ART. Within Dion's analysis scheme, these groups could be considered analogous to religious fundamentalist, secular fundamentalist and feminist radicals (p.95-127).

The division of 'increased rules' groups between women, child/embryo/fetus and society/public health, was through a number of arguments in the scholarly literature. Regarding the 'women' grouping, there have been a number of questions, particularly early in ART development, about the safety and the social impact of the technology. As mentioned in section 1.3.1, some concerns are due to the physical short and long term health impacts that are not necessarily understood or are not well conveyed to the parties involved (Kerian, 1997). Others concerns have to do with the commoditization of 'the womb' and the concern for the potential for women or subgroups of women to become defined only by their reproductive capability (Kerian, 1997). This is distinguished from the 'feminist' grouping of the secular, ban branch beyond just their desire for rules versus ban, but also because we define the 'feminist' grouping to have a larger concern for the social position and pressures upon women to become mothers and bear children (Birenbaum-Carmeli, 2003). An example of an organization that holds more 'feminist' group interests would be the Feminist International Network of Resistance to Reproductive and Genetic Engineering (FINRRAGE).

The next group within the 'increased rules' branching, is those that focus on the future child, the fetus or the embryo. While seemingly this group could be subdivided further into those three classifications, there is a lack of evidence that there are representations of groups with a concern for one over the others. Many of the interests of these groups could be considered to overlap with the 'right-to-life' argument, found in abortion rights debates and discourse, but given the difference in technology there are some that fall outside of that debate. For example, the concern over future litigation based upon the idea of 'wrongful birth', is a concern of law related to the applications of ARTs. This litigation has been hypothesized to be a consideration due to birth defects and other health outcomes as a result of ART (Losco, 1989; Rosato, 2003). Another concern is the valuation and psychological effects of conceptions through ART, for example, the ability of parents to bond with children made possible through gamete donation and the valuation of children after the expense of ART-related treatments (WHO, 2002). Even further, the concerns for the embryo range from its ability to inherit after the death of a 'parent', its ability to be 'adopted' and the damage incurred due to storage, not to mention the concerns over the disposal of them in the event that the couple no longer requires them (Charo, 2002). Similarly, concerns for the fetus are related to those concerns found in the abortion debate, such as multi-fetal reduction, which is in effect abortion of some fetuses for the purpose of maintaining the pregnancy and the health of the remaining fetuses (Collopy, 2004). Other concerns relate to the rights of the mother to conduct herself in a manner that may be detrimental to fetal development or well-being (Merkens, Browner, & Press, 1997). Often referred to as the 'mother-fetal conflict', it provides another aspect of ARTs that is controversial. Overall, a key reason for the combination of

three categories for this classification branch, is that they are not very distinct from each other in the sense that all of the concerns somewhat overlap in time. For example, in order to 'protect' the fetus from 'damage' or poor outcome, some steps may have to be taken at the time an embryo was being implanted, and therefore, not a fetus. Similarly, the measures of 'poor outcome' would not be easily assessed until the fetus had become a child, at which point it would have 'rights', whereas in its current state, it does not.

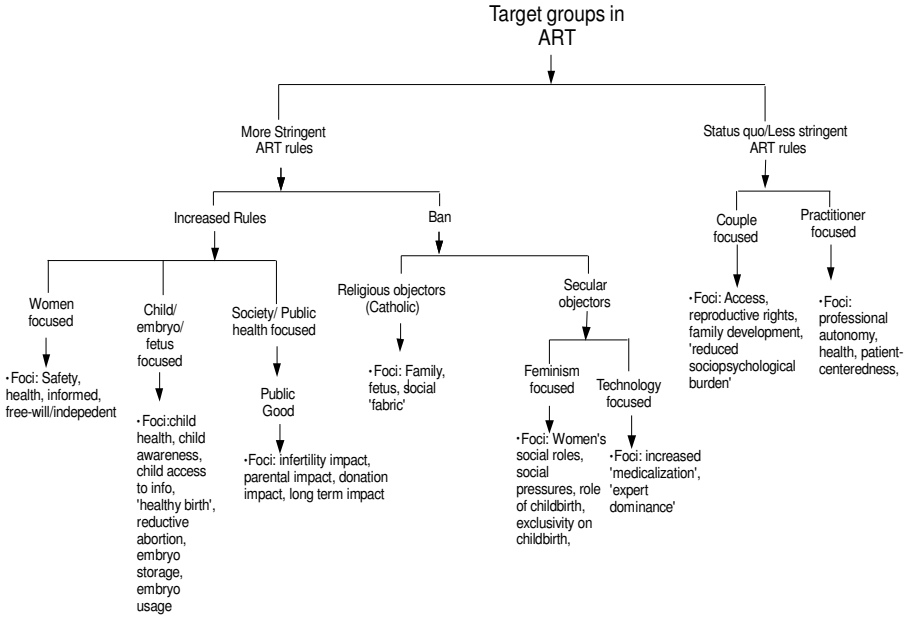


Figure 5: Identified target groups in the ART policy arena

The final classification group of 'society/public health' is considered to be separate from the other concerns of 'women' and 'children', though they are very closely related. For example, in this classification system, the concern over the impact of widespread donor gamete distribution could be considered a concern of the 'child' group, in that they may have less knowledge of their genetic origins, but here it is classified as a 'societal' concern over the inability to maintain clear lines of genetic relationships, thereby

increasing the potential for overlap of similar genetic backgrounds. These concerns also include such issues as the long term outcomes of ART, from a population perspective. An example of such would be the tracking of morbidity associated with ART-related births. While this too could conceivably fall under the auspices of the previous two categories, data related to birth morbidity is currently collected under the auspices of public health, though not necessarily tied back to ART.

The second stage of this classification analysis was to identify potential agents expected to play a part in the management of ARTs, and can be seen in figure 6. This system is NOT intended to be a flowchart of the organizational chain of command, only a general means of classifying the level of governance involved. Furthermore, it is currently made up of only those organizations that have previously participated in policy-making. There may be other organizations that could fulfill a similar position in regulating this industry that have not previously been involved, such as the intervention of the FTC on the advertisement of success rates.

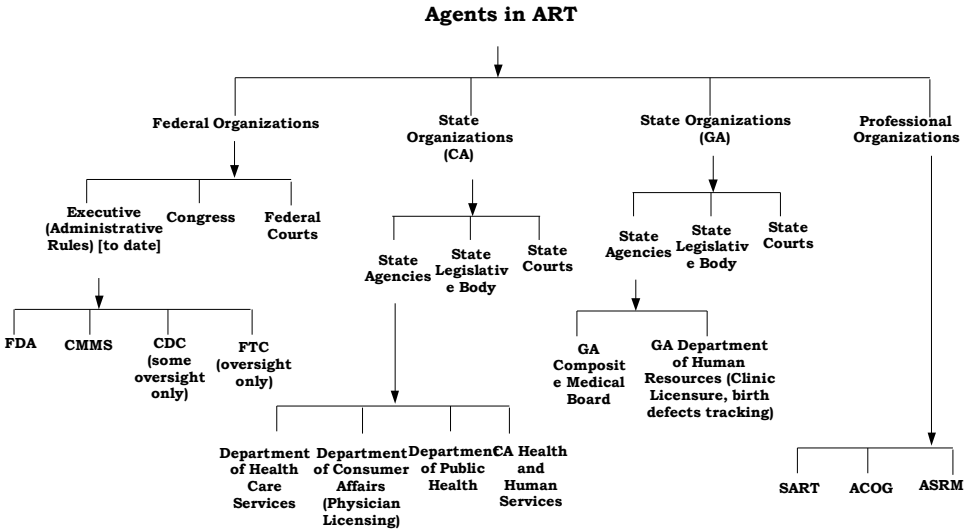


Figure 6: Actors identified to be key in the solution action

The purpose of this classification analysis was to inform and add structure to the frame analysis of section 5.2. Given the breadth of the topic of ART and its policy arena, it is believed that this analysis did fulfill the five principles of classification analysis outlined in Dunn (p. 99-100). Alternative 'opinion' classification systems, such as a prevention/solution/ban division or medical/social/religious, may have served a similar purpose, but either would have expanded the scope of the project (the former) or created too many logical overlaps for the purpose of our frame analysis.

4.2 Frame Analysis

For the frame analysis, 48 federal level, 17 state level bills from Georgia, and 48 state level bills from California were collected using a common set of terms, which can be found in Appendix B. As can be seen in **Error! Reference source not found.**, the federal level bills were collected for the widest range of dates. California and Georgia had a relatively similar range of dates that bills were available for, with California having online records available for two years more. This complicates the inter-frame comparison slightly, particularly between federal and state levels, because bills were not available for all incidences on the timeline of Figure 16. However, because I was also doing an intra-frame comparison, these bills were left in the sample. Even further, in additional analysis, through which I coded for frames using Nvivo (QSR, International, 2009), eight Federal level bills were excluded due to size/import error that could not be overcome.

Table 2: The breakdown of data collected for the frame analysis

Level of bills	Number Available	Number Passed	Available Range of Dates	Range of Dates Used
Federal	40 (48)	1	1989-Present	1989-2010 [2009-2010 legislative year]

Table 2: The breakdown of data collected for the frame analysis

Level of bills	Number Available	Number Passed	Available Range of Dates	Range of Dates Used
Georgia	17	4	1995-Present	1995-2010 [2009-2010 legislative year]
California	48	27	1993-Present	1993-2010 [2009-2010 legislative year]

For bounding purposes, the set of search terms used were narrowed to only those that directly referenced ARTs or specific ART technologies. It is acknowledged that not only is this set of search terms laden, but it also excludes several potentially promising samples. Examples of excluded terms included 'infertility', which resulted in the inclusion of several bills that would have broadened the scope significantly. This broadening in scope also had tradeoffs, in that it may have caused a significant divergence in topic away from the original research question, which would have stretched this project beyond both time and resources.

The hypothesis in Chapter 3 is that frames containing historically negatively constructed actors will result in failure of passage whereas those containing historically positively constructed actors will result in successful passage. For purposes of analysis, the frames with historically positively constructed actors will be designated ‘traditional’ frames and those that contain historically negatively constructed actors will be referred to as ‘alternative’ frames. Given the history of 'reproductive rights' and the medical institution in the U.S. outlined in Chapter 1, I propose, as can be seen in the frame descriptions of Appendix C, that traditional frames contain the patient (or couple or spouse) and the physician, and any private professional or consumer organizations, such

as in the 'status quo' part of the classification analysis above, Figure 5. Therefore, it is proposed that those bills that involve state or federal level government action, monitoring or program development will be less successful. This is particularly the case if the solution frame does not provide for agency of the ‘traditional ART frame' group, particularly the more powerful actors such as physicians. The following four figures are models of the hypotheses. Figure 7 is the general framework expected to be in play. Figure 8 is the expected case for the identification of an ‘alternative frame’ group as a recipient of benefits or the identification of a ‘traditional frame’ group as the cause of a problem. Figure 9 is the expected case for the exclusion of ‘traditional frame’ actors from the development and management of a solution. Similarly, Figure 10 is the expected outcome for cases in which a traditional actor is identified for participation in the solution definition, but additional burdens are placed upon them, outside of self-management.

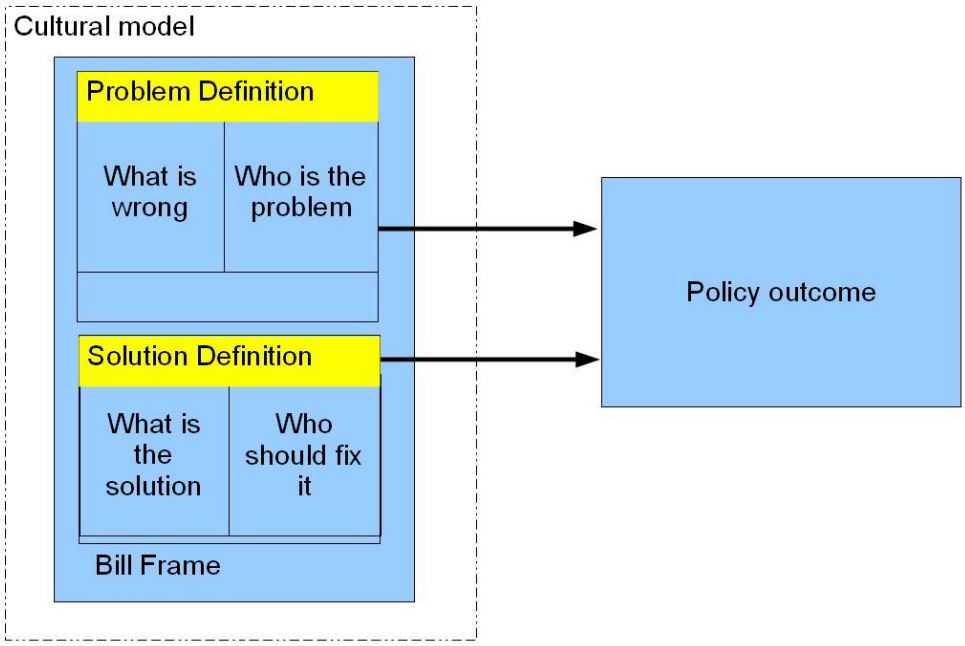


Figure 7: Overall framework for Hypothesis 1, for the purpose of explaining the cases in which a frame will or will not result in passage. Modification of the political context model found in *Blackwell's Companion to Social Movement*, p. 70 (Kriesi, 2004)

