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# A platform of her own: an examination of feminist attempts to reclaim pregnancy from medicalized gynecology

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# A Platform of Her Own:

## An Examination of Feminist Attempts to Reclaim Pregnancy from Medicalized Gynecology

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## Chapter 1: Introduction

> "Pendular swings between activity and passivity, thrusting and temporizing, have characterized medicine throughout history" (Apfel and Fisher, *To Do No Harm* (1984), p. 38)

Technological and medical innovations impact the lives of pregnant women like a pendulum swinging between the extremes of activity and passivity. At some points, technology may occupy a passive position and a pregnant woman may occupy an active position, unencumbered by technology. During other times, technology may occupy the active position or both technology and a pregnant woman might occupy the active position together, working symbiotically during the duration of a pregnancy. Not only do technologies "bring new tools and procedures for classifying, measuring, monitoring, and modifying biological stuff… individuals' experiences of themselves as subjects and agents of their own lives are also transformed" (Coole and Frost, p. 21). Capitalism, patriarchy, and technology have mediated the relationship between women and knowledge about pregnancy throughout time. Feminist movements to reclaim this knowledge rose in response to the growing information gap, but they were not entirely successful in redistributing reproductive power relations in the United States. In order to move forward and foster equitable reproductive power relations, women of a diverse range of identities must be at the forefront of knowledge production.

Women, especially women of color, are dying from pregnancy and childbirth in the United States. The question 'Why is maternal mortality increasing in the United States if women have more access than ever before to information concerning pregnancy?' does not have a simple answer. Before one can grasp rising maternal mortality in the United States, they need to

understand society's current state of knowledge about pregnancy and the history of how women accessed that knowledge. Because technology impacts the distribution of reproductive power, this thesis centers around how technology has interfered, both positively and negatively, with the ways that women access knowledge about pregnancy in the United States.

**Sources**

The sources referenced in this thesis reflect the multidisciplinary information network that women have access to during their pregnancies. Evidence to support my claims come from academic articles, academic books, popular non-fiction books, blogs, Facebook posts, testimony, and news articles. This thesis builds on the work of Dr. Randi Hunter Epstein and Deirdre Cooper Owens who have traced the development of gynecology in the United States and how technological innovations impact birth. I add to the existing literature through the inclusion of newer forms of medical intervention and a consideration of how the internet mediates the relationship between women and their own bodies during pregnancy. Additionally, I bring together a variety of feminist frameworks in order to analyse the role of technology, capitalism, and patriarchy in a woman's active acquisition of knowledge about pregnancy.

**Definitions**

Two concepts–pregnancy information  network and reproductive power relations–are a central concern throughout this thesis. Bruno Latour's Actor-Network Theory influences how I define these concepts. Actor-Network theory (ANT) can be conceptualized as

> The creation of larger and stronger networks. Just as a political actor assembles alliances that allow him or her to maintain power, so do scientists and engineers. However, the actors of ANT are heterogeneous in that they include both human and non-human entities, with no methodologically significant distinction between them. Both humans and non-humans form *associations,* linking with other actors to form networks. Both humans and non-humans have *interests* that cause them to act, that need to be accommodated, and that can be managed and used. (Sismondo, p. 81).

A pregnant women is one actor in network made up of the doctors, peers, the media, family members, and other human and nonhuman entities. Each actor influences other actors in this network. The more reproductive power an actor has, the more power and influence they have in the pregnancy information network. Reproductive power relations are conceptualized as the way in which "shifting terrains of reproductive power alter familial and social relationships, increase professional and social monitoring of women's reproductive lives, and echo social values of the worth and "worthlessness" of various people" (Woliver 2002, p. 1). The ways that women learn about their own bodies has changed over time. The policing and politicizing of women's bodies occurs unfairly when women aren't even given the information they need to hold their ground in conversations about their own bodies, especially concerning reproduction.

Pregnant women are the focus of this thesis. Often, historical and contemporary scientific perceptions and knowledge about pregnancy separate the mother and fetus. Chikako Takeshita summarizes this phenomenon:

> Feminist scholars have argued that the overuse of technological interventions minimizes gestational parents' involvement in childbearing and undermines their subjectivities (Davis-Floyd, 2004; Katzman, 1991). The high rate of cesarean section in the United States reflects obstetricians' prioritization of extracting the fetus from its parent... Feminist scholars who have analyzed photography of fetuses that appear to be free-floating in space and sonographic images of the "unborn child" are similarly critical, arguing that these visual representations push the pregnant person into the background and render their presence imperceptible (Hartouni, 1998; Morgan, 1996; Oaks, 2000; Petchesky, 1987; Stabile, 1992). Visualizing the "independence" of the fetus predisposes the viewer to regard it as a patient of its own right… Scientific theories that pit the Fetus against the Mother have been widely accepted because they appear to be the "natural" order of things. (Takeshita 2017, p. 2-3)

Consequently, the types of knowledge produced is limited along with women's access to that knowledge because the fetus is considered separate from a woman's body. Therefore, in defining

a pregnant woman, I utilize Chikako Takeshita's conceptualization of the motherfetus "which refuses to make a distinction between the Maternal and Fetal organisms by foregrounding symbiosis as the material basis of a pregnant body" (Takeshita 2017, p. 4). The motherfetus represents "an integrated organism comprised of both host elements and a persistent yet constantly evolving population of symbionts [and] opens the door for thinking about pregnancy and the pregnant body as a symbiotic process and system" (Takeshita 2017, p. 12). In utilizing the notion of the motherfetus, I hope to return agency back to the pregnant woman.

A symbiotic relationship is also present between feminism and science. Science, for the purposes of this thesis, is defined as a "vast and diverse disciplinary and extra-disciplinary contributions to knowing our worlds" (Subramaniam and Willey 2017, p. 10). In addition, "writing *about* science is never separable from the work of science itself" (Roosth and Schrader 2012, p. 2). Accordingly, knowledge production includes both the act of science and writing/spreading scientific discoveries. Science is not separate from feminism, and there is "dense traffic" between both disciplines (Subramaniam and Willey 2017, p.2). Science must also always been considered in context of the socioeconomic and political environment it is produced. Feminists have the opportunity to build spaces within science that enable them to become knowledge producers too. Some, like the Boston Women's Health Collective examined in Chapter 3, have taken up that task.

**Purpose**

The purpose of this thesis is to use the history of medicalization of pregnancy in the United States and the interference of technology into pregnancy and birth (both positive and negative) to imagine alternative forms of knowledge production. This method opens "up further

space for thinking about feminism as a site for theorizing and reconfiguring the very meanings of science" (Subramaniam and Willey 2017, p. 4) and for answering the questions such as "How does feminist theory help us shape the goals of inquiry— what do we need to know about our world/s? How might we best study these?" and "How might feminist thought help us re-articulate what constitutes scientific knowledge? What constitutes "usable" or "valid" knowledge?" (Subramaniam and Willey 2017, p. 5). To conclude, I propose a two-pronged approach to redistributing reproductive power in a way that furthers the decolonization of science.

**Outline of Chapters**

Chapter 2 focuses on the the medicalization of pregnancy. White male gynecologists use black slave women to pioneer gynecological techniques, establish gynecology as a medical profession, and gain reproductive power from the long tradition of midwifery. In this chapter, I place forceps and lying-in hospitals as examples of early forms of technological medical intervention in conversation with the newer cesarean section. Their impact on the lives of women and the ability of women to access agency during pregnancy and birth is interrogated through a critical capitalist and feminist epistemological lens.

Chapter 3 centers feminist movements which aim to reclaim agency from doctors during pregnancy and childbirth. In order to understand reproductive power relations during the 20th century, I consider at three feminist movements; the Twilight Sleep Association, the natural birth movement, and second wave feminism, through the magazine articles and books that were used to define and spread them. Throughout this chapter, I continue to review the impact and adoption of new medical technologies like Twilight Sleep and DES. A reproductive justice framework is

used to comprehend the ways in which feminist movements reacted to medical intervention into pregnancy and childbirth and strove to create their own forms of knowledge production.

Chapter 4 focuses on Facebook as a case study to convey the ways in which the internet has mediated the relationship between women and their own bodies during pregnancy. Facebook is a democratizing technology and an opportunity for more women to access information concerning pregnancy.

Chapter 5 continues to explore contemporary access to information about pregnancy and the privacy concerns of the internet and medical technologies. Drawing on the political theories of Hannah Arendt and new materialist feminist theory, this chapter looks broadly at the politics of pregnancy and reproductive power relations. The ease at which misinformation can spread on the internet and its consequences are highlighted. Underlying this chapter is a critical examination of the ways in which the internet furthers capitalist goals that hinder a woman's ability to get accurate information about her own body.

To conclude, Chapter 6 highlights a potential path to follow when creating alternative, feminist forms of knowledge production. New materialist feminist theory brings together critical capitalist, technological, and feminist theory. The work of the Boston Women's Health Book Collective (BWHBC) in the 1980s and the contemporary GynePunks serve as examples of what to strive for. Due to the complexity inherent in democratizing technologies, the intentions of people using them must reflect the feminist theories of reproductive justice and intersectionality.

## Chapter 2: The Medicalization of Pregnancy

The medicalization of pregnancy and childbirth is not a simple story of discovery and medical advancement. Instead, it is a story of racist, capitalist, and gendered oppression. Beginning in Europe in the 1500s, this chapter explores two major moments of medical intrusion into the longstanding tradition of midwifery in order to situate the emergence of American gynecology within the larger context of the medicalization of pregnancy. Next, the development of early American gynecology is described and the emergence of capital-motivated medical technologies is explicated. Capitalism supports and is reinforced through the professional gynecological industry both socially and economically. The medicalization of gynecology alienated women from their own bodies in order to reinforce patriarchal and capitalist ideals.

### The Medicalization of Pregnancy in Europe

The first male doctors who sought to professionalize pregnancy and childbirth repackaged already known and antiquated understandings of pregnancy and childbirth through the utilizations of new technology. *Der Swangern Frauwen und Hebammen Rosegarten* (The Rosegarden for Pregnant Women and Midwives) by "apothecarian-turned-physician" Eucharius Rösslin is considered the first book that focused on pregnancy and childbirth (Green 2009). Published in 1513, it was a translation of "a pre-existing Latin text (composed between 1440 and 1446) from… the Paduan and Ferrarese physician Michele Savonarola" and served as the foremost authority on pregnancy and childbirth in nine different languages for almost 200 years (Green 2009, Epstein 2010, 15). In *Der Swangern Frauwen und Hebammen Rosegarten*, Rösslin "revived the long-lost obstetrical practices of the ancients" (Green 2009). Despite this text's

popularity, it largely referenced techniques and knowledge from ancient Greece and Rome which was considered obsolete. Although initially intended as a reference text for midwives, it is unclear how many midwives actually read the book (Green 2009). Instead, the text served as the basis for medical training on pregnancy and childbirth (Green 2009). Western physicians largely relied on "the ancient Greek and Roman humoral system of understanding and treating the body" described in *Der Swangern Frauwen und Hebammen Rosegarten* (Owens 2017, p. 5). Rösslin's book was the primary text used by Western medicine to medicalize and pathologize pregnancy.

The invention of forceps further secluded midwives from the experience of pregnancy and birth. Forceps were invented by the Chamberlen family of surgeons and male midwives around 1635 (Dunn 1999). They remained a family secret, only used by male members of the Chamberlen family to attend to the births of England's wealthy aristocracy and monarchy, for 100 years (Epstein 2010, p. 17). The introduction of forceps fundamentally changed the birthing process, from the position of the women during the birth to who was allowed in the room (Epstein 2010, p. 19). After 1735, forceps were gradually improved as birth and pregnancy became more medicalized. Prior to the intrusion of medical gynecology, "midwives had always relied on unobtrusive tools to birth babies" (Owens 2017, p. 54). In the United States, "when white men integrated obstetrics and gynecology, pregnant enslaved women who experienced difficult birthing processes became disproportionately represented in surgical cases in which doctors used blades and forceps to remove fetuses" (Owens 2017, p. 54). Forceps are considered the beginning of a slippery slope of excessive medical intervention. Both *Der Swangern Frauwen und Hebammen Rosegarten* and forceps are examples of early political technologies that led to the medicalization of pregnancy and the devaluation of the midwife.