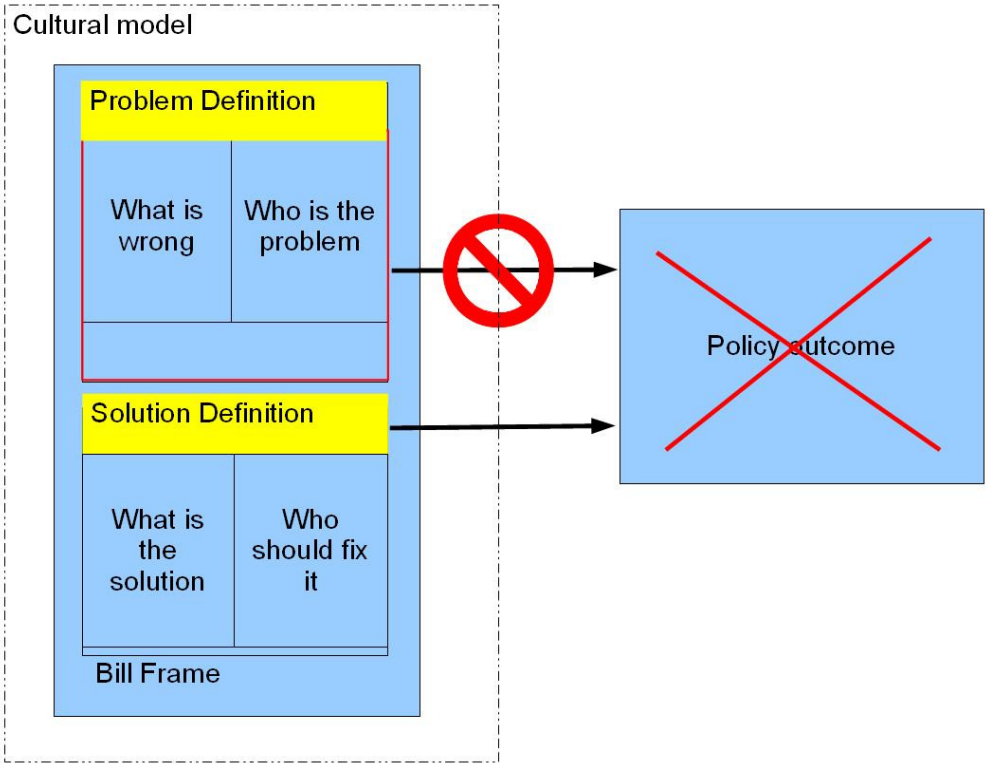


Figure 8: The case in which an alternative actor is identified as the beneficiary of the problem frame or a traditional actor the cause of it. Modification of the political context model found in *Blackwell's Companion to Social Movement*, p. 70 (Kriesi, 2004)

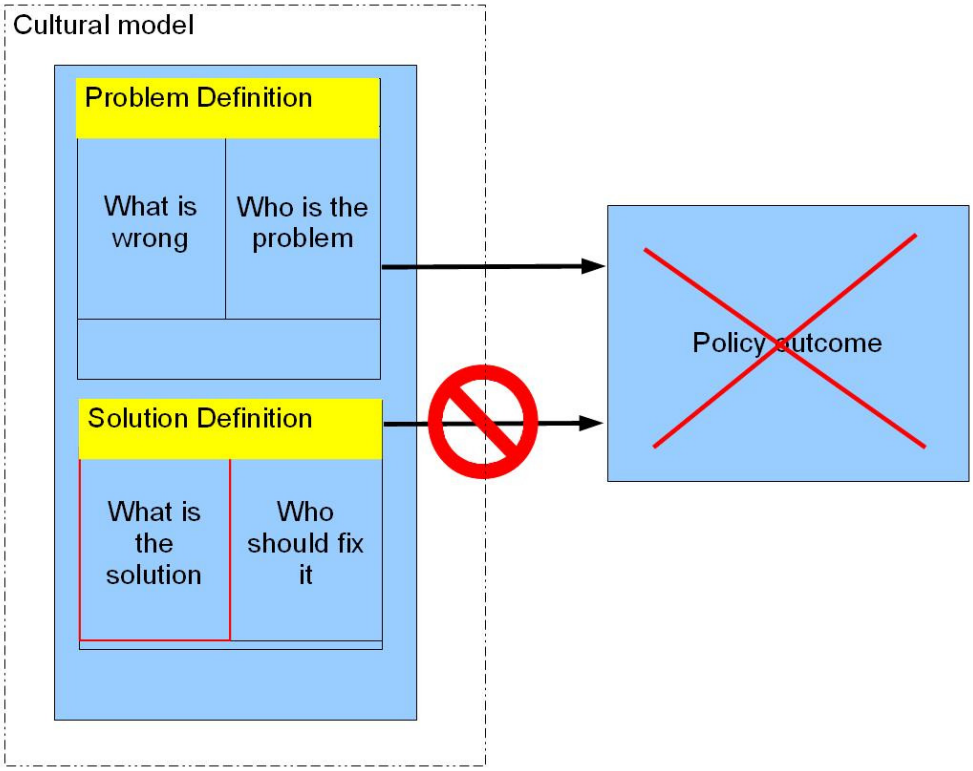


Figure 9: The case in which a bill identifies a solution that removes the option for primarily self-management on the part of dominant actors. Modification of the political context model found in *Blackwell's Companion to Social Movement*, p. 70 (Kriesi, 2004)

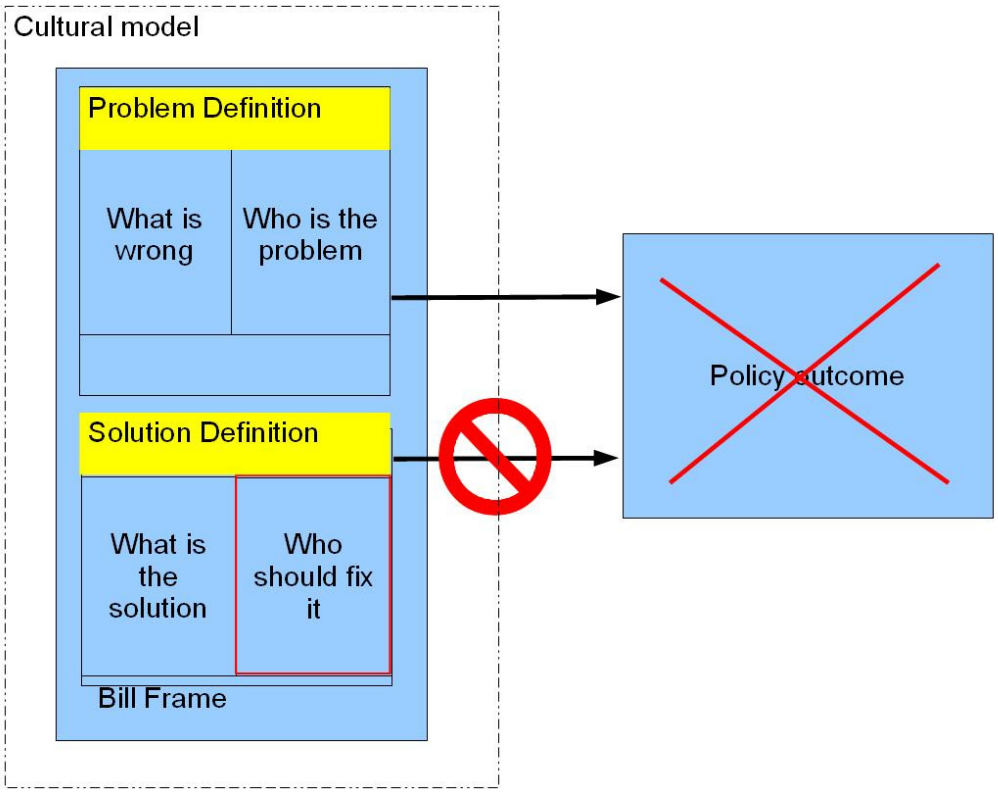


Figure 10: The case in which a bill excludes traditional actors, particularly historically powerful traditional actors, for participation in the development and implementation of the solution. Modification of the political context model found in *Blackwell's Companion to Social Movement*, p. 70 (Kriesi, 2004)

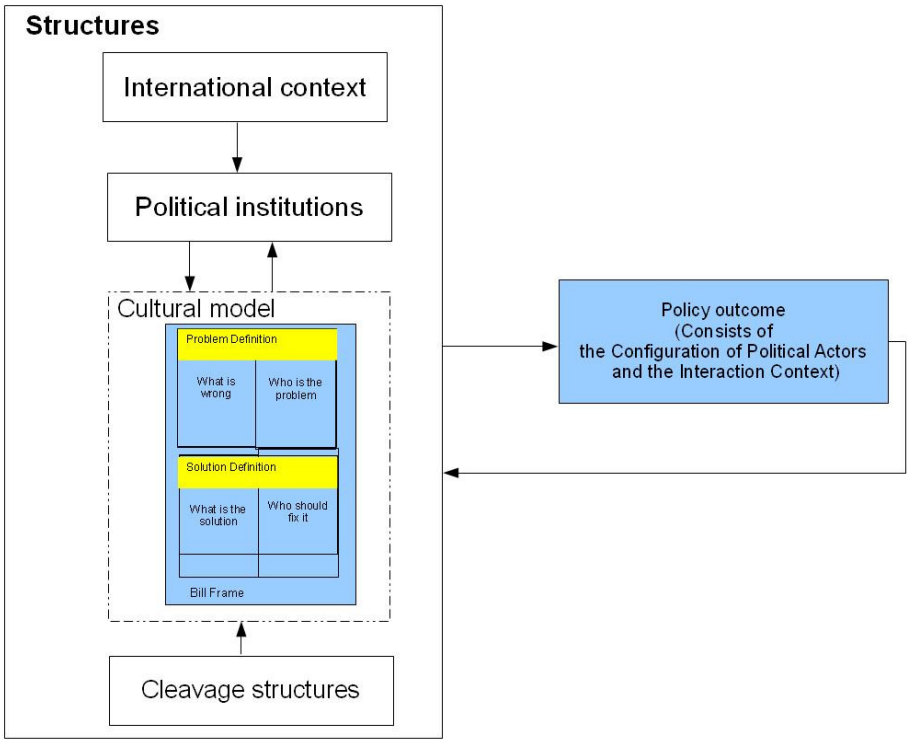


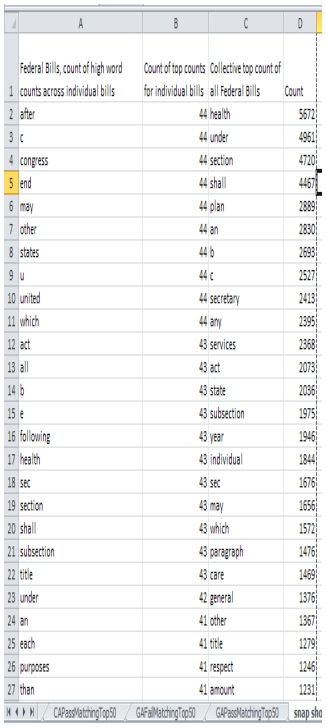
Figure 11: The overall case of frames over time. It is expected that there should be some appearance of feedback. Modification of the political context model found in *Blackwell's Companion to Social Movement*, p. 70 (Kriesi, 2004)

Given that the structure of government bills does not guarantee that the problem definition will be explicitly stated, it was necessary to develop a system of distinguishing problem and solution frames. In this study, the primary means of finding the problem definition stemmed from word counts. The secondary step in the case of a dearth of key words was to use the statement of purpose of the bill. An additional step of identifying the problem definition was to identify whether the actors pointed in the definition were recipient of 'benefits' or 'burdens' within bill. This distribution of benefits and burdens along with the preconceived actor association with frames was then used to determine whether the bill would have been expected to pass or fail. Similarly, the solution definition also used actor location and recipient status to determine whether a bill would have been expected to pass or fail. A list of frames and actors can be found in Tables 9 & 10 of Appendix C.

As has been stated by multiple frame scholars before, the methods of frame analysis have generally been less grounded (Koenig, 2004). Whereas Goffman's original analysis depended largely upon examination of the narrative, it has been pointed out that this method often limits the sample size that can be examined. Following in the footsteps of those that have attempted to perform frame analysis with computer-assisted qualitative data analysis software (CAQDAS), I attempted to use Nvivo for the purpose of this frame analysis. As a result, this part of the analysis was broken down into three steps in order to target the aspects of legislation that this study was interested in. Given that the hypotheses were heavily reliant upon the actors of each piece of legislation and the actions upon those actors, it was helpful to start with a word count for each bill, as well as across each sample set. The second step consisted of condensing these word lists down to just actors or potential actors, given that in the English language, some terms can function as nouns and other parts of grammar. The primary purpose of pulling out actors from the legislation is two-fold: (1) it allowed for the identification of terms used to describe the parties that had already been identified from the literature as potentially important and (2) it provided preliminary results regarding the effectiveness of the frames previously selected. It is important to note that while all bills were run across a common set of actors, the final means of examining the legislation for frames was to group them by successfulness of their passage ('success' of bills) and whether they were produced through a California, Georgia or federal legislative body ('level' of bills).

The initial step of a word search was performed in part so that common words across all bills could be identified and also to provide the researcher with an understanding of the contextual differences between each subset of bills, a subset being

defined as the success (pass/fail) of a piece of legislation at a given level (Federal/California/Georgia). The word count was performed using Nvivo, two times. Once on the bills as a collective across a subset defined by its success and level, and once across each bill within each subset. The top thousand words were collected and the 'non-words' cleaned from the count. Non-words consisted primarily of numerals and numeric ordinals, which were expected to add little to the narrative. As stated above, this word count helped to determine how the use of words may differ between the different subsets being examined. A selection from the word count can be seen below in Figure 12.



	A	B	C	D
1	Federal Bills, count of high word counts across individual bills	Count of top counts for individual bills	Collective top count of all Federal Bills	Count
2	after	44	health	5672
3	c	44	under	4961
4	congress	44	section	4720
5	end	44	shall	4467
6	may	44	plan	2889
7	other	44	an	2830
8	states	44	b	2693
9	u	44	c	2527
10	united	44	secretary	2413
11	which	44	any	2395
12	act	43	services	2368
13	all	43	act	2073
14	b	43	state	2036
15	e	43	subsection	1975
16	following	43	year	1946
17	health	43	individual	1844
18	sec	43	sec	1676
19	section	43	may	1656
20	shall	43	which	1572
21	subsection	43	paragraph	1476
22	title	43	care	1469
23	under	42	general	1376
24	an	41	other	1367
25	each	41	title	1279
26	purposes	41	respect	1246
27	than	41	amount	1231

Figure 12: Federal 'Failed' Bills: An example of the word count comparison between those words that were encountered frequently between all individual bills counts and those that were encountered frequently in a cumulative word count across all bills

From Figure 12, only a few words appear to stand out as potentially important concepts within federal bills that failed to be passed. As stated previously, the word count was run across the aggregate of a subset, as well as across individual bills within a subset. The aggregate count was to determine whether some terms or themes appeared to occur

more frequently overall within a given subset. The individual counts were used in a second count. This second count served as a means of reinforcing the aggregate count by confirming whether a commonly counted word was a theme among many bills or a select few. This can be seen in Figure 12 as the difference in counts between column B and D. Column B contains the twice counted words, which represent how many bills each word was found in. Column D contains the counts of words in aggregate. It is clear from a comparison between these columns in Figure 12, that health is an important focus in this subset, as it occurs across 43 of the 44 bills and is counted highly in the aggregate. From this comparative word count, it could be tentatively argued that most of the bills in this subset may contain at least some aspects of the traditional frames of 'consumer' or 'medical practitioner'. However, given that this is just the first step of this analysis, there is a significant amount of context still lacking.