**Early American Gynecology**

Race and gender oppression form the ideological base of early American gynecology. American gynecological practices and ideologies reinforced the American economic system that depended on the preservation of slavery. According to historian Deirdre Cooper Owens, author of *Medical Bondage*, "slavery... [was] intrinsically linked with the growth of modern American gynecology" (Owens 2017, p. 5). This ideology that saw women and black people as less than the white male

> was based on the precepts of an older Western, mainly Greek-derived *unani* medicine model that was used in cosmopolitan European medical centers for centuries. Historian Deborah Brunton notes, "In unani medicine, all women were believed to have a natural imbalance in their humors that made their constitution colder and wetter than men." With a firm belief that women were literally the weaker sex, American doctors focused their attention on women's health. (Owens 2017, p. 24).

J. Marion Sims, known as the 'father of gynecology,' used slave women for research. However, Sims was just one person in a long line of doctors who experimented on black slave women in the south and Irish immigrant women in the north in order to make American gynecology more "scientific" (Owens 2017, p. 23). Sims and other "pioneering gynecological surgeons [saw] black women [as] flesh-and-blood contradictions, vital to their research yet dispensable once their bodies and labor were no longer required" (Owens 2017, p. 3). For years the essential contributions of black slave women to the development of revolutionary gynecological techniques went unacknowledged.

Advancements in American gynecology elevated the status of the American medical profession. American gynecologists established innovative "surgical procedures that aided in successful cesarean births, obstetrical fistulae repair (which stopped incontinence and repaired vaginal tearing after childbirth), and the removal of diseased ovaries via abdominal surgeries"

(Owens 2017, p. 17). In the 1882, Dr. Max Sanger, a German physician, claimed that 80 percent of his patients survived his cesarean sections (compared to previous survival rates of 30 to 50 percent with other cesarean section techniques) (Epstein 2010, p. 159-160). American doctors in the South perfected the technique using slave women and soon cesarean sections were being marketed by American doctors as a social good (Epstein 2010, p. 160). A social or "common good" refers to those facilities—whether material, cultural or institutional—that the members of a community provide to all members in order to fulfill a relational obligation they all have to care for certain interests that they have in common" (Hussain 2018). Although dangerous when overused, medical interventions during pregnancy and childbirth were created with the aim of caring for the ultimate common societal interest of reproduction. Capitalist motivations to preserve a slave population and find solutions to conditions that impacted reproduction of all races justified early American gynecological studies on black slave women.

Early American gynecological innovations served to preserve the institution of slavery. As an industry and institution, the medicalization of gynecology reinforces and is supported by capitalist structures and ideals in the United States. The use of enslaved black women in the United States for medical innovation and the popularization of the hospital are two examples of the capitalist nature of American gynecology. Historically,

> reproductive medicine was essential to the maintenance and success of southern slavery, especially during the antebellum era, when the largest migration and sale of black women occured… Doctors formed a cohort of elite white men whose work, especially their gynecological examinations of black women, affected the country's slave markets, Each slave sold was examined medically so that she could be priced. Southern doctors knew enslaved women's reproductive labor, which ranged from the treatment of gynecological illnesses to pregnancies, helped them revolutionize professional women's medicine. (Owens 2017, p. 4)

Answering reproductive health questions for slave owners looking to buy slaves, based off of research performed using black slave women, is just one example of gynecology benefiting and perpetuating capitalism. In 1808, "after Congress banned the importation of African-born slaves," American gynecologists worked closely with slave owners to ensure that the reproductive health of enslaved women be maintained "so that they could continue to produce children" (Owens 2017, p. 15).

With the elimination of the importation of African slaves by Congress in 1808 in the United States, many land owners became more concerned with the reproductive potential of their already-enslaved black women and "white medical doctors began to work in midwifery in greater numbers" (Owens 2017, p. 16). Additionally, because of the race and gender of many midwives, many white, male, American doctors felt that midwives were one of the reasons that so many mothers died in childbirth. Through their work, many doctors approached birth by "kicking out midwives and slandering their work, [because they] truly believed they were doing so to save the lives of expectant mothers and babies" (Epstein 2010, p. 34). These beliefs may have stemmed from racist and sexist views that gynecological practices by white male doctors were superior to black midwifery and/or an orientation towards the promise of science and progress.

The professionalization of pregnancy and childbirth killed the midwife. Midwifery in the United States "was not a medical field that men had previously controlled; it had been the domain of women for centuries. Since the country's colonization and founding, its citizens had believed that maintaining women's health was a job divinely ordained for women" (Owens 2017, p. 16). These midwives "were generally well-respected, esteemed, older, wise women who were

first transported from Africa to the Americas on slave ships in the 17th century. They attended to other slaves and plantation mistresses in birth, well-woman care, and healing" (Goode 2014, p. 57). As the domain of black women and an avenue through which they exercised some control over their reproductive lives, the emergence of gynecology "represented one of the largest encroachments black women faced, particularly because of the level of social control that the doctors and hospitals exerted over them" (Owens 2017, p. 53). Not only was the emergence of a medicalized gynecology used to further capitalist motivations of racial subjugation through experimentation on black women, it also took agency away from the black midwives who attended births of both black and white women for years. Moreover, through the development of the medical gaze, doctors illuminated what had previously remained unspoken and hidden in the matriarchal realm.

The emergence of American gynecology follows the path outlined in Foucault's *The Birth of the Clinic*. Foucault is concerned with the concept of what is seen and unseen through the medical gaze. The medical industry is concerned with "the relation between the visible and invisible—which is necessary to all concrete knowledge" (Foucault 1973, p. xii). American gynecology brought pregnancy and childbirth out of the unseen domain, the domestic sphere, and into a space wherein knowledge can be created in order to devalue the midwife. The work of doctors changes the structure of knowledge, "revealing through gaze and language what had previously been below and beyond their domain. A new alliance was forged between words and things, enabling one to see and to say" (Foucault 1973, p. xii). The medicalization of pregnancy imposed the medical gaze upon the woman's experience, taking it out of the realm of the unseen and making pregnancy seen.

**Hospital Births and the Marketing of Medical Intervention**

Pregnancy and childbirth physically left the matriarchal realm with the emergence of the hospital wards and maternity homes. The creation of institutions and "pedagogical approaches for men who would work exclusively on women's bodies" facilitated the masculinization of gynecology (Owens 2017, p. 16). Through the creation of new pedagogical approaches that ignored generations of female knowledge, men carved their own path in the history of birth. Within the space of the hospital and maternity ward, "new notions of body and knowledge were articulated" and defined (Kozma 2011, 24). One strategy employed by doctors to make the midwife obsolete was the emergence of hospital maternity wards wherein only doctors could attend the births.

The alignment of the American capitalist values, innovative medical technology, and potent marketing tactics proved effective in bringing pregnant women of all socioeconomic classes out of the home and into hospitals. The first hurdle that doctors had to overcome was the midwife. In the beginning of the 2008 documentary *The Business of Being Born*, the shift of birth's location from the home to the hospital is documented. Ina May Gaskin, Certified Professional Midwife and Executive Director of the Farm Birth Center, explains that, "in the early 1900s, physicians mostly in the East but also in the deep South to some extent went on a very effective smear campaign against midwives. They would make posters showing a black granny midwife in a very poor home delivering a baby and saying do you want this kind of person to deliver your baby?" (Lake & Epstein, 2008). Given the power and control over birth that midwives had previously held, male gynecologists had to engage in a smear campaign that

leveraged race and class biases of people in the United States. According to Tina Cassidy, journalist and author of "Birth," as a result of portraying midwives as

> dirty… ignorant, [and] illiterate... [doctors offered hospitals] as this gleaming wonderful place where you could go and have a baby that would be cleaner and safer. The reality though was of course that giving birth with an obstetrician at that time was much more dangerous than giving birth with a midwife because doctors were graduating from medical school, many of them had not witnessed a live birth before they set out to practice. (Lake & Epstein, 2008)

Doctors sharply contrasted the work of the midwife to the doctor and the home to the hospital in publications and through their networks. It lead to a paradigm shift, categorized by an increasing popularity and reliance on maternity homes by all classes in the United States, began with the establishment of New York's Lying-In Hospital in the late 1800s. In the United States, unlike other countries, when "birth went into the hospital, the midwives didn't go there with it" (Lake & Epstein, 2008). As a consequence of the sudden demand for under trained doctors and an absence in knowledge of germ theory and poor hygiene techniques, women died in hospitals and infection ran rampant. Nevertheless, hospitals quickly grew in popularity.

Medical advancements such as Twilight Sleep (a combination of morphine and scopolamine that enables one to forget the trauma of birth), a decrease in maternal mortality due to better sanitation practices, and the development of germ theory also facilitated the growing popularity of hospitals. The continued capitalist motivation inherent in American gynecology is present throughout the popularization of the maternity hospital ward which "involves a continuous supervision of the social space with a system of highly medicalized regional centres; and… which is made up of discontinuous, exclusively medical spaces, structured according to the model of scientific knowledge" (Foucault 1973, 42). The "scientific knowledge" that rests at the foundation of the maternity hospital wards was established due to capitalist motivation and

they serve as a space to continuously market new medical intervention. Public Health specialist Nadine Goodman explains that "what happened was that the OB/GYN specialty hospitals started to sprout up, and those professionals started to multiply, and they needed a job. You know, business took over. All of a sudden, the concept of normal changed" (Lake & Epstein, 2008). One can observe the exponential buy-in to hospital birth through the number of people who decided to have birth in hospitals. According to Dr. Randi Hunter Epstein, author of *Get Me Out, "*in 1900, [in the United States] 5 percent of women gave birth in hospitals. By the 1930s, about half of all women and 75 percent of women in cities delivered in hospitals. And by the 1960s, nearly every pregnant women chose a hospital birth over a home birth" (Epstein 2010, p. 65). In 2014, out-of hospital births only accounted for 1.5% of the total number of births in the United States (Declercq and MacDorman, 2015 in Doyle 2016). The 1953 episode of *I Love Lucy* where Lucy has her child in a hospital provides further evidence for a paradigm shift. At this point, hospital births had been normalized and perceived as routine.

The marketing networks established by doctors to promote medical intervention have served and continue to serve as information networks that pregnant women used to learn about pregnancy. One major pregnancy and childbirth myth that flourished within this network "from antiquity right up to the 1950s was that dangerous things did not pass through the placenta or breast milk. [This was thought of as] nature's gift to the perpetuation of the human race" (Epstein 2010, p, 131). Some researchers found evidence towards the contrary but due to the power of the doctor-patient information networks, people did not change their opinions until the disastrous effects of the drugs DES and Thalidomide on babies were seen. Dr. Frederic Frigoletto, former chief of obstetrics and gynecology at Massachusetts General Hospital in

Boston posits that, "people thought the doctor was always right and the doctor thought he was always right. There was much less in the way of patient awareness. There was much less rigidity in the scientific process and so it was a lot of opinion and intellectual decision making" in the 1950s (Epstein 2010, p. 137-138). This perspective supports the theory that doctors are a major node in strong information networks women are engaged in during pregnancy. Foucault writes, "the doctor defines not the mode of knowledge, but the world of objects to be known" (Foucault 1973, p. x). Medical authority, supported by marking and information networks created by doctors, determines what is evaluated as as science versus pseudoscience through the employment of the medical gaze.