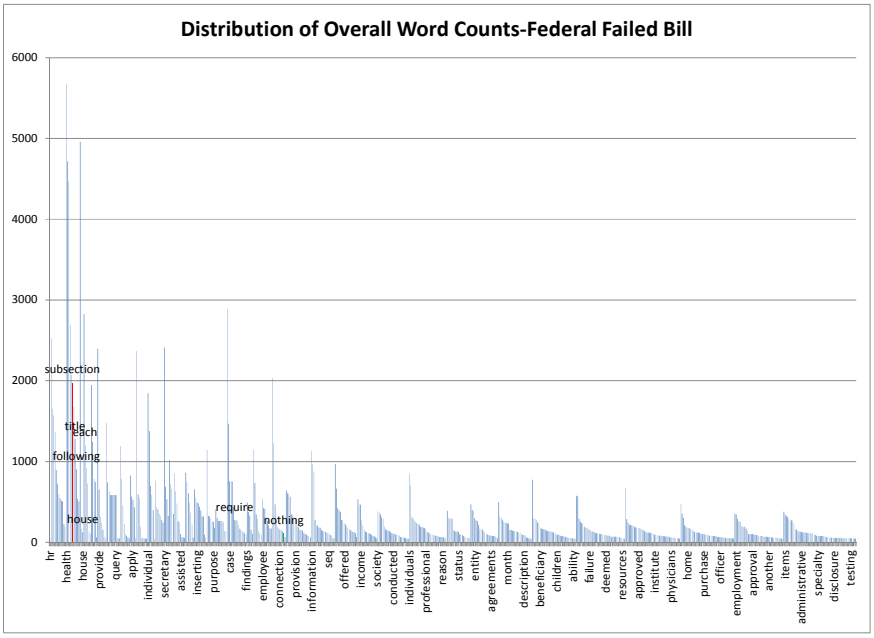


Figure 13: Federal Failed Bills word count distribution

Charts such as the one in Figure 14 below, provided some slight additional perspective to the word counts. It was hoped that by charting the word counts of bill

subsets, a pattern of key words would be distinguishable for the purpose of comparing between subsets, but it largely appeared that highly counted words tended to be random. For clarification, the chart below is the result of charting the aggregate word count, ordered by number of bills occurred in and aggregate count, along the x-axis, while the y-axis represented the aggregate count. This resulted in the pattern seen above, in which each clear peak represents the highest count in a bill count.

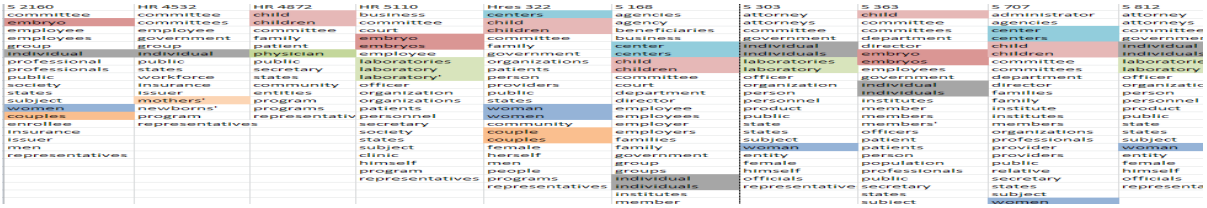


Figure 14: Set of actors contained within a word count of Federal level bills that failed to be passed

An important aspect of performing the word count, beyond just its facilitation of the second step, as will be discussed in the next paragraph, is its usefulness in finding potentially uniform word usage that assisted in the finding of the 'problem definition' and 'solution definition' frames. The default assumption in this study was that the primary purpose of each bill was to outline a 'solution frame'. For example, federal failed bills often (26/44) designated a problem in a section referred to as 'findings'. For California bills, problems were more often labeled by 'existing law' (41/42). Georgia, in contrast to the other two cases under study, appeared to have very little wording to distinguish the problem frame from the solution frame. There was use of 'findings' for a few Georgia bills (5/12), but overall, many of the bills failed to identify the 'problem definition' independently from the proposed solution of the bill.

From Figure 15, the second step used to find frames can be seen, in which the actors from each frame were filtered out of each word count. While it is clear that several words are common across many bills, such as 'state'/'states', it is also apparent from this

initial parsing, that other words are not as heavily used, such as 'unborn'. These word counts were color coded so as to approximate which words would represent potential frames or not. From the sparse usage of such terms as 'unborn' however, it can be inferred that the term may be highly associated with a particular frame, because it invokes specific images regarding (1) reproduction and (2) legitimate actors. However, like the word counts, without the associated narrative, drawing conclusions from these terms alone would be premature. Overall, this above step of a key actor count provides an important boundary identifying step of determining what terms are commonly used to designate actors. Even further, it allows for a clarification in tying commonly used terms to frames, an important step considering that our frames are actor-centered. An important limitation of this step is that the ability to distinguish all actors in a list of words is limited, due to some terms serving multiple functions within language, such as 'relative' (a family member, or a term relating concepts). There is also the fact that pronouns have the potential to mask points of the narrative because they reduce the actor to an even more generic term.

The third step of finding a frame relied upon several matrices in order to compare actor co-occurrences, actors' occurrences within bills, and actors' co-occurrences with terms of interest. Figure 15 below shows a matrix that pinpoints the actors contained within each bill, by subset.

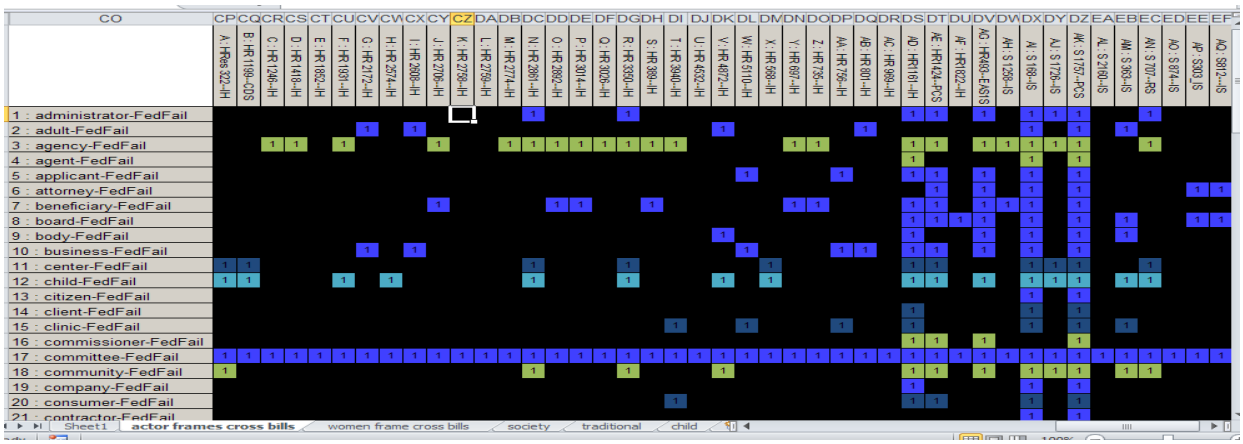


Figure 15: An actors x bills matrix, for federal level failed bills. The purpose of this matrix was to identify which bill utilized which actors.

From the matrices created, the narratives containing actors of interest could be pinpointed.

Overall, word counts provided an important step in the processing of the narrative in this data set. It made it possible to determine how actors appear in bills. Second, it provided insight into standard and non-standard wording of bills. While it does share some similarities with content analysis and 'keying' in the original form of frame analysis (Goffman, 1974, p. 43-44), it is hoped that this means of parsing apart the actors from the remainder of the narrative provides some system through which frame analysis can be more methodically approached in the future. It is noted that an additional aspect to be added in the future may be to also parse out potential verbs and adjectives in order to create a further detailed set of matrices to approach the narrative.

4.2.1 An overview of the contents of federal level bills

The federal level legislation provided its own set of challenges. For example, the keying to identify statements indicating potential problem statements was not uniform across all bills. As mentioned above, twenty-six out of forty-four bills contained the term 'findings', a term that would clearly identify what was determined to be the problem to be

solved. In order to navigate around this issue, it was decided that the purpose statement also could serve as the means to determine the problem frame. This was supplemented by the narrative found with the 'findings' key, as available. Another issue was the fact that there was only a single passed bill, thereby limiting the potential for within-level comparisons. Given that this was expected, it was only possible to disseminate what frames were potentially in play within the legislation and look at the changes from a historical perspective.

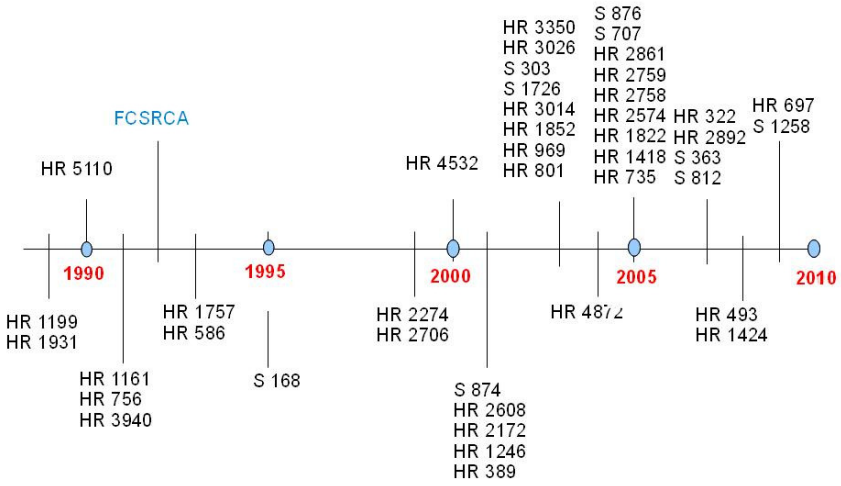


Figure 16: Federal timeline of bills. The blue highlighted bill is the only passed bill at this level.

Figure 16 above shows the time line of federal level bills collected for this study. As can be seen from both this figure and the Chapter 3 outline of data, the number of passed bills at this level is limited to one, FCSRCA. For clarification purposes, the data in the following sections will be ordered in the manner below, as exemplified by Table 3.

The quotes listed in the 'statements of frame' section of the table, will be ordered according to the numbering of the quadrants.

Table 3: Organization of data

bill	purpose	Actor	Scope	
		1	*2*	
		3	*4*	
Statements of frame	Quotes, listed by quadrant			

Figure 16 above shows the time line of federal level bills collected for this study.

4.2.1.1 Federal Successful Bill: FCSRCA

Comparison of all the bills cannot be completed without an understanding of them within their individual subsets. Given that much of the critique regarding policy has been aimed at the federal level, the frames at this level are of primary interest. The limited number of successfully passed federal bills limits what can be said about whether frames affect the ability of a piece of legislation to be passed. However, it may provide some information about the context of ARTs at this level and how they tend to be presented.

The first bill examined for frames was the only passed bill at the federal level, FCSRCA. The structure of this particular bill has no keyword to designate a separate problem statement from its solution statement, so it was concluded that the problem statement was implicit within the statement of the purpose of the bill. FCSRCA states that its purpose is “to provide for reporting of pregnancy success rates of assisted reproductive technology programs and for the certification of embryo laboratories”. Given that the approach of this study was based primarily upon the actors' representation within the frame, it is important to note that the primary actor of this problem statement is 'embryo laboratories', as is noted in **Error! Reference source not found.**, below.

Table 4: FCSRCA frame

Fertility Clinic Success Rate and Certification Act of 1992 (FCSRCA)	Stated Purpose	Actor	Scope	
	"to provide for reporting of pregnancy success rates of assisted reproductive technology programs and for the certification of embryo laboratories"	*Embryo laboratories [target of action]; practitioners of medicine [excluded from action upon]; consumers [implicit]*	*Unclear definitions of ART procedure success rates and inconsistent or unclear procedures taken by fertility clinics in the completion of an ART cycle, EXCEPT for the practice of medicine*	Problem Definition
		Secretary, consumer organizations, professional organizations, 'the state', accreditation organizations	*Secretary: Development of (1) a* model *certification program and (2) a measure of success rates for embryo lab-associated ART programs* *'the State' & accreditation organizations: the implementation of a modified certification program; collection of proscribed data; submission of data and certification reports to the CDC* *consumer & professional organizations: source of consultation for the development of (1) a model certification program and (2) a measure of success rates for ARTs*	Solution Definition
Statements of frame	**1:** "to provide for reporting of pregnancy success rates of assisted reproductive technology programs and for the certification of **embryo laboratories**" "In developing the certification program, the Secretary [or the State] may not establish any regulation, standard, or requirement which has the effect of exercising supervision or control over **the practice of medicine** in assisted reproductive technology programs." "(a) CONSULTATION- In developing the definition under subsection (b), the Secretary shall consult with appropriate **consumer** and professional organizations with expertise in using, providing, and evaluating professional services and embryo laboratories associated with assisted reproductive technologies." **2:** "to provide for **reporting of pregnancy success rates** of assisted reproductive technology programs and **for the certification** of embryo laboratories" STANDARDS- The certification program shall include the following standards developed by the Secretary: A standard to assure **consistent performance of procedures** by each embryo laboratory certified under the certification program or by an approved accreditation organization in a State which has not adopted the certification program. A standard for a quality assurance and a quality control program **to assure valid, reliable, and reproduceable procedures** in the laboratory. A standard for the **maintenance of records (on a program by program basis) on laboratory tests and procedures performed**, including the scientific basis of, and the methodology used for, the			

Table 4: FCSRCA frame

	tests, procedures, and preparation of any standards or controls, criteria for acceptable and unacceptable outcomes, criteria for sample rejection, and procedures for safe sample disposal. A standard for the **maintenance of written records on personnel and facilities** necessary for proper and effective operation of the laboratory, schedules of preventive maintenance, function verification for equipment, and the release of such records to the State upon demand....” **3:** “the **Secretary** shall, in consultation with the organizations referenced in subsection (c), define pregnancy success rates and shall make public any proposed definition in such manner as to facilitate comment from any person (including any Federal or other public agency) during its development.” “the Secretary shall consult with appropriate **consumer and professional organizations** with expertise in using, providing, and evaluating professional services and embryo laboratories associated with the assisted reproductive technology programs.” “A **State** may qualify to adopt the certification program if the State has submitted an application to the Secretary to adopt such program and the Secretary has approved the application.” “A State which has adopted the certification program may use **accreditation organizations** approved under section 4 to inspect and certify embryo laboratories” **4:** “Such an application shall include-- assurances satisfactory to the State that the embryo laboratory will be operated in accordance with the standards under subsection (d), a report to the State identifying the assisted reproductive technology programs with which the laboratory is associated, and...” “The certification program shall include the following standards developed by the Secretary: A standard to assure consistent performance of procedures by each embryo laboratory certified under the certification program or by an approved accreditation organization in a State which has not adopted the certification program. A standard for a quality assurance and a quality control program to assure valid, reliable, and reproduceable procedures in the laboratory. A standard for the maintenance of records (on a program by program basis) on laboratory tests and procedures performed, including the scientific basis of, and the methodology used for, the tests, procedures, and preparation of any standards or controls, criteria for acceptable and unacceptable outcomes, criteria for sample rejection, and procedures for safe sample disposal. A standard for the maintenance of written records on personnel and facilities necessary for proper and effective operation of the laboratory, schedules of preventive maintenance, function verification for equipment, and the release of such records to the State upon demand. A standard for the use of such personnel who meet such qualifications as the Secretary may develop.”

However, a further reading of narrative of the bill reveals references to other actors that can be directly tied to the problem statement, thereby providing further context. For example, the mandate for the creation of a model certification program states explicitly that the Secretary and the state,

> "In developing the certification program...may not establish any regulation, standard, or requirement which has the effect of exercising supervision or control over the practice of medicine in assisted reproductive technology programs."

In stating that the practice of medicine may not be infringed upon, the U.S. Congress is clearly excluding the consideration of a potential actor as part of the problem, i.e. those that 'practice medicine'. Even further, it indicates that despite the tie between the practice of medicine in ART programs and the embryo clinics of interest, only some of the actors in the entity referred to as 'fertility clinics', are under scrutiny: 'embryo laboratories'. This statement further excludes the attached body of ART programs from sanctions, i.e. the monitoring and certification that is being applied to embryo laboratories. An even less explicit actor of this activity are consumers of the fertility clinic. Within the bill, they are mentioned a mere two times, both as a term to describe other organizations that may be 'consulted' in the development of a model certification program. An important point of note regarding these three actors in this bill is the fact that, while they all may play a part in how the problem is defined, their roles are significantly different. The mentioning of the embryo clinics as the explicit actor clearly identifies them as the means of solving the perceived problem (Rochefort & Cobb, 1994, p. 23). The expression that sanctions could not be extended to those that practice medicine in assisted reproductive technology implies something not only about the practitioners, but also about the embryo laboratories. From Ingram and Schneider's social construction of actors matrix, it can be hypothesized that both entities practitioners and laboratories may be perceived as 'contenders' in the policy arena, i.e. actors considered to be stronger but also undeserving of benefits. In the language of Schneider and Ingram's social construction framework, these actors are considered to be contenders (1997, p. 116-120), because of their power

within the policy area as well as the fact that they are not necessarily positively constructed. As such, it is clear that the distinction is made between 'embryo labs' and 'practice of medicine' as the point on which to apply burdens. Regarding the consumer of the fertility clinic, it is not quite clear in which quadrant they reside with regard to the Schneider & Ingram social construction of actors matrix, of which a model of can be seen in Figure 19 of Appendix C. On the one hand, it appears that they are a dependent, given that, from the language of the bill, the primary function of this legislation is to correct for an information asymmetry through publication of information on fertility clinics. On the other, they also are given the opportunity to structure the certification process, thereby creating a more costly policy structure, according to the framework (p. 112, 123).

The second part of the frame is the solution definition. The most prominent, explicit actor is the Secretary of Health and Human Services, acting through the Centers for Disease Control (CDC). However, it also important to note that the implementation is carried out through 'the state' and accreditation organizations. Also important in the development process are the professional and consumer organizations, which are designated as consultants for the development of the program. Again, their role within the solution becomes an important aspect of understanding the solution frame. As stated by the bill, the Secretary is the primary actor for development and delivery of the model certification program, as well as the actor to whom reports are due regarding the data collection aspects of the bill. However, the Secretary defers adoption and implementation of the programs, as well as immediate data collection and management of the certification programs, to 'the state' or accreditation programs. Moreover, states can choose not to become an actor in this particular bill, seemingly resulting in their inclusion in the

solution definition being more rhetorical and not creating action on the part of the state. Similarly, the professional and consumer organizations are also voluntary participants to the process, but they are given 'authority' in the sense that they enter into the development process as experts on how the model certification program should function. Even further, there are the embryo laboratories, which are saddled with the burden of certification and observation.

Overall, as mentioned before, the embryo laboratories appear to function as contenders in the sense described in Ingram and Schneider's matrix of actors, which can be seen in Figure 19. By this, I mean that they are an extension of the fertility clinic, as are the medical practitioners. Given the relationship between the different actors, it is then necessary to look at the scope, in order to understand how the social construction plays out. In this particular bill, the scope of inclusion of each actor is different. The Secretary exists in a broad scope of action, but constrained in that action by actors on which he may not act. As such, given that his function is more as a tool than a socially constructed actor, it is necessary to look at how the constraints to action affect the other actors of the bill. Given that the medical practitioner is both not being acted upon and receiving the option to manage (through consultation) the burden that is placed on it, it appears to function also as a contender, primarily through the fact that it is exempted from action and called upon to 'self-manage' through consultation. The embryo laboratories also function as contenders, in the sense that they are an extension of the practice of medicine, and therefore tied directly to those creating the rules. Even further, however, is the fact that little direction action against the embryo laboratories for not obtaining certification, is expressed within the wording of the bill. Given that the primary

loss of not obtaining certification would be being listed as being 'not certified', there is only slight incentive but no requirement to adhere to the newly created rules. Without further examples of passed bills to compare these actors, these constructions are merely implied through the set up of the bill, but not conclusive.

Given that there are no other passed bills for points of comparison, little can be said regarding the frames' effect on the ability of the bill to be passed. However, regarding the existence of frames themselves, it seems as if there is evidence of a more traditional frame encompassing 'doctors' and 'consumers/couples'. The doctor frame is 'more visible', in the sense that there is a provision to not impinge upon the practice of medicine in ARTs and the requirement that the Secretary consult with "appropriate...professional organizations with expertise in using, providing, and evaluating professional services and embryo laboratories associated with the assisted reproductive technology programs." The consumer frame used within the bill primarily falls within the problem definition and the implicit indications that consumers are the actor for whom action is being taken. Non-traditional frames are not present at all.

An important note to make at this point is that the 'society'/'state' frame appears to have no standing in this form of narrative. Given that the federal government and 'the state' are inherent actors in this bill, the government frame becomes illogical. Additionally, the embryo clinic, while it appears to have received a burden, also seems to function as an extension of the doctor frame. The following bills will be necessary to confirm such a pairing, but from this limited analysis, this appears to be the case.

4.2.1.2 Federal Failed Bills

The forty-four federal failed bills provided additional insight into the structure and composition of bill frames, as well as providing further insight into which actors tended to receive problem definitions on their behalf, which actors were constructed as 'problematic' and which actors tended to result in constraints to government action. A small selection of the failed federal bills can be seen in Table 5, below.

Table 5: Examples of frames for two federally failed bills

HR 1852	Stated Purpose	Actor	Scope	
	"To assure equitable treatment of fertility and impotence in health care coverage under group health plans, health insurance coverage, and health plans under the Federal employees' health benefits program."	*Health insurance issuers [acted upon]; Federal employees [action on behalf of]*	*Inequality on the part of health insurers, regarding treatment for impotence and infertility*	Problem Definition
		Health insurance issuers, actors of ERISA, actors of the Public Health Service Act	*Assuring that policies covering impotence treatment also cover infertility treatment* *Does not allow for constraints to be placed upon the general practices of insurance companies, such as placing restrictions on restricting which drugs receive benefits under which plan*	Solution Definition
Statements of frame	**1:** "To assure equitable treatment of fertility and impotence in health care coverage under group health plans, **health insurance coverage**, and health plans under the **Federal employees' health benefits** program." **2:** "(a) IN GENERAL- A group health plan, and a health insurance issuer offering group health insurance coverage, that provides for coverage of impotency medications such as viagra shall also provide coverage of fertility treatments." **3:** "(b) INDIVIDUAL HEALTH INSURANCE- (1) Part B of title XXVII of the Public Health Service Act is amended by inserting after section 2752 the following new section: `SEC. 2753. EQUITY IN FERTILITY COVERAGE. `(a) IN GENERAL- The provisions of section 2707 (other than subsection (c)) shall apply to health insurance coverage offered by a health insurance issuer in the individual market in the same manner as it applies to health insurance coverage offered by a health insurance issuer in connection with a group health plan in the small or large group market. `(b) NOTICE- A health insurance issuer under this part shall comply with the notice requirement under section 714(c) of the Employee Retirement Income Security Act of 1974 with respect to the requirements referred to in subsection (a) as if such section applied to such issuer and such issuer were a group health plan.'. (2) Section 2762(b)(2) of such Act (42 U.S.C. 300gg-62(b)(2)) is amended by striking `section 2751' and inserting `sections 2751 and 2753'. (c) FEHBP- Section 8902 of title 5, United States Code, is amended by adding at the end the following the following new subsection: `(p) A contract may not be made or a plan approved which does not comply with the requirements of section 2753 of the Public Health Service Act.'." **4:**			

Table 5: Examples of frames for two federally failed bills

<table>
<tr><td></td><td colspan="4">"`(a) IN GENERAL- The provisions of section 2707 (other than subsection (c)) shall apply to health insurance coverage offered by a health insurance issuer in the individual market in the same manner as it applies to health insurance coverage offered by a health insurance issuer in connection with a group health plan in the small or large group market.
`(b) NOTICE- A health insurance issuer under this part shall comply with the notice requirement under section 714(c) of the Employee Retirement Income Security Act of 1974 with respect to the requirements referred to in subsection (a) as if such section applied to such issuer and such issuer were a group health plan."'</td></tr>
<tr><td rowspan="3">HR 3940</td><td>Stated Purpose</td><td>Actor</td><td>Scope</td><td></td></tr>
<tr><td rowspan="2">"To provide for the certification of embryo laboratories."</td><td>Embryo laboratories</td><td>Insufficient availability of information regarding the selection of embryo clinics</td><td>Problem Definition</td></tr>
<tr><td>American Fertility Society (AFS); the College of American Pathologists (CoAP); appropriate consumer organizations; embryo labs; Secretary of HHS; the states; accreditation organizations</td><td>Consultation with AFS, CoAP and consumer organizations, the development of a model certification program based upon standards set by the Secretary of HHS,to be carried out by the states. It is also to be monitored by (1) an accepted accreditation organization approved by the Secretary of HHS or (2) a state AND the Secretary of HHS. The states are required to qualify to administer a program through application to the Secretary of HHS for approval. The penalty for failure to maintain certification standards is the revocation of the embryo lab's certification.</td><td>Solution Definition</td></tr>
<tr><td>Statements of frame</td><td colspan="4">1:
"To provide for the certification of embryo laboratories."
2:
"IN GENERAL- Not later than 2 years after the date of the enactment of this Act, the Secretary shall develop a model program for the certification of embryo laboratories to be carried out by the States."
3:
"CONSULTATION- In developing the certification program under subsection (a), the Secretary shall consult with the American Fertility Society, the College of American Pathologists, and appropriate organizations representing consumers of embryo laboratory services."

"PUBLICATION- The Secretary shall, in consultation with appropriate private organizations involved with embryo laboratories, not later than 3 years after the date of the enactment of this Act and annually thereafter publish and distribute to the States and the public information showing pregnancy success rates, as defined by the Secretary under subsection (e)(2), achieved by each in vitro fertilization program in association with embryo laboratories in the United States. Such information shall prominently disclose which States have implemented the certification program of the Secretary and which laboratories have been certified under such program."
4:
"PUBLICATION- The Secretary shall, in consultation with appropriate private organizations involved with embryo laboratories, not later than 3 years after the date of the enactment of this Act and annually thereafter publish and distribute to the States and the public information showing pregnancy success rates, as defined by the Secretary under subsection (e)(2), achieved by each in vitro fertilization program in association with embryo laboratories in the United States. Such information shall prominently disclose which States have implemented the certification program of the Secretary and which laboratories have been certified under such program."</td></tr>
</table>

Table 5: Examples of frames for two federally failed bills

	"CERTIFICATION BY STATES- A State may qualify to administer the certification program established by the Secretary under section 2(a) within the State if the State has an application to the Secretary to take such action approved. Such an application shall include--" "ADMINISTRATION- A certification program in a State shall be administered by the State and shall provide for the certification of embryo laboratories by the State or by an accreditation organization approved by the State." " a) IN GENERAL- A certification issued by a State or an accredition organization for an embryo laboratory shall be revoked or suspended if the State or organization finds, on the basis of inspections and after reasonable notice and opportunity for hearing to the owner or operator of the laboratory, that the owner or operator or any employee of the laboratory-- ◦ has been guilty of misrepresentation in obtaining the certification, ◦ has failed to comply with any standards applicable to the certification, or ◦ has refused a request of the State or accreditation organization for permission to inspect the laboratory, its operations, and records. • EFFECT- If the certification of an embryo laboratory is revoked or suspended, the certification of the laboratory shall continue in effect for 60 days after the laboratory receives notice of the revocation or suspension. If the certification of an embryo laboratory is revoked or suspended, the laboratory may apply for recertification after one year after the date of the withdrawal or revocation."