**Maternal Mortality**

In the 21st century, some medical innovations and interventions have increased maternal mortality. The first hospitals were risky places to have a baby due to the high risk of infection. High maternal mortality does not just plague new medical interventions. Maternal mortality is on the rise in the United States and an excess of medical intervention, specifically an excess of cesarean sections (c-sections), is a contributing factor. In 2013, "about 1 in 3 babies born… is delivered via C-section, compared to 1 in 5 babies delivered via the surgical procedure in 1996. During the same time period, the annual medical costs of childbirth in the U.S. have grown by $3 billion annually" (Vedantam 2013). Preliminary findings by health care economists Erin Johnson and M. Marit Rehavi have found that doctors get paid a few hundred dollars more for performing c-sections compared to vaginal births. For this reason, some doctors might find a financial incentive for c-sections (Johnson and Rehavi 2013). Researchers and doctors in California saw a connection between increasing maternal mortality and increasing rates of non-medically

necessary cesarean sections in the early 2000s. Although a life-saving technology, even elective cesarean sections carry a higher risk of death compared to vaginal birth (Belluz 2018). California's maternal mortality rate in 2013 was 7.3 percent (compared to the general maternal mortality rate in the United States 22 percent) (Belluz 2018). This was achieved through the implementation of new hemorrhage protocols, placing hemorrhage intervention carts on maternity floors, andforming maternal mortality review boards in California hospitals to lower the need for emergency cesarean sections.

Feminist epistemology illuminates the harmful effects of the medicalization of pregnancy. Practitioners of feminist epistemology hold that,

> dominant knowledge practices disadvantage women by (1) excluding them from inquiry, (2) denying them epistemic authority, (3) denigrating their "feminine" cognitive styles and modes of knowledge, (4) producing theories of women that represent them as inferior, deviant, or significant only in the ways they serve male interests, (5) producing theories of social phenomena that render women's activities and interests, or gendered power relations, invisible, and (6) producing knowledge (science and technology) that is not useful for people in subordinate positions, or that reinforces gender and other social hierarchies. (Anderson 2017)

The medicalization of pregnancy, as a dominant knowledge practice, formed a network of information about pregnancy that women in the United States could only access through the engagement in experimental medical practices. As a result, the interests of women were ignored in the development of gynecological medical advances, the capitalist interests of men were reinforced, information about pregnancy became more inaccessible, and female forms of knowledge production surrounding pregnancy (i.e. the work of the midwife) were undermined.

Capitalist values are present throughout the medicalization of pregnancy in the United States. The initial introduction of forceps, lying in hospitals, and cesarean sections lowered maternal mortality rates. The effectiveness of early medical intervention made people more

willing to turn to doctors to achieve positive birth outcomes. Due to the increasing reliability of medical intervention technology, American gynecologists gained great power and credibility in the pregnancy information network. Capitalist aspirations are reinforced through the use of excess medical intervention in a way that makes it difficult to encourage and practice minimal medical intervention. In order to move beyond the masculine medicalization of pregnancy, women began to break away from the capitalist model of the clinic through the practice and promotion of female agency in the 1970s.

## Chapter 3: The Feminist Politics of Pregnancy

Written anonymously in fading pencil on the Vassar Library's first edition copy of *Our Bodies Ourselves* are the following three bullet points:

- Another example of women helping women when the men failed at a job which they felt they could do, exclusively.
- Women and only women have the right to write the discourse on women's bodies, women's minds, women's thought
- You don't see women writing encyclopedias of who and what a man should be and expecting them to embody those proclamations

Although I do not know when these notes were written or who wrote them, these three points express the intentions of the writers and readers of *Our Bodies Ourselves* (1973). They align with the goal of liberation within the context of second-wave feminism. This chapter explores attempts to reclaim pregnancy and birth from the medical establishment. Feminist movements throughout American history have developed differing mechanisms in response to the ways in which medicalized gynecology alienates women from their bodies as they aim to reclaim access to information about and agency during pregnancy and birth.

### Twilight Sleep

In 1914, white, upper-class feminists in the United States advocated for the right to receive Twilight Sleep when it first rose to popularity. Twilight Sleep is the phenomena of forgetfulness during childbirth, often confused with painlessness, that a woman experiences after taking a combination of "morphine to dull the pain and scopolamine to dull [the] memory of the

experience" (Laskow 2017). The inventor of twilight sleep, the German Dr. Kronig, leveraged class and gender biases along with scientific reasoning to make women believe that they needed twilight sleep in order to endure birth (Epstein 2010, p. 84-85). As a result, the media coverage and medical advice that emerged was supportive of twilight sleep and categorized natural childbirth as dangerous (Epstein 2010, p. 85).

Twilight Sleep was first promoted in the popular United States media in *McClure's Magazine* in 1914. Originally available only at great expense to women willing to travel to Germany, a group of American women organized to demand that American doctors offer Twilight Sleep to women during birth. They affiliated under the Twilight Sleep Association with both a unifying national group and local chapters. This early feminist activism rose in response to the newfound control over the birthing process that doctors gained through the use of the maternity ward. Dr. Epstein describes the organized group of Twilight Sleep supporters as illustrating, "perhaps more than any other [early 1900s] organization, the power of the media to shape public opinion" (Epstein 2010, p. 83). A 1914 article in *McClure's Magazine* describes Twilight Sleep as, "humane forgetfulness" and "the new and painless method of childbirth" (Tracey and Leupp 1914, 37). Other headlines in newspapers and magazines promoting the benefits of twilight sleep include "Painless Childbirth," "Lifting the Curse of Eve," "Twilight Sleep is Necessity, Not Luxury," and "Drug Boon to Women, New Treatment for Childbirth Called Medical Mercy" (Epstein 2010, p. 86). A strong network of supportive media articles enabled Twilight Sleep to gain popularity quickly. However, the Twilight Sleep movement was soon abandoned as World War I began and distrust in German technology became widespread (Laskow 2017). Nonetheless, in 1914, the pendulum had swung in the direction of favoring

medical technological intervention, albeit with the condition that women could exercise choice in the matter.

**Diethylstilbestrol (DES)**

*Figure 1 (desaction.org)*


Following the popularity of Twilight Sleep and increasing trust in hospitals as places to give birth, the conditions in the 1950s were prime for a rapid diffusal of Diethylstilbestrol (DES). DES is a drug consisting of large amounts of synthetic estrogen and was primarily marketed as a way to prevent miscarriages. Not only was DES

> more potent than the natural estrogen... It could be produced cheaply and in pure form, and it could be administered by mouth. And because DES was discovered under a grant from the British Medical Research Council, whose policy it was that new discoveries should be well publicized and not patented, DES became widely available very quickly.

> Its inexpensiveness appeal to the drug industry, and its purity attracted the investigative scientists, as did the fact that milligram for milligram it was more powerful than natural estrogens. (Apfel and Fisher, 1984, p. 13-14)

DES received credibility and support from physicians and researchers at elite institutions such as Harvard who conducted studies on the efficacy of the DES and encouraged their patients to take it (Epstein 2010, p. 133). Many were attracted to DES due to the ways in which doctors and pharmaceutical companies marketed the drug. In other words, one factor in the rapid adoption of DES was "the confluence of commercial benefit and the promise of youth" (Apfel and Fisher, 1984, p. 42). DES was advertised as a solution to miscarriage and as a drug that helped older women have children (see Figure 1). Pharmaceutical companies produced over 200 versions of DES (Epstein 2010, p. 134). Consequently, DES was perceived as a medical choice women could make to have safer and more successful pregnancies.

Like Twilight Sleep, DES rested within a gray area wherein women made active choices regarding their bodies within the medicalized gynecological paradigm. Gaining credibility and support from powerful actors within the pregnancy information network and from "the way hormones were talked about, [DES] did not seem like medicine at all. It was natural, restoring the body to its original balance" (Epstein 2010, p. 133). Even with evidence pointing towards the ineffectiveness of DES, it continued to be prescribed for years (Epstein 2010, p. 130). Women who took DES while pregnant had children with an increased risk of infertility and almost every female exposed to DES in the womb has "vaginal adenosis, benign cellular changes that can be precancerous and that require constant monitoring" (Epstein 2010, p. 129-130). Another drug, Thalidomide, was prescribed outside the US as a sedative for many and as a morning sickness treatment for pregnant women in the late 1950s until it was banned in 1961

(Vargessen 2015). As a result of thalidomide's popularity, rates of miscarriage increased and over 10,000 children were born with severe birth defects affecting the, "limbs (upper limbs more commonly affected than lower limbs), face, eyes, ears, genitalia, and internal organs, including heart, kidney, and gastrointestinal tract" (Vargessen 2015). Interestingly, the disastrous effects of these medications did not immediately discredit medical intervention during pregnancy. In the 1950s and 1960s, when these drugs were marketed, other reproductive medical interventions like hospital births, cesarean sections, and the birth control pill were becoming increasingly popular and successful. However, the devastating results that these drugs had on the offspring of women who took them correlated with the rise of the second wave feminist movement and fueled advocates of natural birth.

Why women adopted medical interventions that hurt them is complex. Although Twilight Sleep made women essentially incapacitated, proponents behind Twilight Sleep associations perceived the drugs as a *choice* they could make in the birthing process. The choice to take these drugs enabled them to exercise some form of agency over a process that doctors had taken away from women by moving birth into hospitals. Further, women perceived DES and pharmaceutical companies marketed it as an active decision and choice women could make to combat their fear of miscarriage (see Figure 1). Medicine was evolving from it's "traditional goal– to assist the natural processes of life and healing– [and] was replaced with the notion that the forces of nature themselves are subject to control" (Apfel and Fisher, 1984, p. 39). Women sought agency within pregnancy and childbirth but were operating within the paradigm and constraints of a medicalized gynecology.

Further, the promise and trust that rests in the doctor-patient relationship facilitated early trust in drugs whose effectiveness and side effects were not clear. Apfel and Fisher describe the doctor-patient relationship as a

> special bond between patient and doctor… based in part on the earliest needs for body care and protection, needs that stem from infancy and childhood. This bond exists between all doctors and their patients, in health and in sickness. The patient, much as he or she may disguise it, on some level feels vulnerable and helpless when ill and wants to view the caretaker as omniscient and invincible, like the good mother of childhood who can take care of everything. (Apfel and Fisher, 1984, p. 85)

The trend to seek medical solutions for fertility challenges may be part of a larger pathologization of pregnancy and the belief in infertility as an illness. These notions rest in the social construction of gender roles which were especially prevalent in the 1950s. Nevertheless, a fear of medical intervention began to spread in the late 1960s and early 1970s that stemmed from the dangerous consequences of diethylstilbestrol (DES) and the growing popularity of feminist ideals. Both the natural birth movement and second wave feminism latched onto this fear as they promoted their own ideals to govern pregnancy and childbirth.

**Natural/Prepared Childbirth**

The early natural childbirth movement (also known as prepared birth), observed through the Lamaze movement and the writings of Dr. Grantly Dick-Read, enabled female choice within the industry of childbirth that had developed in the 1950s and 1960s. This early movement was not anti-doctor but focused instead on easing "the trauma of delivery for the baby" and for the mother through psychological and breathing techniques (Epstein 2010, p. 110). Popularized through European-inspired Lamaze workshops in the United States by Elizabeth Bing and the books and workshops of Dr. Read, natural/prepared childbirth became a national phenomena. Magazines like *Collier's, Ladies Home Journal, Baby Talk,* and *Life* publicized natural childbirth

techniques (Epstein 2010, p. 110). Doctors, soon realizing that their business would be negatively impacted if they did not get on board with this approach to birthing, started to accept the practices of natural birth in medical settings. The beginning of this paradigm shift towards natural birth can be observed 22 years after the medialized hospital birth was portrayed on *I Love Lucy*. On a 1975 episode of *All in a Family*, another popular television sitcom, one of the main characters arrives at the hospital to give birth while practicing Lamaze techniques (Epstein 128). The power and credibility behind the alignment of the interests of doctors and wealthy women further bolstered the popularity of natural birth.