With the federal level bills, the lack of availability of contrasting 'passed' bills resulted in no point of comparison to determine whether the frames in use were different than those passed. Undoubtedly, at this level, having a broader selection of legislation would have clarified the results immensely. That being said, given the results of just this level of bills, some interesting results regarding legislative frames become apparent. For one, the concept of a 'women' frame and 'society' frame, do not hold up well in the context of legislation. This may be because the terms are highly generalized, such that the terms would inevitably be used in some form. The society frame is also so close to the 'government' frame, that distinguishing actions on the part of 'society' or 'the public' is drowned out by action being taken in general. Both of these frames could possibly benefit from further adjustments to identify whether there are additional actors terms that could be used to identify these frames or whether they would benefit from the addition of verbs and adjectives. However, the overall legislation presented at this level did present some

indications of variation of frames that could potentially affect the success of those frames in passage.

For the problem definition aspect of the frame, the bills typically identified couples and/or consumers as important actors in the bills. The occurrence of 'couple' as a term occurred in thirteen of the forty-four bills. Sometimes, these individuals were identified as 'the infertile', a term that, from some discourse perspectives, has been considered a term indicating dependency (Farquhar, 1996, p. 83). It is important to note that 'couples' were rarely targeted in the solution of the frame. The form that they were targeted was primarily for the purpose of denying coverage of IVF. For example, a bill addressing veterans' benefits only targeted couples in the sense that it e*xcluded* the use of IVF as a potential health plan covered treatment for infertility.

> (1) The Secretary may--
>
> > `(A) provide to an eligible veteran (and, if necessary, the veteran's spouse) qualifying procreative services, and
> >
> > `(B) subject to paragraph (2) of this subsection, reimburse an eligible veteran for qualifying adoption expenses incurred by the veteran...
>
> `(4) For the purposes of paragraph (1) of this subsection, the term `qualifying procreative services' means procreative services that are reasonable and necessary to overcome the effects of a service-connected disability described in paragraph (3) of this subsection, but such term does not include--
>
> > `(A) procedures to conceive a child using gametes of an individual other than the veteran or the veteran's spouse; `(B) procedures to conceive a child through in vitro fertilization; or
> >
> > `(C) the services of a surrogate gestational mother. (HR 1931)

Therefore, for all intents and purposes, the couple appears to remain a dependent population. Other populations' inclusion in the problem definition of the bills varied.

Given the limitations of the approach to these pieces of legislation, the solution definition appeared to have the most interesting results regarding the hypotheses proposed by this study. For one, one common actor/ tool often featured is the Secretary of Health and Human Services (HHS). Also featured in similar positions were the Secretary of Veterans' Affairs and the Comptroller General. For the most part, with the exception of the three bills that appear functionally similar to FCSRCA, the function of these individuals was often to define terms under which to give benefits like ART treatment for infertility (Secretary of HHS) or affirm it (Secretary of Veterans' Affairs). Another example of a frequent actor of the solution definition was physicians, who often had the standing of 'expert' within the wording of the bills, as expected. This often took the form of a requirement for verification in order to access some service:

> "(5) For purposes of this subsection-- `(A) the term `infertility' means--(i) the inability to conceive a pregnancy after 12 months of regular sexual relations without contraception or to carry a pregnancy to a live birth; or (ii) the presence of a demonstrated condition determined by 2 physicians (at least 1 of whom specializes in infertility) to cause infertility;".(HR 1418 IH)

> (1) The term `infertility treatment services' means, with respect to an individual entitled to benefits by reason of section 226(b), diagnosis and treatment (described in paragraph (2)) by a physician (as defined in subsection (r)(1)). (HR 2758)

> `(ii) the procedure (including any retrieval incident thereto) is performed at medical facilities that conform to the standards of the American Society for Reproductive Medicine, the Society for Assisted Reproductive Technology, the American College of Obstetricians and Gynecologists, or

> any other similar nationally-recognized organization, or a Federal agency that promulgates standards for infertility procedures; (HR 1246)

Similarly, professional organizations also served to fulfill the role as 'expert', particularly as points of consultation for the government official or office tasked with implementing the legislation. With regard to the implementation of action, many of the failed pieces of legislation clearly exemplified the traditional frames, which were hypothesized to *support* passage of legislation. For some bills, such as those preceding FCSRCA on the issue of embryo laboratory certification, a significant amount of intrusion by the government into the practice of medicine and the function of the fertility clinic may have contributed to the failure of these pieces. For example, in FCSRCA, an explicit limitation exists for the Secretary of HHS:

> SECRETARY- In developing the certification program, the Secretary may not establish any regulation, standard, or requirement which has the effect of exercising supervision or control over the practice of medicine in assisted reproductive technology programs. (P.Law 102-493)

In contrast, the three bills addressing the same topic and with similar construction of the problem (HR 3940, HR 5110 & HR 756), appear to have no explicitly worded limitations. Even further, a point of interest may be the exact means through which the Secretary could exact penalties in these bills. For example, all three of the failed, similar bills allowed for the Secretary, the state or both, to exact fees in the certification process:

> FEES- The Secretary and a State may each require payment of fees for the issuance and renewal of certificates in such amount as they may determine is necessary to carry out their respective responsibilities under this Act. (HR 3940)

> FEES- The Secretary shall require payment of fees for the issuance and renewal of certificates in

such amount as the Secretary may establish to carry out this Act based on the volume and scope of the services being performed by the embryo laboratories. (HR 5110)

FEES- The Secretary shall require payment of fees for the issuance and renewal of certificates in such amount as the Secretary may establish to carry out this Act based on the volume and scope of the services being performed by the embryo laboratories. (HR 756)

FCSRCA did not allow this to be the case, a potential example of an aspect of a solution definition that could be considered burdensome to the privileged actor of the traditional frame. In the remaining bills, because there is no clear bill for comparison, the ability to attribute frame to their failure is limited.

Overall, the general conclusions to be drawn from the frames found in the failed legislation solution definitions appeared to represent three different ways that possibly could prevent their passage, according to the previously presented 'traditional frame': (1) prevention of access to IVF [burdensome on the 'infertile couple'], (2) the placement of a burden upon physicians, or (3) the exclusion of privileged actors from their own management system. An additional important note is that, out of the forty-four of bills for analysis, only five appeared to have any non-traditional frames (i.e. society frames, women frames, or children frames): HR 2861, HR 3350, S 1726, S 707, and HR1161. All five of these bills were directly addressed to the issue of “infant health” or “women's health”, thereby seemingly removing them from having a fully traditional frame. However, according to the coding by actors, a different story is told. In fact, by that coding, HR 1161 contains many of the traditional frame actors, as well as all of the 'society'/'government' actors, while using a limited number of the child and female actors. This may indicate either (a) that the actor association with each frame is a weak one or

(b) that no frames exist within legislation. Given the lack of a point of comparison, in the form of successfully passed bills, either one is difficult to conclude.

4.2.2 An overview of the contents of the California level bills

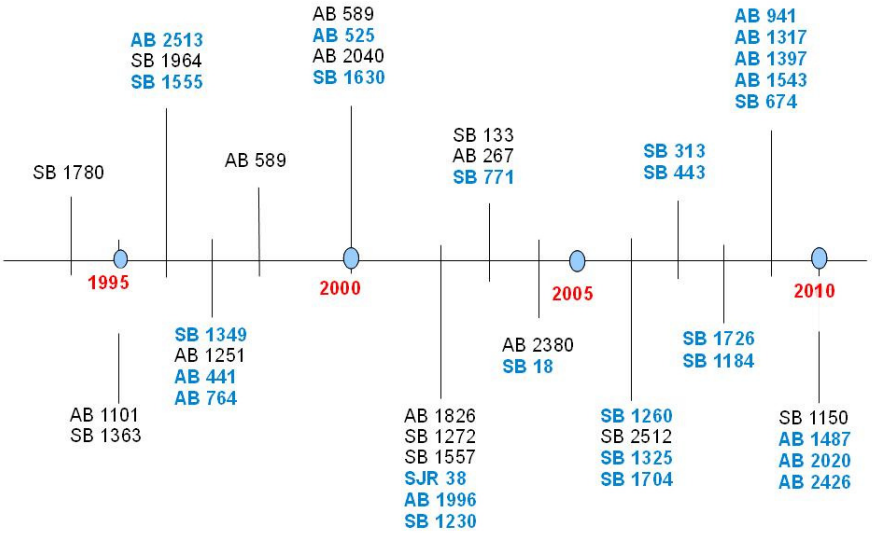


Figure 17: A time line of California bills. The blue highlighted bills are passed bills

The next sample set examined was California legislation. The legislation from California, as compared to the federal level legislation, required significant sifting through the narrative in order to understand which actors were being addressed for the problem and solution definitions. While forty out of forty-two of the bills had a clear key term to designate what the defined problem was ('existing law'), the density of the narrative complicated the distillation of the important actors and actions from general defining terms. The one bill that did not use the 'existing law' term was a resolution and therefore had a different structure. Some important structures that made the California data set significantly different from both the federal data set and the Georgia data set is

the fact that while one version of a California bill might contain one of the ART terms searched for, not all iterations necessarily contained it. Given that this study looked primarily at the final version of all bills, this significantly trimmed the number of bills examined for frames of interest. Of the 42 bills collected, only 27 of them contained the original search terms. Another point of interest that makes this subset different from the other two is that the passage of the legislative body did not necessarily result in it being signed into law. While this had the potential to happen in any of these subsets, neither Georgia nor the federal level legislative bodies passed any legislation that did not get signed into law, whereas in California four of the 27 bills that passed the legislative body failed to become signed into law. Given that the primary interest of this study was whether the bill could manage passage through the legislative body, these bills were counted among the 'passed' bills. However, this explains why there may be proposed legislation that failed to pass, but has similar or the exact same requirements as a 'passed' version that predates it.

4.2.2.1 California Passed Bills

On the surface, the passed bills in California appeared to contradict the hypotheses completely. For one, while they did appear to draw heavily upon the traditional frames of 'physician', 'couple', and 'family', the bills did not appear to apply solutions to the social constructions as would have been expected. For example, some bills implement clear penalties for transgressions by powerful actors. An instance of this is bill AB 2513, which implements a definitive civil penalty of a fine if it is found that a physician or surgeon is found to have conducted themselves unprofessionally:

> This bill would require a physician and surgeon who removes sperm or ova from a patient to

> obtain a prescribed written consent from the patient before the sperm or ova are used for a purpose other than reimplantation in the same patient or implantation in the spouse of the patient. The bill would provide that violation of the requirement constitutes unprofessional conduct. The bill would provide that the misdemeanor provision does not apply to a person who violates the requirement. This bill would require a physician and surgeon who fails to obtain the required consent a 2nd time to be assessed a civil penalty of not less than $1,000 and not more than $5,000, plus court costs, to be paid to the individual whose required consent was not obtained. (AB 2513)

However, without further analysis of the success of this action, it is not possible to determine whether this action is enforceable or is primarily rhetoric aimed at placating a dependent set of actors. This could be argued to be the case given that some of the bills that permit penalties for such powerful groups managed to get passed through the legislature but then failed to become law. Other bills clearly utilize non-traditional frames, even when couched with traditional frames of physician and infertile couple. For example:

> (b) (1) No later than January 1, 2002, the department, after consultation with the appropriate national medical specialty societies, shall develop a standardized written summary in laymen's language and in a language understood by the patient or oocyte donor regarding health and consumer issues relating to ART and oocyte donation. The summary shall be printed and made available by the board to physicians and surgeons and shall include, but not be limited to, the following disclosures:
>
> A) The potential risks to both the mother and the fetus posed by the drugs, medications, and hormones used in ART.
>
> B) The potential risks of implanting multiple embryos, including multiple births.
>
> C) The potential risks to both the mother and the fetus from multiple births.
>
> D) The potential risks of oocyte donation, including the risk of decreased fertility and the risks associated with using the drugs, medications, and hormones prescribed for ovarian stimulation during the oocyte donation process.

Even further, there is a significant amount of intervention by government bodies on behalf of different actors and even the public. Some actors, such as the couple or consumers, are still constructed in a similar manner to how they are constructed in the federal level bill. However, the presence of additional actors and social constructions in these bills, such as 'child', provide evidence that other frames orientations exist within legislation and also have the potential to be passed. The passage of legislation penalizing physicians and other medical professionals for transgressions appears to be more acceptable, but examples such as passed bill SB 674, provide a contradiction to the acceptability of such legislation because, while they state the following, they also fail to become law:

> (1) Existing law provides for the licensure and regulation of various healing arts practitioners and requires certain of those practitioners to use particular designations following their names in specified instances. Existing law provides that it is unlawful for healing arts licensees to disseminate or cause to be disseminated any form of public communication, as defined, containing a false, fraudulent, misleading, or deceptive statement, claim, or image to induce the rendering of services or the furnishing of products relating to a professional practice or business for which he or she is licensed. Existing law authorizes advertising by these healing arts licensees to include certain general information. A violation of these provisions is a misdemeanor.

Whether this action is rhetoric or even intended to target other professional groups outside of those powerful groups providing ARTs comes into question. However, it does provide some explanation as to why the types of regulation vary so drastically around the country.

Overall, the social constructions within the California passed legislation include more actors in addition to providing different constructions for them. The social construction of infertile couples appears to remain the same, i.e. they are dependent

actors to whom offering the benefits of political action may or may not be optimal. However, there are additional dependents within this case that were not present in the federal failed case, primarily children, but also women, as the example above shows. Another example of an alternative frame appears in the laws mandating testing precautions on behalf of a gamete/embryo recipient with regard to testing and informed consent. However, there are also bills in which constraints are applied to these new actors' participation. For example, the laws relating to oocyte donation require that the donors undergo counseling and informed consent before undergoing the procedure and are informed that compensation for egg donation is not always provided. For example, the wording of AB 1317 is as follows:

> 125325. (a) The person or entity posting an advertisement seeking oocyte donation associated with the delivery of fertility treatment that includes assisted oocyte production and a financial payment or compensation of any kind, shall include the following notice in a clear and conspicuous manner:
>
> "Egg donation involves a screening process. Not all potential egg donors are selected. Not all selected egg donors receive the monetary amounts or compensation advertised. As with any medical procedure, there may be risks associated with human egg donation. Before an egg donor agrees to begin the egg donation process, and signs a legally binding contract, she is required to receive specific information on the known risks of egg donation. Consultation with your doctor prior to entering into a donor contract is advised."

While the informed consent and counseling aspects of this bill are for the benefit of the donor, they also act as a constraint on their participation in this transaction, reducing their agency. By Schneider and Ingrams' framework, these new actors could be considered to be dependents or deviants depending on one's perspective of informed consent and compensation.