The alignment of the interests of wealthy women and doctors enabled the natural birth movement to take off. Natural childbirth reached national prominence through a "celebrity-studded nationwide movement" (Epstein 2010, p. 127). Dr. Epstein finds that

> it was money, pure and simple, that made the [natural childbirth and rooming-in] campaign take off. Wealthy women wanted natural childbirth, and they wanted to room with their babies. If their own doctors did not provide the care they wanted, they went elsewhere. Savvy doctors, even the most cynical, realized they needed to offer prepared childbirth to keep their patients happy… The press was all over this story. Women's magazines and newspapers were filled with glowing stories about the natural methods of birthing. (Epstein 2010, p. 122-123)

The interests of these wealthy women and doctors reached the masses through books and television. One book in particular, *Childbirth Without Fear* (1944) by Dr. Grantly Dick Read, is noteworthy in the way it leverages the fear of childbirth in order to promote natural birth. Fear is a powerful and pervasive emotion. A fear of childbirth and pain is what drove so many women to want to experience Twilight Sleep. A significant portion of *Childbirth Without Fear* (1944) addresses pain and pain management. A consideration of the emotions of women during the process of pregnancy and birth is central to the book's philosophy. Additionally, the book is

devoted to providing women with information that only doctors have previously held. This trend of giving women information about their own bodies is one of the most effective and direct responses to the ways in which doctors have hidden information through the medicalization of pregnancy.

The second-wave feminist movement soon adopted the natural birth movement as one of its causes. Second-wave feminism is a blend

> of sexual freedom, broadly defined, and women's liberation… Unlike first- and third-wave feminists, second-wave feminists saw the politics of private life as the source of women's oppression. For second-wave feminists, the relationships between men and women constituted the very infrastructure upon which other oppressions relied. Without patriarchy… all hierarchies of power were incomplete… Second-wave feminists of all stripes–radical and cultural–argued that the psychology of male domination had… rendered what was "private" social and political. Extricating women's desires from the tangled pathology of male domination became, for the second wave, the very definition of liberation. (Gerhard 2001, 194)

Reclaiming pregnancy as a private, intimate experience between a woman and her baby without the interference or guidance of a man fits into the philosophy of second-wave feminism. One of the ways second-wave feminists began the liberation of their own bodies and their own sexuality was through educating themselves and other women about their own human condition. *Our Bodies Ourselves* embodies the values and goals of second-wave feminism. It is a foundational second-wave feminist text that brought women together and helped them develop as feminists. It is also a text that reflects the shortcomings of second-wave feminism.

***Our Bodies Ourselves* (*OBOS*)**

The Boston Women's Health Book Collective (BWHBC), a group of women frustrated with the medical establishment and seeking to learn together developed *Our Bodies Ourselves* (OBOS). Second-wave feminist philosophy strove to advance what became to be known as

feminist standpoint theory. In summarizing the central themes of standpoint theory, feminist philosopher Sandra Harding highlights

> the women's movement needed knowledge that was for women. Women had long been the object of others' knowledge projects. Yet the research disciplines and public policy that depended upon them permitted no conceptual frameworks in which women as a group became the subjects or authors of knowledge; the implied "speakers" of scientific sentences were never women. (Harding 2008, p. 29)

*Our Bodies Ourselves* is a knowledge project from the standpoint of women. It emerged from a group of middle-class, white women in Boston who wanted to learn more about their own bodies from other women. After splitting into groups and researching topics that they felt were "particularly pertinent," they came together and shared their findings in a seminar-like setting (Boston Women's Health Book Collective, 1). These women soon decided to put their findings into print and published *Our Bodies Ourselves*. The approach taken by the authors can be described

> as the "difference" approach; that is, placing the female body at the center of politics, knowledge, and power as opposed to the "equality" approach that deemphasizes female biology, in part due to the legacy of discrimination based upon it (Kline, 2010). Embracing difference, [Boston Women's Health Book Collective] advocated for the normalcy of women's life events, from birthing to aging, and challenged frameworks that unnecessarily pathologized their bodies. (Vostral 2017, p. 7)

The first edition of *Our Bodies Ourselves,* published in 1971, is 276 pages and explains medical phenomena in a way that is easy to understand. This book consists of fifteen sections, including one that addresses the decision to have children (section 12) as well as multiple aspects of pregnancy and birth. Subsequent editions of *Our Bodies Ourselves* "sold over four million copies and [the original text went] through six major updates. The latest edition appeared in 2005. It occupied the *New York Times* best seller list for several years, was voted the best young adult book of 1976 by the American Library Association" (Davis 2007, p. 2)

White middle class women wrote *Our Bodies Ourselves* for all women. The authors of the first edition of *Our Bodies Ourselves* describe themselves as, "white, our ages range from 24 to 40, most of us are from middle-class backgrounds and have had at least some college education, and some of use have professional degrees" (Boston Women's Health Book Collective, 1). Thus, they acknowledged that they represented a narrow segment of the population of Women in the United States. In the preface, the authors state:

> we do realize that poor women and non-white women have suffered far more from the kinds of misinformation and mistreatment that we are describing in this book. In some ways, learning about our womanhood from the inside out has allowed us to cross over the socially created barriers of race, color, income, and class, and to feel a sense of identity with all women in the experience of being female. (Boston Women's Health Book Collective, 2).

By not including the voices or testimony of women of color, the Boston Women's Health Book Collective (BWHBC) did not allow them "to cross over the socially created barriers" and does not inspire a "sense of identity with all women in the experience of being female." Instead, *Our Bodies Ourselves* served to hinder the women's movement in its goal to eliminate oppression because it perpetuates the exclusion of women of color. Further, the topics covered in this book are experienced differently and exist within different historical and socio-political contexts for women of color and white women in ways that impact the applicability of the advice offered. In critiquing *Our Bodies Ourselves*, I do not mean to devalue or negate the groundbreak work that the BWHBC pioneered. Instead, I hope to think about ways to be "politically strategic about how we redistribute power—particularly epistemic privilege—through our feminist critiques of science and critical science literacy work" (Giordano 2017, p. 13). Great power rests in writing a popular book that so many women want and need. I only wish it included and uplifted a more diverse range of viewpoints.

**Feminist Frameworks to Understand the Medicalization of Pregnancy**

Because *Our Bodies Ourselves* reinforced the paradigm of exclusionary feminism, it prevented the second-wave feminist movement from achieving a democratized creation of information about women's bodies. It is essential that sources of information include the voices of those it is describing. A major motivation for the Boston Women's Health Book Collective was that they felt uncertain and uncomfortable receiving information from male doctors about conditions that impact biologically female bodies exclusively, including but not limited to pregnancy. 'Woman' is a broad term that describes only one identity that an individual holds. It is unfair to place the burden of representing all identities on a single text. Instead, *Our Bodies Ourselves* serves as a case study through which we can think about alternative ways of creating knowledge and as a model through which to base more books about women's health from more standpoints. According to an extensive study performed by the Maternal Health Task Force, "women of color tend to have poorer access to high quality reproductive health information and services than white women, are discriminated against in the healthcare system and experience higher rates of disrespect and abuse" (Maternal Health Task Force 2018). Because maternal mortality and complications during pregnancy impact white and black women in the United States differently, efforts to increase access to information about pregnancy must be inclusive and elevate the voices of women of color. Chapter 2 revealed how the medicalization of gynecology relied on paradigms of gender and race domination. In trying to promote the liberation of women from the medicalization of their bodies, *Our Bodies Ourselves* ignored the different experiences of non-white and poor women. To acknowledge that the women who wrote this book are not representative of the entire women experience is important, but to move

forward and truly liberate all women from patriarchy through the democratizing of access to information, feminist women of color have developed intersectionality and reproductive justice.

Reproductive justice provides a different approach, one founded by and inclusive of women of color, towards a more inclusive and democratic education of women about their own bodies. Intersectionality and reproductive justice as feminist theory and practice prioritize the experience and knowledge of women of color. Intersectionality is defined by Kimberlé Crenshaw as, "the way in which the particular location of black women in dominant American social relations is unique and in some senses unassimilable into the discursive paradigms of gender and race domination" (Crenshaw 1992). More broadly, "intersectionality's intellectual project is… twofold: an analytical approach to understanding between-category relationships *and* a project to render visible and remediable previously invisible, addressed material effects of the sociopolitical location of Black women or women of color" (Hancock 2016, 33). In other words, intersectionality in practice aims to both understand overlapping forms of oppression and bring the perspectives of women of color to the foreground when producing knowledge. Ange-Marie Hancock opens her book *Intersectionality*: *An Intellectual History* with a quotation from Healther Love; "For groups contained by historical injury, the challenge is to engage with the past without being consumed by it" (from *Doetsch-Kidder*2012, 33; in Hancock 2016, 1). This quotation speaks to the task taken up by this thesis: to question the ways in which oppressive forces, such as patriarchy, racism, and capitalism as they play out in medicine, have impacted the ability of women to learn about their own bodies, to maintain a focus on ways in which women have actively fought to reclaim forms of knowledge production, and to highlight forms of knowledge production from historically oppressed groups. It is not to get hung up on past

mistakes but to take what one learns and apply that knowledge moving forward. Intersectionality in practice can enable women to learn about their own bodies during pregnancy and disrupt oppressive reproductive power relations that have historically hurt women differently depending on the identities that they hold.

To practice reproductive justice is to strive towards increasing accessibility to information about pregnancy and empowering more woman while still upholding goals of liberation. Reproductive Justice is defined by Loretta Ross, a member of SisterSong Women of Color Reproductive Health Collective, as, "the complete physical, mental, spiritual, political, social, and economic well-being of women and girls, based on the full achievement and protection of women's human rights" (Ross 2007, p. 4). One focus of reproductive justice is to address "inequalities of opportunity that [women] have to control [their] reproductive destiny" (4). One focus of SisterSong, a powerful actor in the reproductive justice movement is "reproductive oppression—the control and exploitation of women, girls, and individuals through our bodies, sexuality, labor, and reproduction—rather than a narrow focus on protecting the legal right to abortion" (Ross 2007, p. 4). This focus includes an emphasis on access and empowering women to learn about their own bodies to enable them to "control [their] reproductive destiny" with choice and agency. Reproductive justice includes the second-wave feminist objective of enabling the "ability to fully express, control, and affirm one's sexuality" (Wellek and Yeung 2007, 18). This goal is not very different than the goals of second-wave feminism and the authors of *Our Bodies Ourselves*, but the framework emphasizes the need to uplift and include the voices and experiences of women of color.

Two second-wave feminist approaches to spreading information about pregnancy are examined in this chapter: books and seminars. The purpose of analysing pre-internet forms of sharing and obtaining information about pregnancy within the context of second-wave feminism is to demonstrate the political nature of these technologies. An understanding of the exclusionary and inaccessible nature of these technologies reveals some needs that a truly democratizing technology can fulfill: the need to include the varied experiences of different women, the need to hold space for those experiences to be discussed, shared, and debated, and the need for accurate information. Facebook is a technology for the spread and consumption of information that today women look towards in order to learn about pregnancy. As an information platform, Facebook fulfills some of these needs, but does it do so in a way that upholds a framework of reproductive justice?

## Chapter 4: To Be Pregnant on Facebook

As a result of the medicalization of gynecology between the late 1800s and the late 1900s, information concerning pregnancy was isolated from its social, political, and historical context. Chapter 2 demonstrated how the pregnancy information network became exclusive and difficult to access. Chapter 3 explicated feminist attempts to create their own modes of knowledge production about pregnancy in order to break into the pregnancy information networks that was previously closely guarded by doctors and the medical business. This chapter examines Facebook as a case study to consider the impact of the internet on the pregnancy information network and the ways in which women in the United States use Facebook to learn about pregnancy. Chapter five will consider other internet platforms that women engage in to learn about pregnancy in considering the potential of democratizing technologies. As the internet became more widely used, more accessible sites of information were incorporated into pregnancy information network. Direct communication between women on Facebook exemplifies contemporary attempts to reclaim information concerning pregnancy from medicalized gynecology.

Many people turn to the internet to learn, connect, and consume, but the question of whether the internet is representative of progress remains. Much of science, technology, and society studies are concerned with examining progress scientific developments that negate or

lead towards progress. One way that progress can be measured is through the adoption of new paradigms. The concept of a paradigm is defined by philosopher of science Thomas Kuhn as an

> accepted model or pattern... with a series of questions defined and refined by scientists that constitute a scientific tradition that shapes the way questions are asked and information is gathered. Paradigms become dominant because they are more able than their competitors to answer questions that are deemed relevant at a particular historical moment while accounting for anomalies that have accumulated under the previous paradigm. (Roosth and Silbey, 2009, p. 4)

Progress is an important measure to consider as we strive to answer the question: Why is maternal mortality increasing in the United States as women gain more access than ever to information concerning pregnancy? To use paradigms to measure progress is to strive towards truth and answers. This chapter examines how pregnant women use Facebook in order to think about whether greater access to information is enough to give women better experiences during pregnancy.

**Facebook: A Case Study**

A close examination of Facebook as a platform for the spreading of information concerning pregnancy supports the theory that science and technology do not exist separately from politics and society. One scholar defines Facebook as, "a social-networking site of about 200 million members that is both based on an expansive idea of community and invested in controlling it for commercial purposes" (Grigoriadis, 2010, p. 106). Do the ways in which women use Facebook to connect with each other about their experiences with pregnancy represent progress towards a more widespread understanding of the experience of pregnancy among women in the United States? To improve the quality and consciousness of science,

society must become aware of the social, political, and historical context in which science operates. For far too long information concerning pregnancy in the United States has been closely guarded by the medical establishment and shielded from the influence of society and politics. If anything, this has made pregnancy more political. Science must be examined, debated, and diffused through social and political platforms. Online spaces do just this, and are often categorized as, "empowering spaces or tools that young people can use to negotiate identity, connect, and grow" (Kanai in Bailey and Steeves 2015, p. 85). These perspectives fit into the progress narrative that governs many discussions about science and technology.

Women in the United States use Facebook communicate, connect, learn more, and find support throughout their pregnancies. According to the Pew Research Center, among the 68% of all U.S. adults who use Facebook, 74% visit the site at least once a day (Gramlich 2018). Additionally, more women use Facebook than men (Gramlich, 2018). More women use Facebook than men. One user describes Facebook as, "a multidimensional pleasure: it's given me a tool for exceptionally mindless, voyeuristic, puerile procrastination; crowd-sourced pesky problems...; stoked my narcissism; [and] warmed my heart with nostalgia" (Grigoriadis 2010, 108). A popular baby and pregnancy blog categorizes pregnancy Facebook groups as a platform that can enable

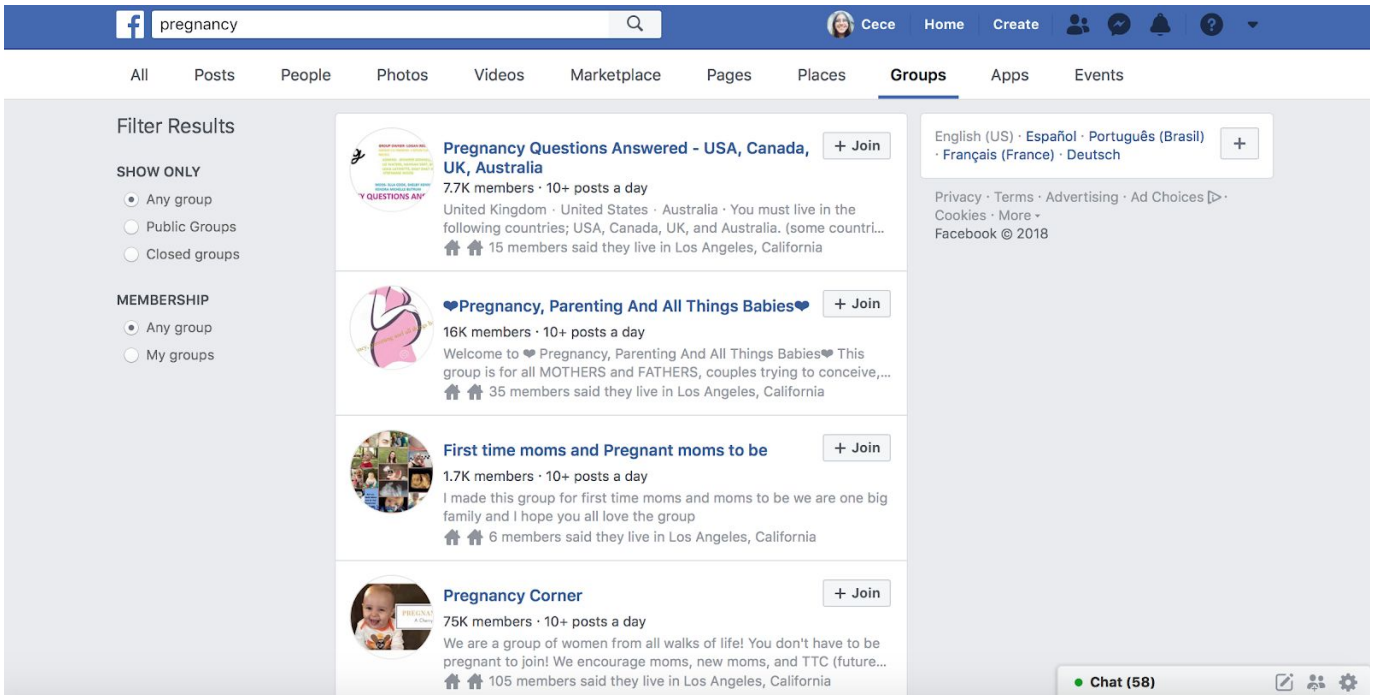
> moms-to-be everywhere [to] rejoice, they're no longer alone. When they're up late at night and can't sleep because the baby won't push pause on their karate kicks, they can connect with women in the same situation halfway around the world. When heartburn gets the best of them or they can't keep anything down, but they're too afraid to take medication for the nausea, others who've been in their shoes can recommend alternatives and reassure them. It's a beautiful thing to have other people to share life's milestones

with. No one ever understands what we are going through better than someone else who is going through the same thing (Bosley 2017).

Women can turn to Facebook groups to "find your tribe, share knowledge, get anonymous help, vent, get support, get recommendations, have fun, [and] to get reassurance" (Butterworth 2018). Facebook groups about pregnancy represent a free resource that can be accessed from anyplace with an internet connect. In a neoliberal world structured around instant gratification, Facebook groups enable women to get the information they need immediately.

There is a plethora of Facebook groups centered around pregnancy so that pregnant people can curate the information they are receiving. A simple search of pregnancy groups on Facebook reveals endless groups, some with over 75,000 members (see figure 2).

*Figure 2 (Facebook.com)*



Facebook reveals how many people in the group self-identify as living in the same area that a user self-identifies as living in through their account's settings, which may make it easy for a pregnant person to find a group that suits their geographic interests. The groups cover a range of topics from "Pregnancy Questions Answered - USA, Canada, UK, Australia," to "Pregnancy, Parenting And All Things Babies," "First time moms and Pregnant moms to be," "Pregnancy and Infant Loss Support Group," "keto pregnancy keto mommy," and "Pregnant After Tubal Ligation." Many groups are constrained to certain time periods such as "Pregnant Moms due 2018-2019," which enables pregnant people to connect with others experiencing pregnancy, childbirth, and babies in the same moment. Facebook has a tool with pre-prepared guidelines that enable group administrators to establish rules that govern the space. Some examples of rules are, "No Hate Speech or Bullying, Be Kind and Courteous, No Promotions or Spam, and Respect Everyone's Privacy." These are largely self governing spaces wherein the power to monitor posts lies with the group administrator– often the person who starts the group in the first place. Most of the groups have 10+ posts a day, the highest measure of posts in a group in any given day on Facebook. However, upon closer examination, many groups have almost 100 posts a day. There are two types of Facebook groups, public and closed groups. Anyone can join public groups, but a group administrator has to approve anyone who wants to join a closed group.

Although Facebook aims to provide a structure for conversation and connection to take place, its structure constricts the content of the conversations that can be had on the platform. Facebook has achieved an online state wherein it "has convinced 200 million people to color

within the lines, to behave a certain way without being told to" (Grigoriadis, 2010, p. 109). Social norms that govern society seem to also govern conversation spaces on Facebook, including pregnancy Facebook groups, and construct the information that is shared within the space. STS theorist Langdon Winner defines technology as "an ongoing social process in which scientific knowledge, technological invention, and corporate profit reinforce each other in deeply entrenched patterns, patterns that bear the unmistakable stamp of political and economic power" (Winner, 1986, p. 27). Technology is inherently political and its creation and execution. To establish a Facebook group, there must be a group administrator, a title, and at least one member who is not the administrator. Once the group is established, the group administrator can make rules, add pictures and descriptions, and invite others to join. The process of creating a group is an inherently political and social technology that relies on social networks, hierarchies of power, and the enforcement of norms. Patterns of political and economic power inherent in the structure of Facebook constrain the conversations that can be had on the platform in a way that promotes the spread of misinformation and perpetuates medicalized and second-wave feminist paradigms of pregnancy.

**Accuracy of Information**

The rise of the internet and the structure of it as a platform for the spread of information is an important step towards the gradual reclaiming of information concerning pregnancy from the grasp of medicalized gynecology. It is so easy to fall into a trap "when we are dealing with scientists, [where] we still admire the great genius and virtue of one man and too rarely admit

that in the technological or scientific fields a multitude of people is necessary to diffuse the discovery made and the machines invented" (Latour, 1988, p. 14). The spread of information using the internet, and specifically Facebook groups, represents further progress towards the diffusion of scientific advancement and ultimately a reclamation of female bodies by women. Nevertheless, we must wonder if Facebook has contributed to this spread of information concerning pregnancy in a way that empowers women with accurate information. In explaining the benefits of pregnancy Facebook groups, Bosley, a pregnancy and baby blogger, writes, "before we get ahead of ourselves, let's remember that Facebook isn't a replacement for medical advice. That being said, it *is* the perfect place to make like-minded friends, share research and learn from others" (Bosley 2017). These warnings do not seem to be followed too closely within the discussions of the Facebook groups. Within many pregnancy Facebook groups, people who are not doctors advise others about medical concerns. One has to "join" or choose to opt-into a Facebook group. As a result, they can easily choose to be exposed to only the information they want to hear. Thus, a user may just be exposed to information that aligns with and reinforces their values and beliefs. To be surrounded by so many like-minded, unregulated, perspectives, the danger of receiving and spreading misinformation is high.

Both professionals and nonprofessionals can give advice that is contradictory or dangerous. One pregnant person who asked for advice recounts her experience on a blog for Jewish women. She reflects:

> While many responses were helpful and to the point, others diverged into other random pieces of advice. I became somewhat indignant as the barrage of emails increased. Some of the advice felt pushy, too personal, even patronizing. "Make sure you hire a doula." (*I*

> *already have one!*) "Make sure you do your research." (*I'm a grown woman!*) "Make sure to compare all the C-section rates." (*I'm not an idiot!*). (Ratzabi 2015)

According to Julie Francis, manager of Parenting South Australia, the influx of advice once you ask a question online "can make parents feel less confident in their ability to care for their child" (Wiles 2016). There are some posts in mom and pregnancy Facebook groups that have almost two hundred comments. That can mean almost two hundred people giving the writer of the post their own opinions and perspectives on whatever the poster asked. It can be overwhelming and it can be easy to feel like one is doing something wrong. Additionally, not only does one's confidence and mental health suffer, but they could be receiving medical advice from unprofessional sources when asking certain questions. Dr. Matthew Simon, a pediatrician with Texas Health Resources, uses the metaphor that it takes a village to raise a child in order to express the consequences of turning to mom Facebook groups for advice. He states in an interview by NBC News that "the village is great for support. It does take a village to raise children, but that village may not be the source of medical advice" (Castro 2017). He adds, "while it may seem harmless… he's seen solicited online advice lead to the hospital" (Castro 2017). Facebook groups are a platform wherein unprofessional and sometimes unsolicited advice is common. A commenter can easily spread advice that they heard from someone else, and not speak from their own experiences.