4.2.2.2 California Failed Bills

The failed bills in California, unlike the passed bills, appear to have slightly less variation of frame. While the number of failed bills presented here is a much smaller number as a result of excluding bills not addressing ARTs within their body, it becomes apparent that the failed bills do not have quite the same amount of variation in actors as in the passed bills. For example, within the six California failed bills examined for frames, the primary actors in these bills are physicians, insurers and the 'infertile'. Also featured were donors and researchers. An interestingly missing frame, which appeared heavily in passed bills, is the child frame. Similarly, the woman frame does not appear to feature as heavily. However, regarding language and construction of the featured actors, there appears to be little difference between passed and failed legislation. Passed bills do place some constraints upon actors that have real enforcement mechanisms, but this is also found in failed legislation. The only difference between passed and failed is the representation of insurance actors, who appear to represent a greater fraction of the actors targeted in failed bills than in successful bills. However, there are also significantly fewer pieces of failed legislation, which means that the possibility that there will be one bill that does or does not contain one actor over another increases.

Regarding the frames that were presented in this subset, the primary actor for whom policy action was being taken appeared to be consumers. This is the case for two bills focusing on insurance coverage and one on the structure of advertising. The failed legislation addressing advertising primarily focuses on physicians. Gamete donation does not appear to target a particular group, instead imposing penalties on anyone making the attempt to sell or buy human tissue. As such, the social construction of each of these actors would appear to also be contenders. While the generic terminology to describe

actors within the gamete donation bill may make it appear that these actors would be classified under the deviant construction, a closer look at the text of the legislation appears to limit the punishment to only civil action in the form of a fine, similar to those applied to physicians in both the passed bills and failed bills of California legislation. An example can be seen below.

> This bill would provide that any person who clones a human cell, or purchases or sells an ova, zygote, embryo, or fetus, for the purpose of cloning a human being, shall be punished by a
>
> **criminal** fine ~~, by imprisonment in a county jail for~~
>
> ~~not exceeding one year, or by both a fine and imprisonment~~ (AB 1251)

> This may also be because the issue is considered to be tied directly to medicine, given that the billcontains a clause relating to professional conduct, as in the example below:
>
> It would make a violation an act of unprofessional conduct under the Medical Practice Act. The bill would also require the revocation of the local business license of any business that violates this provision. By creating new crimes, this bill would impose a state-mandated local program.

Overall, it can be seen that the construction of actors within both California failed and passed bills radically differed from the hypothesized relationship between actors and actions. While the social constructions are similar to those found in the federal level bills, their influence over the ability of bills to get passed is not evident at all. Another distinguishing factor of California bills is the inclusion of several non-traditional frames, even though they were couched within a more traditional frame such as family. More generally, California bills exemplify the limitations of frame on the ability to get bills passed and also suggest limitations to the applicability of social construction in legislative action.

4.2.3 An overview of the contents of the Georgia level bills

Figure 18: Time line of Georgia Bills. The passed bills are highlighted in blue.

Of the legislation examined for this study, Georgia had the smallest subset over that shortest period of time. As can be seen from the time line above, a majority of legislation has occurred after 2005, with three bills occurring before 2005. As can be seen, the only ones that managed to pass occurred in 2007 and 2009. As mentioned earlier in this section, Georgia bills presented an interesting challenge for analysis. For one, Georgia bills appeared to have no key term identifying the present state of policy and the goal to be accomplished by new policy. This is similar to the status of approximately half of the pieces of federal level legislation. Therefore, the purpose statement was used as a proxy for the present state of policy, just as with the federal level bills.

4.2.3.1 Georgia Passed Bills

As can be seen in the Figure 18 time line, both of the passed bills occurred after 2005. Even further, it can be seen that one of the passed pieces of legislation is a resolution rather than a bill and therefore functions in a different manner than the other. Of the passed legislation, the first was passed for the purpose of establishing a committee "on Rights Relating to Reproductive and Genetic Technology". The composition of this committee provides a clear example of what concepts are closely associated with ARTs, as can be seen in the excerpt below:

> ...the Senate Study Committee on Rights Relating to Reproductive and Genetic Technology to be composed of seven members of the Senate. The chairpersons of the Senate Judiciary Committee, Senate Health and Human Services Committee, and Senate Science and Technology Committee shall each be a member, and the other four members shall be appointed by the Lieutenant Governor. (SR 280)

It is clear from this that the primary conceptual associations with ARTs are health and science. Given this to be the case, it is clear that the constructions that can potentially be applied to this area are potentially perceived to be limited. The other piece of legislation dealt with the adoption of embryos (HB 338). From the structure of HB 338, it is clear that the child frame is an important aspect of this bill, despite the fact that the bill's underlying structure is derived from a more traditional frame. An even more interesting aspect of this frame is its general recognition of the embryo as an actor with its own interests, as opposed to an object, as is found in many of the other bills utilizing the term. This can be seen in such statements as the one below:

> (5) 'Recipient intended parent' means a person or persons who receive a relinquished 24embryo and who accepts full legal rights and responsibilities for such embryo and any 25child that may be born as a result of embryo transfer. (HB 388)

Given this case, it is clear that keying, in the Goffman sense, has occurred because the entity has undergone a transformation from an object to an actor, in some sense. Even further, this bill heavily utilizes the child frame and subsumes the traditional frame of family through its language, by emphasizing the embryo and the potential future child to be born of that embryo, while removing the distinguishing factors of a more traditional frame like 'family', which would be expected to emphasize parenthood and parent-child relationships. Alternatively, it also does not utilize a 'couple'/'consumer' frame at all, instead placing an emphasis upon the embryo/child guardianship. In effect, this bill is an example of utilizing terms to address an alternative frame.

4.2.3.2 Georgia Failed Bills

As can be seen from the time line in Figure 18, the number of failed bills in Georgia far outnumber the passed bills. The primary actors of interest within these bills consist of couples, insurers, and physicians, similarly to the previous subsets. However, Georgia failed bills utilize the child frame far more heavily that previous subsets. For instance, in one failed bill, the term 'unborn' is used: presumably to reference that the entity in question is an actor only limited by its lack of birth. This example from HB 1358, can be seen below:

> Inheritance rights shall not flow to the in vitro human embryo as a legal person unless the
> 1in vitro human embryo develops into a fetus and is born in a live birth or at any other time
> 2when rights attach to an unborn child in accordance with law. As a legal person, the in
> 3vitro human embryo that is born in a live birth as a result of embryo adoption to another
> 4couple shall not retain its inheritance rights from the biological parents." (HB 1358)

The heavier use of the child frame may be an example of frames causing the failure of legislation, though it can be seen in both passed and failed Georgia bills, that this particular frame is more favored. Regarding the other actors, 'physician' is used in half of the bills, in which it acts as primarily a source of authority with regard to the 'couple' and other actors within. For example, in HB 1073, the physician is the authority through which a commissioning couple may enter into a surrogacy contract, and makes arrangements for embryos in the case of unforeseen circumstances such as divorce. However, as the authority in the ART transaction, the physician also appears to be given the burden of 'safekeeping' of embryos and other parties involved, as can be seen in the wording of HB 1358, below:

> Any physician or medical facility that causes fertilization of a human ovum in vitro shall 1be directly responsible for the safekeeping of the in vitro human embryo. (HB 1358)

4.2.4 Comparisons between frames and conclusions

Across all bills, it becomes apparent that some frames are more easily teased out than others. A primary example of an easily distinguished frame would be the 'child' frame, which was apparent in both California and Georgia legislation. Other frames, such as 'society', were not as easily distilled. It is not clear whether this was the case because 'society' frames are assumed to occur with any state action, or because the instrument with which to identify the frame requires refinement. Similarly, the 'women' frame also proved difficult to distill from the legislation presented here. In part, it could also be argued that the frames were constrained by the overarching metanarrative of 'health', which would automatically place some actors in positions of prominence, while limiting or excluding others.

Through this exercise of distilling frames from the many subsets of narrative, a few concepts hopefully have become apparent. For one, physicians and other health professionals continue to dominate this particular policy arena. This limits the potential policy options, as shown previously by Harris (2010). Their heavy involvement over their own management, as shown by the frequent use of the individual physician or the professional organization representing physicians, provides evidence that they act as contenders, according to the Schneider and Ingram social construction classification. Even further, it becomes apparent that while it has been argued that their political power has waned with the advent of managed care, it is clear that as a group they are still perceived favorably enough to act as a trusted expert in activities related to the practice of medicine.

It is also important to note the emphasis placed upon the consumer/couple as a dominant actor to receive benefits, in the form of increased access to the treatment through mandates on insurers, or through increased access to information through application of certification and screening processes. However, despite the application of legislation on their behalf, it does not appear that they carry much political power, which is why they have been designated here as being a socially constructed 'dependent' group. Even further, some of the legislation that has been formulated on their behalf appears to be primarily rhetorical, for example, the mandate upon embryo laboratories certification found in FCSRCA (1992).

The other remaining actors' role in the framing of legislation relating to this issue provide an interesting contrast between the cases under study, for example the emphasis on the child frame as the dominant alternative frame in Georgia, whereas the dominant

California alternative frame was more heavily focused upon women or the public. However, what is clear from the small sample set presented here is that the use of alternative frames is limited, and requires further study as to what may determine the application of frames in a particular policy arena.

CHAPTER 5

CONCLUSIONS

5.1 Contribution to theory

Overall, it is believed that this study has shown the existence of frames within legislation. It is hoped that future study will attempt to provide further means through which to more systematically approach the study of frames, particularly within legislation. While this study only examined those bills that directly reference the topic of interest, it is believed that a broader selection of bills could be used to refine the methods of systematic frame analysis, for the purpose of use with large data sets. Moreover, the examination of multiple iterations of policy could also be of interest in understanding the process of frame development. This multiple iterations method could also shed further light on the development of ART-related policy, particularly in clarifying the appearance and cutting of ART terms from different iterations of bills.

Regarding the contributions to the literature, it is believed that this study brings multiple aspects of frame analysis to the forefront. First, the attempt to parse out the social construction of actors as a means of developing the frame itself provided a different way of viewing the actors and their activities within legislation. This is in contrast to some of the publications of the MAGEEQ project, which used frame analysis for the purpose of evaluating the means by which gender issues were incorporated in European Union policy (Verloo, 2004; Lombardo & Meier, 2006), and developed a frame based off of four concepts: the diagnosis of what's wrong, attribution of causality to whom, the prognosis of what should be done, and the call for an actor to do something (Verloo, 2004). Using this initial frame, it was the intent of this study to utilize the social

constructions of actors, per the definitions provided by Ingram and Schneider in *Design for Democracy*, to determine the frames of legislation (1997). The purpose of uniting these two frameworks for the examination of legislation was to capture the interaction between the proposed problem and solution within legislation, thus attempting to distill both explicit and implicit actors within legislation.

Even further, it was the purpose of this paper to extend previous work on applying CAQDAS to frame analysis. The attempt to use a process of distilling word counts was only partially successful in describing the narrative of the legislation. It is believed that this process could be further improved by further distilling the word counts into other grammatical features, and running a matrix analysis across the actors along with these additional grammatical features. This could potentially provide further systematization to the process of frame prediction and discovery, thus guiding the frame analysis method towards a more empirical analytic process.

5.2 Limitations and contribution to ART policy literature

Overall, while it may appear that the data set of this study was far from small, it is the belief of the author that it would further benefit from a larger selection of legislation in future study, so as to better clarify whether the lack of frames such as those relating to women and children at the federal level, or women at the state of Georgia level, is a result of the frame not occurring or a limiting factor of the overall metanarrative. Similarly, an analysis of the multiple iterations of legislation could also be beneficial in better understanding the role, existence and persistence of frames within legislation.

Additionally, it is believed that this study provided some clarification of the social constructions around different ART actors. While it is limited in the conclusions that can

be drawn, it is clear that most of the social constructions are persistent in each of the cases studied, despite the fact that they are implemented slightly differently. While some social constructions are non-existent in certain cases, such as women and children at the federal level, this may be due to jurisdictional issues as much as a lack of mobilization of such frames.

5.3 Policy implications

The overarching policy implications tie primarily back to the concept of mobilization in social movement theory. It is perceived here that, at the federal level, there is little mobilization of non-traditional frames. This may be a function of the previously observed fragmentation of actors, as presented by Goggin and Orth (2004). However, it could also be argued that this is the result of structural factors such as federalism and power distribution. Given the observation that there is persistence of some social constructions and frames at all levels, it would appear to indicate that some organization may occur beyond just historical structuring. Even further, given the historical power balance, as presented in the historical analysis of Chapter 1, the development of such a structure should be neither surprising nor its persistence unexpected. Without the mobilization of an alternative metanarrative, particularly with regard to reproduction, the ability to 'change course' with regard to policy would seemingly be difficult, thereby resulting in the current regulatory scheme found in the ART policy arena today.