Misinformation can spread very easily on Facebook. In a 2015 study about the spread of misinformation online, researchers Alessandro Bessi and Walter Quattrocicchi found that "functional illiteracy, such as inadequate reading skills, and confirmation bias, our tendency to select information consistent with one's beliefs" contribute to the spread of misinformation on

the internet (Bessi and Quattrocicchi, 2015, p. 34). Additionally, the"co-dependency between social media, news outlets and the users" can trigger emotional reactions that can contribute to the spread of misinformation online (Roese, 2018, p. 313). In recognizing Facebook as a complex space, we can examine Facebook groups as spaces wherein female identities are both formed and policed (Kanai in Bailey and Steeves 2015, p. 84). Power structures present offline also exist on the internet and sometimes enact greater influence over online interactions than offline interactions. Additionally, for too long, women in the United States have relied on science and the medical establishment to validate their experiences in pregnancy and establish 'best' practices for pregnant women.

**Feminist Pedagogy**

The knowledge-receiving process in pregnancy Facebook groups is characteristic of a collaborative learning process. Collaborative learning is, "rooted in an interpretive epistemology that circumvents any meaningful conversation about the gender, race, or class nature of knowledge production, dissemination, and utilization" (Mayberry, 2001, p. 145). Collaborative learning exists both online and offline and consists of individuals engaging within information networks to form communal knowledge in a way that results in the formation of informal social relationships (Mayberry, 2001, p. 146). On the other hand, feminist pedagogy is another way of learning. When practicing feminist pedagogy, one takes into account feminist theories, like reproductive justice, in order to reveal and transform forms of oppression (Mayberry 2001, 145). Due to the ability of one to choose which groups they want to join, an individual can choose to

engage in a group that functions as a collaborative, social learning space in which they do not have to work towards undermining forms of prejudice and oppression in order to retain membership or receive knowledge within a group. Alternatively, feminist pedagogy is much more concerned with the content of information learned.

The production of knowledge within Facebook groups is comparable to the production of knowledge in the book *Our Bodies Ourselves* (1973). Both Facebook groups and second-wave feminist writings about pregnancy emerge from "the second-wave feminist push for "better" and more "realistic" representations of assertive, independent, and intelligent women in media" (Kanai in Bailey and Steeves 2015, p. 84). Facebook must be regarded as a complex technology steeped in sociopolitical power dynamics. Additionally, the content of the information shared within second wave feminist writings and the content shared within Facebook groups about pregnancy does not differ noticeably. It is dangerous to become distracted by the different modes through which information is shared if the content does not differ. Deborah Tannen, a scholar of messaging and linguistics, suggests that, "the alarm with which older adults have greeted young people's new media practices resembles not only the negativity that commonly accompanies cross-cultural differences in conversational style but also the alarm that accompanied the introduction of a communication technology that we now accept without question: the printing press" (Tannen 2013, p. 101). Consequently, has progress really been made? A critical view of progress enables the critic to challenge, "the myth that assures us that full-speed-ahead is never

wrong" (Sale, p. 3). It seems as if progress cannot be quantified by looking at the ways in which people access information concerning pregnancy.

Facebook has expanded the amount of information available about pregnancy and the number of access points an individual has to that information. But in order to truly make an impact on maternal mortality in the United States, the type of information that is spread must be reckoned with. Facebook enables users to operate in a silo. Within this silo, individuals can access information that echos preconceived beliefs and myths about womanhood and pregnancy. Further, these silos may reinforce the medical paradigm, a second-wave feminist paradigm, or completely reject the medical paradigm. Both have benefits and consequences and it is worrying that challenges to these paradigms are difficult to establish. Thus, I wonder if Facebook is truly a democratizing platform, or if we should strive towards democratizing information about pregnancy that has been constructed within a paradigm that continues to exclude people of color and not acknowledge the different types of bodies that exist in the United States.

## Chapter 5: Democratizing Technologies

Within democratic communities, individuals engage with others and make choices. These choices may be influenced by others and/or informed by shared sources of information and individual testimony. A pregnant woman in the contemporary United States exists within a democratic community and looks towards information networks to learn about her own body. Similar to what occurred during the early medicalization of pregnancy, capitalist interests are pervasive throughout forms knowledge production on the internet. Actors in this network include Facebook groups, YouTube creators, and other types of bloggers. Although the internet platforms of Facebook, YouTube, and blogs are democratizing technologies and represent progress, serious privacy concerns and capitalist motications cloud their impact.

When considering the ways in which information about pregnancy is produced and accessed, a political lens in necessary. The alignment of second-wave feminist politics and the production of knowledge about women's bodies from the standpoint of women exemplifies the necessity of politics in the production of inclusive and accessible pregnancy information networks. Feminist philosopher Sandra Harding notes:

> Politics was necessary to create the possibility of the formation of diverse forms of women's collective group consciousnesses that would enable women in their different class, race, sexuality, and cultural locations to identify, value, and engage in the kinds of research that could enable them to see how to end their culturally-distinctive forms of sexist oppression. Thus, politics was conceptualized as itself part of research method (Harding 2008, p. 30).

Political activism itself is a form of research and knowledge production, especially in its capacity to initiate action. To strive towards democratizing technologies is to strive towards new forms of knowledge production. Democratizing technologies, like Facebook groups, may have the

potential to increase access to knowledge but also to create knowledge from various standpoints. These technologies provide space for inclusive and diverse pedagogies with positive consequence for the health of more mothers in the United States. Nevertheless, the inherent political nature of technology and knowledge production create concerns about privacy, policing, and the manipulation of facts.

**Privacy**

Privacy concerns arise even from the earliest technological interventions into pregnancy and birth. Following the medicalization of pregnancy, pregnancy and birth were ripped from the private sphere and thrust into a space of professionalization and research. When forceps were invented, male doctors closely guarded the technology. Forceps enabled doctors to gain an advantage over the midwife in difficult births and initiated a paradigm shift. Birth before the invention of forceps "was a social and spiritual event… No men allowed. Post forceps, men would gradually become a routine presence. Doctors did not like [birthing] stools. They preferred the patient lying in bed where they could use their tools with ease" (Epstein 2010, p. 18). Forceps improved the survival rate for both mother and child during complicated births and enabled the doctor to have a comfortable and essential role in the birthing process. Consequently, male doctors had a reason to be present during the birth and women had to, for the first time, "think about how private they wanted the birth of their babies" (Epstein 2010, p. 19). Forceps paved the way for the development of other birthing technologies and began to solidify the doctor's presence during birth as essential. From this point forward, pregnancy left the private, matriarchal sphere it had existed in and a different types of privacy concerns arose during pregnancy and birth.

As Chapter 2 conveys, pregnancy and childbirth physically left the domestic sphere when hospitals became popular. The domestic sphere, also referred to as the sphere of domesticity or cult of domesticity, is an expectation placed upon women to remain in the privacy of the home and uphold "the values of stability, morality, and democracy by making the home a special place, a refuge from the world where her husband could escape from the highly competitive, unstable, immoral world of business and industry" (Lavender 1998, p. 4). The domestic sphere relies on the distinction between male and female roles and places a high value on privacy. As men ignored traditional gender roles in favor of medicalizing pregnancy and birth, the sphere of domesticity was punctured. No longer did pregnancy and childbirth exist within the privacy of one's own home. The private sphere of domesticity is incompatible with the masculine science of the hospital. Some see this incompatibility as due to "the deep gulf between the public realm of science, presumably bristling with masculine reason, impartiality, and intellectual virility, and the private sphere of domesticity, radiating with feminine warmth, tender feeling, and quiet intuition" (Schiebinger 2004, p. 234). This incompatibility is a contributing factor towards the fraught adoption of hospitals as the norm. Second wave feminism fought to reclaim the sphere of domesticity, as related to birth, as an empowering alternative to masculine science which left women vulnerable to the interference of men.

Akin to the departure of pregnancy from the domestic sphere of the home, pregnancy departs from the private sphere as defined by political theorist Hannah Arendt as professional gynecology gains prominence. In her 1958 book, *The Human Condition*, Arendt conceptualizes three distinct spheres that make up one's daily life: the private, the public/political, and the social. The private sphere's purpose is to "shelter the intimate [and is] the opposite not of the

political sphere but of the social" (Arendt 1958, p. 38). The social sphere "excludes the possibilities of action… society expects from each of its members a certain kind of behavior, imposing… rules… which tend to "normalize" its members" (Arendt 1958, p. 40). On the other hand, "the public realm… was reserved for individuality; it was the only place where men could show who they really and interchangeably were" (Arendt 1958, p. 41). Some technologies considered in this thesis rest within the social sphere. Forceps, the maternity ward, and Twilight Sleep function to exclude possibilities of female action and limit the behavior, and by extension the choices, of women. However, the natural birth and feminist movements sought to bring pregnancy and birth back into the private and public spheres in order to facilitate the reclamation of female bodies and the education of individuals about their own bodies.

The public realm is where action occurs and where social media exists. In the public realm, "everything that appears… can be seen and heard by everybody and has the widest possible publicity" (Arendt 1958, p. 50). The public realm "is common to all of us" (Arendt 1958, p. 52). Social media helps sustain the *space of appearance* which "comes into being whenever men are together in the manner of speech and action" (Arendt 1958, p. 199). Arendt conceptualizes action as the fundamental characteristic of the human condition, that which distinguishes the human from other forms of life, and enables freedom and plurality within the life of the individual (Arendt 1958, p. 7). Action is the ability to engage with difference, with others, and to begin initiatives (Arendt 1958, p. 9). Social media is a platform on which humans participate in speech and action, inherently political activities. Pregnancy Facebook groups, examined in Chapter 4, are a specific example of women participating in speech and action.

Pregnant women also participate in speech and action on YouTube and blogs. Consequently, social media as a technology is political.

**Benefits of Democratic Technologies**

In striving towards democratic engagement with technology and with each other in order to better understand and reclaim ownership over female bodies, social media as conceptualized through Arendt's theories of action and the public realm is of value. Langdon Winner and Andrew Feenberg have both argued in favor of the democratization of technology along with the inclusion of ordinary people in the production of technology (Franssen, Lokhorst, van de Poel 2018). Social media enables women to easily be part of a group, a major characteristic of democracy and essential to action within the human condition. A crucial function of democracy "is to ensure that through representative or participatory processes, new or submerged voices, or novel depictions of where interests lie and what they in fact are, are heard and understood" (Sunstein 2017, p. 169). Democratic technological characteristics and practices are not limited to social media platforms. *Our Bodies Ourselves* is also an example of a democratizing technology because it privileges marginalized perspectives, contains a list of organizations that work on the issue highlighted in each chapter for the reader to engage with, and inspired the creation of feminist science. Internet social media communities also serve as democratizing technologies.

Facebook is a democratizing technology. Fundamental to democratizing technologies is the characteristic of community and the ability of the technology to find "new ways of privileging [excluded] values and realizing them in the new technical arrangements" (Feenberg 2005, 54). Facebook is a community building technology that enables one to have a voice and connect with others who share their views through features such as the Facebook group. One

whose values are not mainstream can often find others with similar viewpoints on Facebook. A non-democratic technology, "inspires a positioning of the user that sharply restricts potential initiative, while a democratic conception enlarges initiative in more complex virtual worlds" (Feenberg 2005, p. 62). In other words, a democratic technology is empowering and promotes action. Facebook encourages users to share and act on the platform. If using Arendt's definition of action to conceptualize "initiative", social media can be seen as a transformation of human action away from being centered around and constrained within the boundaries of the nation state and allow for "more complex" engagement.

YouTube is also a popular internet democratizing technology. 73% of adults in the United States use YouTube (Gramlich 2018). This is more than the 68% of adults in the United States who use Facebook and is continuously growing (Gramlich 2018). Every minute, 500 hours of video are uploaded onto YouTube (Wakabayashi 2019). These videos range in genre and focus, and many focus on pregnancy and parenting. A simple search of "pregnancy" using the YouTube search function reveals a plethora of videos about or related to pregnancy. Popular topics covered in these videos range from "Healthy Pregnancy Tips From the CDC," to pregnancy announcements, to "Exercise During Pregnancy| Do's and Don'ts." Other recommended searches consist of "pregnancy announcement," "pregnancy week by week," "pregnancy test," "pregnancy symptoms," and "pregnancy transformation." One can turn to YouTube to watch a video that advises them during every step of their pregnancy. Further, anyone can make the videos and upload them to YouTube with little oversight and with the potential of making a profit from ad revenue if it gets enough views. The people who upload

YouTube videos are called creators. A YouTube user can create a curated feed of video by 'subscribing' to their favorite creators.

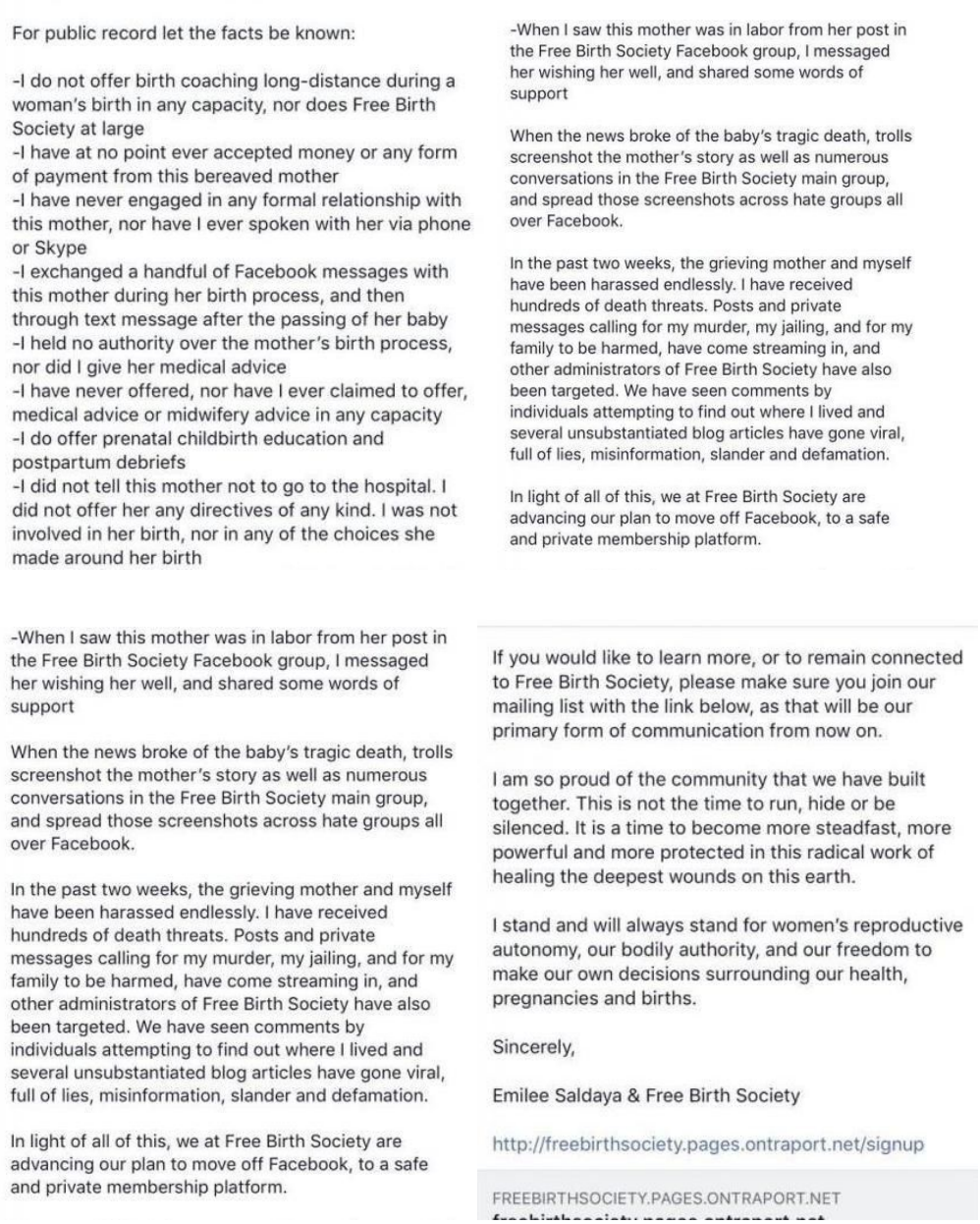
Increased access to information is one major benefit of democratizing technologies. The medicalization of pregnancy, and female bodies more broadly, has tried to rob women of their reproductive power. The feminist movement is one example of women fighting to regain their reproductive power. Women have sought to learn about their own bodies and share that information through democratizing technologies like *Our Bodies Ourselves* and on the internet in Facebook groups, YouTube communities, and blogs. Political Scientist Cass Sunstein posits "that once some people have the relevant knowledge, they confer benefits on others who entirely lack that knowledge" (Sunstein 139). Democratizing technologies that foster community help spread information rapidly. Within the reproductive power struggle, democratizing technologies have proven effective as women reclaim ownership of their bodies. Nevertheless, Arendt worries that to engage exclusively in the public realm of social media may lead to a shallow life (Arendt 71). Communities fostered through social media may prove deceptive and harmful, possibility due  the easy spread of misinformation and the negative characteristics of democratizing technologies.

**Challenges of Democratic Technologies**

Policing and exclusion are pervasive within the reproductive power struggle and democratizing technologies. Negative consequences of democratizing technologies include, "shifting terrains of reproductive power [that] alter familial and social relationships [and an] increase [of the] professional and social monitoring of women's reproductive lives" (Woliver 2002, 1). The rules regulating pregnancy Facebook groups, for example, have proven to have

negative consequences for pregnant women who mainly rely on the advice of others in these groups. A woman who was a part of the Free Birth Society Facebook group experienced the consequences of community policing firsthand. Freebirth, a form of unassisted childbirth, is a movement wherein women go through pregnancy "with no prenatal care, no ultrasounds, no testing, and give birth without a doctor or midwife at home" (Joy 2018). This woman experienced a lot of pain during the beginning of her labor and looked to her Freebirth Facebook group for support (Joy 2018). This group, "had a strict rule about providing birthing mothers any medical advice. Additionally, the group prohibited the members from suggesting mothers seek help at a hospital. Instead of the mother being alerted that her situation might be dangerous for her and her baby, members cheered her on through the labor" (Joy 2018). Ultimately seeking medical assistance "after finding "smelly, odd-colored liquid streaming her legs,"" her baby was delivered stillborn (Clark-Flory 2018). Other mothers and babies have survived similar situations within the context of a medical facility, including the blogger whose article is referenced here. Following the death of this woman's baby, the Facebook group was shut down. In the founder of the Free Birth Society's Facebook post [see figure 3] explaining the end of the group, she confirms the group's commitment to never recommending medical care and their complicity in not recommending that the woman seek medical attention. This is not to say that choosing to have a non-medical delivery in one's home is unsafe and a poor choice. It is the strict policing of this group and the information shared within it that contributed to the negative outcome of this woman's birth. Setting rules and regulations within democratizing technologies is policing and may lead to serious harm.

*Figure 3 (Joy 2018):*



For public record let the facts be known:

-I do not offer birth coaching long-distance during a woman's birth in any capacity, nor does Free Birth Society at large
-I have at no point ever accepted money or any form of payment from this bereaved mother
-I have never engaged in any formal relationship with this mother, nor have I ever spoken with her via phone or Skype
-I exchanged a handful of Facebook messages with this mother during her birth process, and then through text message after the passing of her baby
-I held no authority over the mother's birth process, nor did I give her medical advice
-I have never offered, nor have I ever claimed to offer, medical advice or midwifery advice in any capacity
-I do offer prenatal childbirth education and postpartum debriefs
-I did not tell this mother not to go to the hospital. I did not offer her any directives of any kind. I was not involved in her birth, nor in any of the choices she made around her birth

-When I saw this mother was in labor from her post in the Free Birth Society Facebook group, I messaged her wishing her well, and shared some words of support

When the news broke of the baby's tragic death, trolls screenshot the mother's story as well as numerous conversations in the Free Birth Society main group, and spread those screenshots across hate groups all over Facebook.

In the past two weeks, the grieving mother and myself have been harassed endlessly. I have received hundreds of death threats. Posts and private messages calling for my murder, my jailing, and for my family to be harmed, have come streaming in, and other administrators of Free Birth Society have also been targeted. We have seen comments by individuals attempting to find out where I lived and several unsubstantiated blog articles have gone viral, full of lies, misinformation, slander and defamation.

In light of all of this, we at Free Birth Society are advancing our plan to move off Facebook, to a safe and private membership platform.

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In light of all of this, we at Free Birth Society are advancing our plan to move off Facebook, to a safe and private membership platform.

If you would like to learn more, or to remain connected to Free Birth Society, please make sure you join our mailing list with the link below, as that will be our primary form of communication from now on.

I am so proud of the community that we have built together. This is not the time to run, hide or be silenced. It is a time to become more steadfast, more powerful and more protected in this radical work of healing the deepest wounds on this earth.

I stand and will always stand for women's reproductive autonomy, our bodily authority, and our freedom to make our own decisions surrounding our health, pregnancies and births.

Sincerely,

Emilee Saldaya & Free Birth Society

http://freebirthsociety.pages.ontraport.net/signup

FREEBIRTHSOCIETY.PAGES.ONTRAPORT.NET

Exclusion of some identities, especially women of color, is characteristic of the reproductive power and democratizing technologies. The reproductive power struggle often echos the, "the social values of the worth and "worthlessness" of various people" (Woliver 2002, 1). Although social media allows for the plurality of experiences and opinions to be expressed, it does not facilitate inclusivity very well. As a result of women making "increasingly diverse choices" within a network of multiple actors and multiple influences is a decline in the number and breadth of shared experiences (Sunstein 140). A large information network with multiple actors "can erode the kind of social glue that is provided by shared experiences, knowledge, and tasks" (Sunstein 140). Women seeking to utilize democratizing technologies to reclaim and spread information about female bodies must be cognisant of, and actively oppose, policing of others within the communities they create.

Because of the immense amount of content and users on platforms like Facebook, Twitter, and YouTube, these companies have difficult times regulating what is posted. Privacy scandals and capitalist motivations also plague many online communities. Between mid-2017 and mid-2019, Facebook faced a number of scandals related to the way it handles user information. Many questions surround what Facebook does with user data, the negative consequences of password breaches, and the regulation of content of the platform. An April 2019 article in *Wired Magazine* chronicles the difficulties Facebook faced and the way its leaders have dealt with them (Thompson and Vogelstein 2019). Videos of shootings and child pornography along with statements that would be considered hate crimes are uploaded every hour for anyone to find. YouTube in particular is described by *The New York Times* as "the most chaotic place on the internet" (Wakabayashi 2019). The CEOs and leaders of these technology companies have a

difficult time controlling the type of content uploaded and face a lot of criticism. On YouTube in particular, a lot of content uploads are driven by the potential ad revenue that can be gained and capitalist motivation is pervasive throughout the platform.

Capitalist aspirations also underlie seemingly more wholesome channels that chronicle pregnancy experiences and other 'mommy-blogs.' There is great opportunity to make an income when sharing your experiences through blogs and other forms of social media. Sponsorships and affiliate links represent one such avenue of opportunity. Companies actively seek partnerships with popular mother bloggers because, "mothers control about 85 percent of household purchases, which accounts for $2.4 trillion" (CBSlocal.com 2017). Bloggers are therefore incentivized to structure their content around products that companies pay them to advertise. As a result, much of the content on parenting blogs and in YouTube videos recommend products and services to deal with common pregnancy problems. Products bloggers insist are essential or claim as their favorites are linked in the description of many videos and hyperlinked on many blog posts. Due to the strong sense of community and these platforms and creators foster, the environment is ripe for successful advertisement.