APPENDIX A: TABLES OF REPORTS

Table 6: EAB Report Recommendations

Major Ethical Issues	
Moral status of the Embryo	"'Profound respect...but....not...full legal and moral rights attributed to persons." "Embryo loss associated with attempts to assist otherwise infertile couples bear children of their own...may be regarded as ethically acceptable from an ethical standpoint, under certain conditions (emphasis own)"
Safety of mother and offspring	"it is concerned, as well, about the physical and mental health of the children born following such a procedure and about their legal status. Many women have told the Board that in order to bear a child of their own they will submit to whatever risks are involved....Department should not interfere with such reproductive decisions, it has a legitimate interest in developing and disseminating information regarding safety and health so that fully informed choices about reproduction can be made."
Adverse effects of technological intervention	"...broad prohibition of research involving human in vitro fertilization is neither justified nor wise. Among the developments warned against by some who testified before the Board, a few (e.g. , the cloning of human beings and the creation of animal/human hybrids) are of uncertain or remote risk." "Other abuses may be avoided by the use of good judgment based upon accurate information of the type collected by the Board and now being disseminated in this report."
Federal funding	"The Board concluded that it should not advise the Department on the level of Federal support, if any, of such research; but it concluded that Federal support, if decided upon after due consideration of all that is at issue, would be acceptable from an ethical standpoint."
Overall Report Conclusions	
Support of in vitro fertilization/ embryo transfer research to better understand the fertilization process	More data would be beneficial to draw additional conclusions from regarding the rate of abnormal embryo creation and further experimentation in animal models
Ethically acceptable to conduct research involving human in vitro fertilization	With 2 caveats and 5 sub-caveats: (a) human research without embryo transfer involves: (1) research that complies with all provisions governing research with human subjects; (2) research is designed to establish safety and efficacy and obtain acquire information for that purpose that is not otherwise attainable; (3) gametes are obtained from informed persons on their use and that have consented to that used; (4) embryos will not be held beyond normal implantation period; (5) advisement of the public will

Table 6: EAB Report Recommendations

Major Ethical Issues	
	occur in the discovery of a higher than normal risk of abnormal offspring production (b)research involving the transfer of gametes through IVF only be conducted with married couples
Ethically acceptable for the department to conduct or support IVF research, but chooses not to address the level, if any, funding	Assuming the caveats of conclusions 2 are met

Table 7: OTA 1988 Report Recommendations

Policy issue	Potential congressional action	Policy options
Should the Federal Government improve collection of data on reproductive health?	"The Federal Government has an interest in collecting data in three areas of infertility: factors contributing to infertility, its prevalence, and the outcome of certain treatments."	"Option I: Take no action."
		"Option Z: Appropriate funds for the Secretary of Health and Human Services to make grants to State public health departments for the establishment of a national surveillance system on chlamydial infection."
		"Option 3: Direct the Secretary of Health and Human Services to enhance the collection of data on infertility."
		"Option 4: Establish a systematic method for registering the birth of IVF babies and for following the development and health of these infants."
Should efforts toward prevention of infertility be enhanced?	"The Federal Government supports no identifiable activities expressly directed toward prevention of infertility. It supports several activities allied with prevention of infertility, such as NCHS collection of descriptive data about infertile couples, contraceptive research funded by NIH and the Agency for International Development, and programs of the Centers for Disease Control that aim to prevent sexually transmitted diseases."	"Option 1: Take no action."
		"Option 2: Amend the Public Health Service Act to extend the program of grants for prevention and control of sexually transmitted diseases to include prevention of infertility secondary to sexually transmitted diseases."
		"Option 3: Evaluate Federal efforts to prevent infertility."
		"Option 4: Establish a demonstration project for identification of risks for infertility."
		"Option 5: Enhance education in reproductive health."
Should the Federal Government ensure that consumers of selected infertility services have the information to make informed choices?	"Congress generally does not regulate medical practice, with the exception of drawing broad criteria for care delivered at Veterans'	"Option 1: Take no action."
		"Option 2: Encourage the use of a consensus review or conference on the use of IVF, gamete intrafallopian

Table 7: OTA 1988 Report Recommendations

Policy issue	Potential congressional action	Policy options
	Administration hospitals or reimbursed by Federal insurance programs. Nor are medical techniques subject to consumer protection legislation, with the notable exception of Food and Drug Administration regulations for testing drugs and devices, and for regulating advertising of their indications and efficacy. Rather, quality assurance and consumer protection issues are left to State legislatures, professional societies, consumer groups, and word-of-mouth."	transfer, and other innovative treatments for infertility."
		"Option 3: Extend consumer protection laws to selected infertility services."
Preexisting mechanisms for gaining access to infertility diagnostic and treatment services adequate?	Currently, those who can afford to pay for infertility services out-of-pocket have the greatest access. To consider use of newer medical technologies, infertile individuals need to be able to pay anywhere from several hundred dollars to more than $22,000. Individuals with some private insurance coverage generally can expect to have a large portion of their expenses covered during the diagnostic phase, with considerable variability of coverage for infertility treatments."	Option 1: Take no action.
		Option 2: Direct the Health Care Financing Administration of the Department of Health and Human Services to review and report on the extent of existing coverage for infertility diagnosis and treatment services under the Medicaid and Medicare Programs
		Option 3: Amend the existing Federal Medicaid Program to add a new reimbursement category for services related to the diagnosis and treatment of infertility.
		Option 4: Amend Title 5 of the U.S. Code to provide that any carrier offering obstetrical benefits under the health benefits program for Federal employees shall also provide benefits for medical procedures to overcome infertility, including procedures to achieve pregnancy and to carry pregnancy to term.
		Option 5: Facilitate adoption, a social alternative to infertility treatment.
Should the Veterans' Administration provide infertility diagnosis and treatment?	For the VA to provide care to a veteran, at least four conditions must be met: the veteran must have a disability, the VA care must be for that disability,the care must be necessary, and the care must constitute hospital care (including	Option 1: Take no action.
		Option 2: Direct the Administrator of the Veterans' Administration to interpret disability to include the inability to procreate.
		Option 3: Amend Title 38 of the U.S. Code to specify that infertility

Table 7: OTA 1988 Report Recommendations

Policy issue	Potential congressional action	Policy options
	medical treatments). These provisions mean that veterans currently obtain only limited treatment for infertility from the VA.	treatments including but not limited to IVF, gamete intrafal]opian transfer, and artificial insemination may be provided by the Veterans' Administration
Should the transfer of human gametes and embryos be regulated?	Sperm are sold by commercial sperm banks throughout the United States and have been for many years. Donation of unfertilized ova is today occurring at a number of infertility clinics. A few have begun to pay women to undergo hormone stimulation and ovum retrieval, sometimes in the course of voluntary sterilization by tubal ligation. Ovum banking using frozen ova has yet to become available, but considerable research is under way to make this feasible Embryos that remain after IVF procedures are not yet sold, as clinics and hospitals have chosen instead to give parents the choice of having them frozen, destroyed, or donated.	Option 1: Take no action. Option 2: Mandate national standards for protection of paid ovum donors. Option 3: Mandate national standards for protection of recipients and offspring. Option 4: Ban commercial sales of embryos.
Should anyone accepting or transferring human gametes keep nonidentifying genetic records on behalf of the potential child?	Donation of human gametes is usually accompanied by an oral patient history including important genetic information that can become a formal written record. Such information is routinely obtained by those who operate sperm banks as they screen donors. Currently, however, the type of information that is collected and the ways in which it is maintained and transferred vary greatly. This variation is particularly significant because the predictive value of genetic history may increase in coming years.	Option 1: Take no action. Option 2: Mandate that operators of sperm, ova, and embryo repositories, or anyone who transfers these materials, maintain written records detailing the non-identifying genetic history of all gamete donors and that this information be available to the recipients of gametes or embryos and the eventual offspring.
Should commercialized surrogate motherhood be regulated by the Federal	Surrogate motherhood is an infrequent but increasingly	Option 1: Take no action. Option 2: Review developments in State

Table 7: OTA 1988 Report Recommendations

Policy issue	Potential congressional action	Policy options
Government?	popular arrangement used by infertile couples, singles, and homosexuals as an alternative to adoption and perhaps infertility treatment in their efforts to form a family. Surrogacy arrangements are based upon principles of contract and family law, and therefore are largely within the traditional domain of State legislative activity.	law related to surrogate motherhood.
		Option 3: Facilitate development of State legislation related to surrogate motherhood
		Option 4: Facilitate interstate cooperation and harmonization of State laws.
		Option 5: Mandate national standards for surrogate motherhood arrangements or commercial intermediaries
		Option 6: Facilitate international agreements concerning transnational surrogacy arrangements.
		Option 7: Ban commercialized surrogate motherhood.
Do some areas of reproductive research require additional support?	Federal support of human reproductive research is concentrated in two agencies of the Public Health Service: NIH (in particular, the National Institute of Child Health and Human Development and the National Institute of Environmental Health Sciences) and CDC (in particular, the National Institute for Occupational Safety and Health and the National Center for Health Statistics).	Option 1: Take no action.
		Option z: Expand Federal support for research in male infertility.
		Option 3: Expand Federal support for research on the psychology of participants in assisted conception.
		Option 4: Direct the Secretary of Health and Human Services to review, solely for scientific merit, research involving human sperm, eggs, and early embryos.
		Option 5: Mandate the appointment of an Ethics Advisory Board within the Department of Health and Human Services.
		Option 6: Direct the Secretary of Health and Human Services to implement (and update as needed) the 1979 recommendations of the Ethics Advisory Board.
		Option 7: Direct the congressional Biomedical Ethics Board to develop guidelines for federally funded research with human sperm, eggs, and embryos.

Table 8: PCB Report Recommendations (specifically regarding ARTs)

General conclusions	

Table 8: PCB Report Recommendations (specifically regarding ARTs)

A.1. Institutional governance	a) There is minimal direct governmental regulation of the practice of assisted reproduction and b)extensive, voluntary professional self-regulation of the practice of assisted reproduction.
A.2. Substantive areas of concern	a) There is no comprehensive mechanism for data collection, monitoring, or oversight of the effects of ARTs on children or gestational mothers, b) there is no uniform law of access, c) there is no oversight of novel practices once moved into clinical practice, d) there is no uniform system of public review and deliberation regarding human or social significance of ARTs
E. Commerce	There is no comprehensive mechanism for regulation of commerce in gametes, embryos, and ART services

APPENDIX B: LIST OF SEARCH TERMS

List of Search terms used to find ART bills

- in vitro fertilization/invitro fertilization
- IVF
- assisted reproduction
- assisted reproductive medicine
- assisted reproductive technology
- medically assisted reproduction
- infertility treatment
- fertility treatment
- human reproductive technologies
- gamete intrafallopian transfer
- zygote intrafallopian transfer
- artificial insemination

EXLUDED TERMS

- infertility [alone]
- fertility [alone]
- infertility drugs [not in conjunction with other terms]
- reproductive HARM
- reproductive health/care [alone]
- reproductive toxicity
- interpregnancy care
- fertility drugs
- fertility preservation

APPENDIX C: FRAMES & SOCIAL CONSTRUCTIONS

Table 9: Frames

	Position	Diagnosis	Attribution of Causality	Prognosis	Proposition
Alternative Frame	feminist	• Changes female role • alters value of female body • creates incentive to 'loan out' one's body • allows for the (re?)construction of the female body as 'mother' rather than 'woman'	'ART technologies', 'medicine', government	• Ban technologies	
	Right-to-life/ child/ embryo/ fetus/ future person	• Alters value of child • There is a lack of representation of the child in the process, outside of the parent • alters value of embryo • creates the possibility of abortion • increases the health hazards for the resulting child	'parents', medical professionals, drug companies, government	• Collect data on additional animal models • Require informed consent • Collect data on the resultant children of IVF • Evaluate the psychological wellbeing of both child and parents • Create rules on the number of embryos that may be implanted	Legislators, religious bodies, child advocates,
	woman	• Little provision of 'sufficient' drug testing • representation of woman is as 'desperate dependent' • insufficient animal modeling	'drug companies', 'doctors', 'scientific establishment'	• Collect longitudinal data on fertility treatments and users • Recognize and target information specifically to women • establish woman-focused infertility counseling • create additional programs for *preventing* infertility	Legislators, 'feminist' organizations
	society	• Long term fertility impact • Creates a need for new legal definitions • Provides new avenues for 'civil conflict' (wrongful birth)	'policy makers', 'parents'	• Collect longitudinal IVF birth data • Create legal clarification of 'familyhood' • create rules on the exchange and use of gametes,	Legislators, administrative branches of government

Table 9: Frames

	Position	Diagnosis	Attribution of Causality	Prognosis	Proposition
		• Differential access/ economic costs (Creation of a disparity between haves and have-nots with regard to reproductive access) • Potential 'misuse' (eugenics, sex-selection, cloning) • Social structure changes (older parents, older gametes) • 'Market' for human parts (gametes) and bodies (surrogacy) • The potential for an increase in disabled babies • The potential for unclear genetic lineages (siblings that have grown up with different 'parents') • Insufficienct 'responsibility' for the medical professional • Altered previously accepted social structures (minor?)		surrogates • create clear rules on the use(s) of PGD • create limits on age access and use of IVF • institute strict rules on cloning • collect clear genetic data, provide a database of 'potential siblings' •	
	religion	• Circumvents nature/ God's will • 'Defeating' the purpose of 'procreation' • Creates the possibility for the destruction of embryos	'doctors'	• Ban IVF use	legislators
	socio-technological	• Allows for too much technological intervention • Creates 'paradigm' of medical/ technological intervention	'unclear'	• Ban IVF use	legislators
Traditional Frame	Traditional couple	• Insufficient access • High cost	Government	• Institute requirements for	Doctors, patient

Table 9: Frames

	Position	Diagnosis	Attribution of Causality	Prognosis	Proposition
		• Inaccurate success rates • Telling the child their parentage • Positive versus negative right to genetic reproduction		insurance to cover access to IVF treatments • Create rules requiring clear, concise information on 'live birth rates' • Otherwise create rules making the right to make reproductive decisions a *positive right*	advocates
	Physician	• Too much intervention by the government • Sufficient governance at the professional level	Government	• Maintain professional autonomy • reduce, limit government intervention in data collection • Limit rule making in	Doctors, patients, insurance companies

Table 10: List of actors distilled from all bills

1 : administrator	31 : donor	61 : organization
2 : adult	32 : embryo (2)	62 : owner
3 : agency	33 : employee	63 : parent
4 : agent	34 : employer	64 : participant
5 : applicant	35 : entity	65 : partner
6 : attorney	36 : family	66 : patient
7 : beneficiary	37 : female	67 : people
8 : board	38 : fetus	68 : person
9 : body	39 : government	69 : personnel
10 : business	40 : group	70 : petitioner
11 : center (2)	41 : guardian	71 : physician
12 : child	42 : gynecologist	72 : policyholder
13 : citizen	43 : holder	73 : population
14 : client	44 : hospital	74 : product
15 : clinic	45 : human	75 : professional (2)
16 : commissioner	46 : husband	76 : program
17 : committee	47 : individual	77 : public
18 : community	48 : institute	78 : recipient
19 : company	49 : institutions	79 : representative
20 : consumer	50 : insurance	80 : school
21 : contractor	51 : insurer	81 : secretary (2)
22 : coordinator	52 : juvenile	82 : society
23 : corporation	53 : laboratory	83 : spouse
24 : counsel	54 : life	84 : stakeholder
25 : county	55 : member	85 : state (2)
26 : couple	56 : mother	86 : surgeon
27 : court	57 : nonprofit	87 : unborn
28 : department	58 : obstetrician	88 : woman
29 : director	59 : office	89 : workers
30 : disabled	60 : officer	

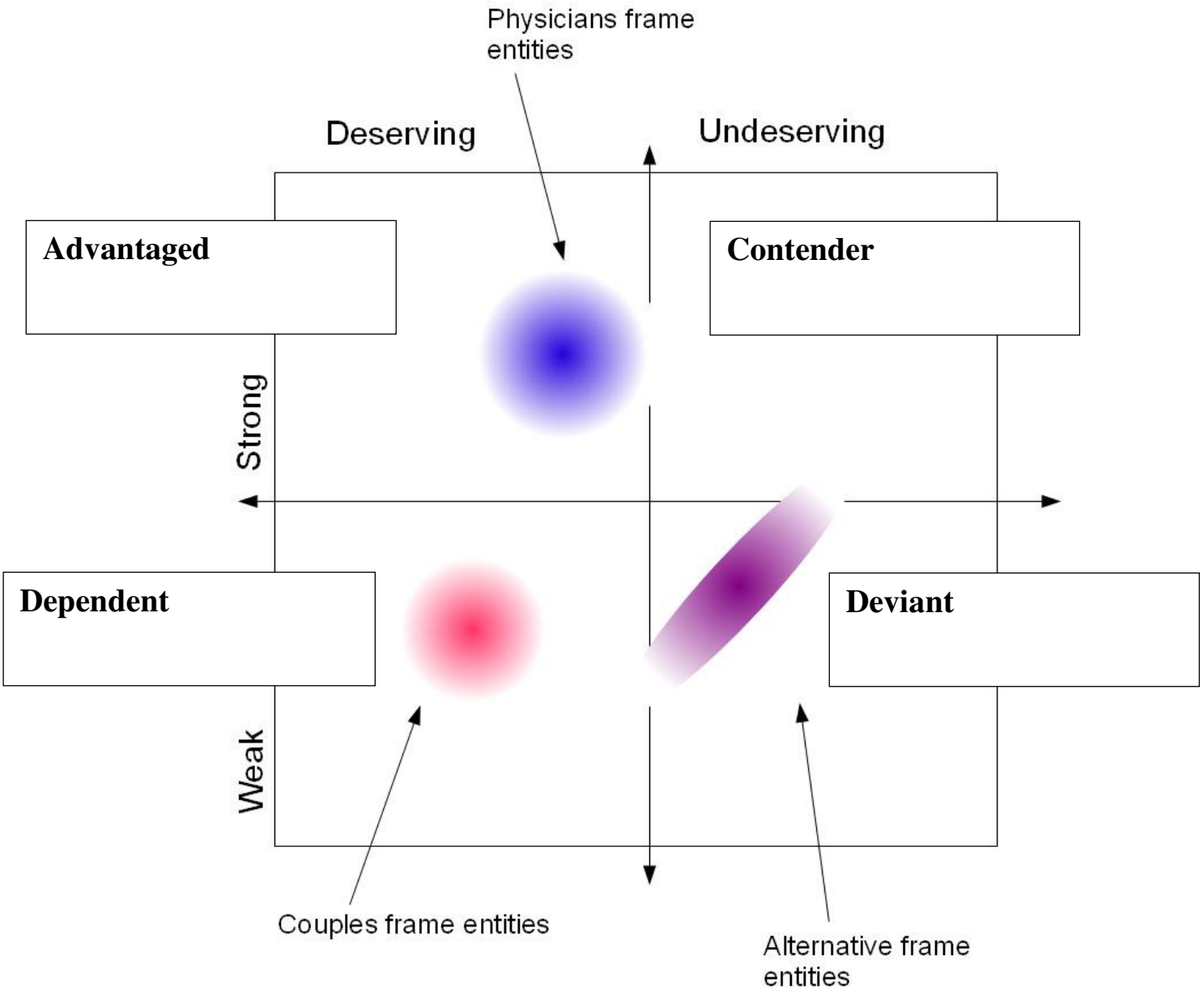


Figure 19: Social constructions of actors from frames. Modified from Ingram & Schneider (1997, p. 113-4)

Table 11: Nvivo stop terms

stop words				
if	s	into	on	as
will	such	no	or	these
and	that	in	with	
not	the	for	was	
but	Their	by	to	
and	Then	be	they	
are	There	at	this	

APPENDIX D: BILLS

Table 12: The bills

Federal	HR 1931: `Childless Veterans Assistance Act of 1989'.	1989
	HR 1199: no title	1989
	HR 5110: `Fertility Clinic Success Rate and Certification Act'	1990
	HR 1161: `Women's Health Equity Act of 1991'.	1991
	HR 3940: `Fertility Clinic Success Rate and Certification Act of 1991'	1991
	HR 756: `Fertility Clinic Success Rate and Certification Act'.	1991
	HR 4773`Fertility Clinic Success Rate and Certification Act of 1992'.	1992
	S 1757: `Health Security Act'.	1993
	HR 568: `Contraception and Infertility Research Centers Act of 1993'.	1993
	S 168: Affordable Health Care for All Americans Act''.	1995
	HR 2774: no title	1999
	HR 2706: `Family Building Act of 1999'.	1999
	HR 4532: `Equity in Fertility Coverage Act of 2000'.	2000
	S 2160: `Fair Access to Infertility Treatment and Hope Act of 2000'.	2000
	S 874: `Fair Access to Infertility Treatment and Hope Act of 2001'.	2001
	HR 2608: `Cloning Prohibition Act of 2001'.	2001
	HR 2172: `Cloning Prohibition Act of 2001'.	2001
	HR 1246: no title	2001
	HR 389: `Family Building Act of 2001'.	2001
	S 303: `Human Cloning Ban and Stem Cell Research Protection Act of 2003'.	2003
	S 1726: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2003
	HR 3350: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2003
	HR 3026: no title	2003
	HR 3014: `Family Building Act of 2003'.	2003
	HR 1852: `Equity in Fertility Coverage Act of 2003'.	2003
	HR 969: `Medicare Infertility Coverage Act of 2003'.	2003
	HR 801: `Cloning Prohibition Act of 2003'.	2003
	HR 4872: `Retinoblastoma Awareness and Prevention Act of 2004'.	2004
	S 707: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2005
	S 876: `Human Cloning Ban and Stem Cell Research Protection Act of 2005'.	2005
	HR 2861: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2005
	HR 2759: `Equity in Fertility Coverage Act of 2005'.	2005
	Hr 2758: `Medicare Infertility Coverage Act of 2005'.	2005
	HR 2574: ''Respect for Life Embryonic Stem Cell Act of 2005''.	2005
	HR 1822: `Human Cloning Ban and Stem Cell Research Protection Act of 2005'.	2005
	HR 1418: `Infertility Coverage for Federal Employees, Military Personnel, and their Families Act'.	2005
	HR 735: `Family Building Act of 2005'.	2005

Table 12: The bills

	S 363: `Hope Offered through Principled, Ethically-Sound Stem Cell Research Act'	2007
	S 812: `Human Cloning Ban and Stem Cell Research Protection Act of 2007'.	2007
	HR 2892: `Family Building Act of 2007'.	2007
	HRes 322: not title	2007
	HR 1424: `Paul Wellstone Mental Health and Addiction Equity Act of 2008'.	2008
	HR 493: `Genetic Information Nondiscrimination Act of 2008'.	2008
	S 1258: `Family Building Act of 2009'.	2009
	HR 697: `Family Building Act of 2009'.	2009
California	SB 1780: Health insurance: infertility treatment coverage.	1994
	AB 1101: Health care coverage: contraceptive drugs: family planning: reproductive health.	1995
	SB 1363: Personal rights: human tissue.	1995
	SB 1964: Discrimination in employment and housing.	1996
	SB 1555: Sperm, ova, or embryos: use and implantation without authorization.	1996
	AB 2513: Physicians and surgeons: assisted reproduction	1996
	SB 1349: Committee on Business and Professions. Vocations: Pharmacy Law: sanitizers.	1997
	AB 1251: Human cloning.	1997
	AB 441: Tissue donors: sperm donors.	1997
	AB 764: Food and drug inspections.	1997
	AB 589: Health care coverage: clinical practice guidelines.	1998
	AB 2040: Parent and child: assistive reproductive technologies.	2000
	SB 1630: Assisted reproductive technology.	2000
	AB 525: Health benefits: reproductive health care.	2000
	AB 1826: coverage: infertility treatment.	2002
	SB 1272: Stem cells: human tissue: research.	2002
	SB 1557: Human cloning.	2002
	SJR 38: Stem cell research.	2002
	AB 1996	2002
	SB 1230	2002
	SB 133: Human cloning.	2003
	AB 267: Cloning: humans.	2003
	SB 771: Human cells: embryo registry: egg cell donation.	2003
	AB 2380: Parent and child relationships.	2004
	SB 18: Reproductive health and research.	2004
	AB 2512: Fetal pain prevention.	2006
	SB 1260: Reproductive health and research.	2006
	SB 1325: Adoption.	2006
	SB 1704: Health care benefits.	2006

Table 12: The bills

	SB 313: Adoption.	2007
	SB 443: Tissue donors: sperm donors.	2007
	SB 1726: Adoption.	2008
	SB 1184: Public Health	2008
	AB 941: Adoption.	2009
	AB 1317: Assisted oocyte production: advertisement: information.	2009
	AB 1397: Tissue donation.	2009
	AB 1543: Medicare supplement coverage.	2009
	SB 674: Healing arts.	2009
	SB 1150: Healing arts.	2010
	AB 1487: Tissue donation.	2010
	AB 2020: Family law.	2010
	AB 2426: Surrogacy facilitators.	2010
Georgia	HB 1073	1996
	SB 451	1998
	HB 1012	2003
	SB 537	2006
	SR 280	2007
	HB 1384	2008
	HB 1358	2008
	SB 330	2009
	SB 204	2009
	SB 169	2009
	HR 5	2009
	HB 489	2009
	HB 351	2009
	HB 1	2009
	SR 156	2009
	HB 338	2009
	HB 228	2009

Table 13: Time line

Federal	Human Embryo Transfer	1985
	Alternative Reproductive Technologies: Implications for Children and Families	1987
	Federal Employee Family-Building Act of 1987	1987
	Consumer Protection Issues Involving In Vitro Fertilization Clinics	1988
	Federal Employee Family-Building Act of 1987	1988

Table 13: Time line

	Medical and Social Choices for Infertile Couples and the Federal Role in Prevention and Treatment	1988
	HR 1931: `Childless Veterans Assistance Act of 1989'.	1989
	HR 1199: no title	1989
	HR 5110: `Fertility Clinic Success Rate and Certification Act'	1990
	HR 1161: `Women's Health Equity Act of 1991'.	1991
	HR 3940: `Fertility Clinic Success Rate and Certification Act of 1991'	1991
	HR 756: `Fertility Clinic Success Rate and Certification Act'.	1991
	Fertility Clinic Services	1992
	HR 4773`Fertility Clinic Success Rate and Certification Act of 1992'.	1992
	S 1757: `Health Security Act'.	1993
	HR 568: `Contraception and Infertility Research Centers Act of 1993'.	1993
	S 168: Affordable Health Care for All Americans Act''.	1995
	HR 2774: no title	1999
	HR 2706: `Family Building Act of 1999'.	1999
	HR 4532: `Equity in Fertility Coverage Act of 2000'.	2000
	S 2160: `Fair Access to Infertility Treatment and Hope Act of 2000'.	2000
	S 874: `Fair Access to Infertility Treatment and Hope Act of 2001'.	2001
	HR 2608: `Cloning Prohibition Act of 2001'.	2001
	HR 2172: `Cloning Prohibition Act of 2001'.	2001
	HR 1246: no title	2001
	HR 389: `Family Building Act of 2001'.	2001
	S 303: `Human Cloning Ban and Stem Cell Research Protection Act of 2003'.	2003
	S 1726: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2003
	HR 3350: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2003
	HR 3026: no title	2003
	HR 3014: `Family Building Act of 2003'.	2003
	HR 1852: `Equity in Fertility Coverage Act of 2003'.	2003
	HR 969: `Medicare Infertility Coverage Act of 2003'.	2003
	HR 801: `Cloning Prohibition Act of 2003'.	2003
	HR 4872: `Retinoblastoma Awareness and Prevention Act of 2004'.	2004
	S 707: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2005
	S 876: `Human Cloning Ban and Stem Cell Research Protection Act of 2005'.	2005
	HR 2861: ''Prematurity Research Expansion and Education for Mothers who deliver Infants Early Act''	2005
	HR 2759: `Equity in Fertility Coverage Act of 2005'.	2005
	Hr 2758: `Medicare Infertility Coverage Act of 2005'.	2005
	HR 2574: ''Respect for Life Embryonic Stem Cell Act of 2005''.	2005
	HR 1822: `Human Cloning Ban and Stem Cell Research Protection Act of 2005'.	2005
	HR 1418: `Infertility Coverage for Federal Employees, Military Personnel, and their Families Act'.	2005
	HR 735: `Family Building Act of 2005'.	2005

Table 13: Time line

	S 363: `Hope Offered through Principled, Ethically-Sound Stem Cell Research Act'	2007
	S 812: `Human Cloning Ban and Stem Cell Research Protection Act of 2007'.	2007
	HR 2892: `Family Building Act of 2007'.	2007
	HRes 322: not title	2007
	HR 1424: `Paul Wellstone Mental Health and Addiction Equity Act of 2008'.	2008
	HR 493: `Genetic Information Nondiscrimination Act of 2008'.	2008
	S 1258: `Family Building Act of 2009'.	2009
	HR 697: `Family Building Act of 2009'.	2009
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	SB 1363: Personal rights: human tissue.	1995
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	AB 2513: Physicians and surgeons: assisted reproduction	1996
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	AB 1251: Human cloning.	1997
	AB 441: Tissue donors: sperm donors.	1997
	AB 764: Food and drug inspections.	1997
	AB 589: Health care coverage: clinical practice guidelines.	1998
	AB 2040: Parent and child: assistive reproductive technologies.	2000
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	AB 1543: Medicare supplement coverage.	2009
	SB 674: Healing arts.	2009
	SB 1150: Healing arts.	2010
	AB 1487: Tissue donation.	2010
	AB 2020: Family law.	2010
	AB 2426: Surrogacy facilitators.	2010
Georgia	HB 1073	1996
	SB 451	1998
	HB 1012	2003
	SB 537	2006
	SR 280	2007
	HB 1384	2008
	HB 1358	2008
	SB 330	2009
	SB 204	2009
	SB 169	2009
	HR 5	2009
	HB 489	2009
	HB 351	2009
	HB 1	2009
	HB 338	2009
	HB 228	2009

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