Serious privacy concerns arise from the ease at which parents can document their own experiences and the experiences of their children on the internet. In a 2014 article in *The Guardian*, one mother expressed early concern about the safety of sharing so much of our lives with the internet (Geddes 2014). "Sharenting," describes the parental act of sharing photos or information about one's children on the internet. It is difficult to tell why parents share so much. But, this is a network that values power over passion or lived experiences and "science's deep imbrications in networks of power make it impossible to tease out a pure love or passion for

scientific discovery outside of the desire for access to power" (Giordano 2017, p. 7). It may be driven by profit, but it also has become a condition of modern life. Parents are creating digital footprints for their children, without their children's consent, very early on in their child's life (Stadtmiller 2017). As the children of these 'sharents' grow older, they begin to realize how much of their lives their parents are sharing on the internet. Given the uncertainty surrounding how secure information posted on Facebook and other internet sites is, it may even be dangerous to share so much of your life online. There are also little to no avenues for children to exercise consent in these situations.

Like democratic governments, democratic technologies have both positive and negative characteristics. One major benefit lies in their ability to foster community and uplift marginalized voices. Individuals become very invested in the communities that are fostered on platforms such as Facebook and YouTube. Consequently, people share a lot and trust the advice that others give. Capitalism and privacy concerns continue to flourish in the contemporary pregnancy information networks. Yet, when the intentions of powerful actors within these networks align with the missions of reproductive justice and intersectionality, capitalist interests are impeded from taking over.

## Chapter 6 Conclusion

### A Path to the Redistribution of Reproductive Power

The United States has high rates of maternal mortality. According to a 2017 investigation by ProPublica and NPR,

> American women are more than three times as likely as Canadian women to die in the maternal period (defined by the Centers for Disease Control as the start of pregnancy to one year after delivery or termination), six times as likely to die as Scandinavians. In every other wealthy country, and many less affluent ones, maternal mortality rates have been falling; in Great Britain, the journal Lancet recently noted, the rate has declined so dramatically that "a man is more likely to die while his partner is pregnant than she is." But in the U.S., maternal deaths increased from 2000 to 2014. In a recent analysis by the CDC Foundation, nearly 60 percent of such deaths were preventable. (Martin and Montagne 2017)

The overuse of technology designed within capitalist, racist, and gendered context contributes to high maternal mortality and especially higher black maternal mortality in the United States. Black women in the United States "are three to four times more likely to experience a pregnancy-related death than white women" (Creanga, Syverson, Seek, & Callaghan, 2017). Drawing California's success of lowering maternal mortality through decreasing the amount of cesarean sections performed and other instances of successful feminist science, I propose a two-pronged approach derived from Sara Giordano's vision of redistributing epistemic authority to decolonize medicalized gynecology and redistribute reproductive power relations in the United States.

First, more people who experience pregnancy need to make scientific knowledge as researchers and doctors. Pregnant women and women who have experienced pregnancy are not encouraged to engage in medical and research spaces. A 8-year long study of 4,206 scientists

published in 2019 in *Nature* found that, "more than 40% of women with full-time jobs in science leave the sector or go part time after having their first child, according to a study of how parenthood affects career trajectories in the United States. By contrast, only 23% of new fathers leave or cut their working hours" (Else 2019). Additionally, in a 2017 study that surveyed 5782 people who identified as both mothers and physicians in a Facebook group titled 'Physician Mom Group,' "66.3% reported gender discrimination, and 35.8% reported maternal discrimination. Of those reporting maternal discrimination, 89.6% reported discrimination based on pregnancy or maternity leave, and 48.4% reported discrimination based on breastfeeding" (Adesoye et al. 2017). Important to note is that maternal discrimination seems to be different from gender discrimination. The same study found that "Of the 4222 respondents who reported either gender or maternal discrimination, 1681 (39.8%) reported both; 2152 (51.0%) reported gender discrimination alone; and 389 (9.2%) reported maternal discrimination alone" (Adesoye et al. 2017). Various institutional supports can be put into place to better support and encourage female scientists and doctors, and there must be some specification towards the needs and wants of people who are parents or pregnant.

Second, knowledge production does not just consist of doing the research, but also spreading the knowledge gained. Therefore, having platforms where pregnant people can connect with other pregnant people of similar identities is also important. This is a project of expanding science to create more knowledge about pregnant bodies, to make new science, *and* to equitably distribute pertinent, life-saving information. Expanding science to include more perspectives and work on a wider range of questions also functions to further the decolonization of science. Inspired by Sara Giordano vision of redistributing epistemic authority, women must

create “laboratories of our own to fulfill our passions to produce knowledges about our worlds and bodies. This would mean broadening science rather than simply gaining inclusion in science as it is” (Giordano 2017, p. 11). Yet, creating new science “will not necessarily “unsettle” colonial, racial, and gendered power” (Giordano 2017, p. 10). In order to truly decolonize science, the definition of human must be redefined (Giordano 2017, p. 10). To redefine what is human is a grand task. Redefining reproductive power relationships and expanding science is one step towards the ultimate goal of decolonizing science. The proposed approach does not dismantle the capitalist framework, but instead strives to be as equitable and inclusive as possible within oppressive conditions. The the ways in which the Boston Women’s Health Collective fought to transform the tampon industry and the work of the Catalan GynePunks provide examples of ways in which the pregnancy industry can be disrupted to lower maternal mortality.

The Boston Women’s Health Book Collective (BWHBC) inspired a group of women to work towards regulation in the tampon industry in a manner that also furthered the goal of decolonizing science. In 1980, the CDC recommended that women limit their use of superabsorbent tampons because more absorption increases the risk of Toxic Shock Syndrome, a life-threatening condition derived from certain bacteria infections (Vostral, 2017, p. 1). However, the tampon industry did not all categorize the size of their tampons, often labeled light, regular, super, with the same absorbency benchmarks (Vostral, 2017, p. 1).. In other words, Tampax’s super tampon might have the same superabsorbency as Kotex’s light tampon. As a result, women did not have the ability to follow these new guidelines. One concern that captured the attention of the women’s health nonprofit that developed from the BWHBC after the publication of *Our Bodies Ourselves* was Toxic Shock Syndrome. The power that the BWHBC had gained in the

larger women's health network of information forced the FDA and tampon manufacturers to pay attentions to their concerns (Vostral 2017, p. 7-8). In order to create "standards for absorptive capacity as well as nomenclature for all commercial tampon brands," the BWHBC hired scientist Nancy Reame and established a Tampon Task Force consisting of manufacturers and consumer advocates (Vostral, 2017, p. 1). This task force uncovered many inconsistencies and bad scientific practices of the tampon industry. In particular, Dr. Reame was the first person to use actual menstrual blood when testing the absorptive capacity of tampons.

The work of the BWHBC and Dr. Reame in pushing for regulation in the tampon industry redistributed epistemic authority. *Our Bodies Ourselves* built a community that Dr. Reame leveraged when creating new scientific practices to test tampon absorbency and regulate the tampon industry. This case "points to significant implications of consumer groups and feminist advocates using tactics learned while writing *Our Bodies, Ourselves* and deploying them in the federal regulation process by producing their own scientific data. It also highlights the importance of feminist ideas privileging women's understandings of their own bodies to shape science during the 1980s" (Vostral 2017, p. 23). Both parts of the model proposed in this chapter, making new knowledge and spreading new knowledge, gained power from each other in achieving regulation in the tampon industry. It was a symbiotic relationship Ultimately, "the feminist advocates challenged assumptions, questioned language, and embodied a new approach. Together, they required the men to acknowledge and bear witness to the materiality and biological functioning of their bodies" (Vostral 2017, p. 8). Dr. Reame was able to perform and share her feminist science because of the power gained from the BWHBC network of feminist activists and supporters.

The GynePunks of Catalonia are working towards decolonizing the female body. At the Calafou cooperative, the GynePunks operate out of the Pechblenda biolab "to democratize and "liberate" the instruments and protocols used in obstetrics and gynecology to allow low-cost diagnostics" (Chardronnet 2015). Three of their projects is especially notable in the way they work to decolonize the female body, create new science, and educate others from the perspective of women. In 2013, Klau Kinky, a GynePunk, created a video and website that conveyed the racist, capitalist, and gendered roots of the medicalization of gynecology that I also describe in Chapter 2. The project is titled "Anarcha, Betsey, Lucy y otras chicas del montón" in reference to three slaves that Dr. J. Marion Sims experimented on to establish gynecological procedures and technology like the speculum (Chardronnet 2015). As a result of this research project, the GynePunks have renamed the Skene's Gland, named after a 19th century male gynecologist and the gland connected to female orgasim, to Anarcha's Gland (Bierend, 2015). The GynePunks also created a DIY emergency gynecological testing kit to analyze fluids to test for yeast infections, cervical cancer, STDs, and pregnancy (Bierend, 2015). It includes a centrifuge, a microscope and an incubator to allow a woman to test her own fluids. They are also leading workshops to teach others how to create and use these kits and posting guides to creating all their gynecological tools online for free. Additionally, the GynePunk movement has inspired others to 3D print speculums and think about the ways in which it can be redesigned. Other GynePunk initiatives include, "workshops aimed at decolonizing the female body, exploring plant-based vaginal medicines, DIY lubricants, and improved sex toys" (Bierend, 2015).

The GynePunks' projects serve to undermine existing reproductive power relations and force medicalized gynecological technologies to meet the needs of communities previously

ignored. The GynePunks, as Catalonian nationals, are marginalized in Spanish society and push for equitable access to resources from that standpoint. They use the DIY emergency gynecological testing kits themselves. Others who cannot access traditional medical establishments due to price, location, or their identities also can utilize these kits. The gynepunks are making new science, reimagining medical technologies into accessible formats, sharing information about the history of gynecology, and making all their projects accessible through websites and other posts on the internet. This is the future of reproductive health. It is a conglomerate of reclaimed reproductive technologies that are reimagined and accessible to a variety of people.

Both the GynePunks and the BWHBC worked to redistribute reproductive epistemic authority. Their resulting initiatives provide models that pregnant women can follow to regain reproductive power from medicalized gynecology. Women utilize a variety of technologies to enter the domains of science and history. One undervalued mechanism is writing. Ecofeminist Trish Glazebrook writes, "woman enters history through writing. The self-articulated and autonomous identity that emerges in women's writing includes her definition, delimitation, and understanding of her body, for example, what her sexuality means to her" (Glazebrook 2006, p. 45). The written words of women experiencing or who have experienced pregnancy are the foundation from which the technologies examined in this thesis have thrived. In *Our Bodies Ourselves*, Facebook posts, and blog posts, women engage with history and science with the written word. The redistribution of epistemic authority has begun, but more science making by women who experience pregnancy is called for.

The network that women engage in to learn about their own bodies during pregnancy and childbirth has expanded and become more complex over time. Some actors are popular and powerful and others are less influential. Some actors within this network see their power diminish and grow at different points in history. At this moment, social media is exceptionally powerful and may be the technology that truly democratizes information. However, the negative consequences of engagement on social media are significant and it is difficult to regulate and equalize access to and the content within this technology. Further, the centrality of power within this network means that women need to engage in the politics of science in order to truly reclaim the science of their own bodies. Nevertheless, lot of positive relationships and advice women have gained from the internet derive from communities developed with missions that center around uplifting marginalized voices and understanding or creating science. The GynePunks and BWHBC are an examples of a communities that took advantage of internet technologies to create new scientific knowledge from marginalized viewpoints. In working towards questioning the ways in which oppressive forces, such as patriarchy, racism, and capitalism as play out in medicine and their impact on the ability of women to learn about their own bodies, the GynePunks and the BWHBC have found ways to produce new knowledge and center the experiences of marginalized identities. The more diverse the standpoints from which this knowledge is created, the closer society gets to decolonizing science and reclaiming knowledge that was taken from marginalized identities.

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