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Fertility Preservation Technologies for Women: A Feminist Ethical Analysis

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A thesis submitted in partial fulfillment of the requirements for the degree in Doctor of Philosophy

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FERTILITY PRESERVATION TECHNOLOGIES FOR WOMEN: A FEMINIST ETHICAL ANALYSIS

(Thesis format: Integrated Article)

By

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Graduate Program in Philosophy

A thesis submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

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Abstract

In this dissertation I examine ethical issues that concern fertility preservation (FP) technologies for women from a feminist perspective. FP technologies involve the removal, cryopreservation and subsequent storage of reproductive materials for future use. The aim of these technologies is to preserve the option of future genetic reproduction. FP technologies have been developed in the cancer context because infertility is one of the long-term side-effects of many cancers or cancer therapies. Many FP technologies are still experimental, but some technologies are becoming available to healthy women who wish to guard against age-related infertility. Although FP technologies are expanding women's reproductive options and benefitting some women by satisfying their desires for genetically-related children, these technologies pose numerous physical, emotional and financial risks to women. I maintain that a feminist examination of choice is necessary for the ethical provision of FP technologies within patriarchal contexts. My analysis begins by demarcating two oppressive social biases from one another: namely pronatalism and biologism. I argue that each of these biases can unduly influence women's reproductive choices about FP technologies. I then consider how these biases might be identified and challenged in the FP decision-making context. I outline an ethical process of informed choice that is equipped to protect patient autonomy when such autonomy is threatened by these biases. I then consider whether the choice to use FP should be available to both women within and without the cancer contexts. I argue that both disease-related FP and age-related FP can be morally permissible. Finally, I consider whether there should be an upper age limit on women's access to their stored reproductive materials. I argue that age can be morally relevant to reproduction and thus age limits on access to assisted reproduction are morally permissible. I conclude by suggesting how feminist insights might inform policies on FP technologies and related assisted reproductive technologies. In sum, my dissertation shows that a feminist analysis of choices about FP is essential for ensuring the ethical provision of FP technologies.

Keywords: *oncofertility, fertility preservation, infertility, cancer, assisted reproductive technologies, bioethics, informed choice, relational autonomy, pronatalism, biologism, ageism, feminism*

Dedication

For my yiayia, with love

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Chapter 1

1 Fertility Preservation Technologies, Reproductive Choice and a Feminist Ethical Approach

Cancer survival rates are dramatically improving; however, aggressive therapies such as chemotherapy and radiation that are used to treat cancer can cause numerous late-effect health and quality of life issues¹ (Chemaitilly & Sklar, 2010; Khan, Akhtar & Sheikh, 2005; Woodruff & Snyder, 2007). Among these issues is infertility. In response to the risk of infertility, researchers in a new interdisciplinary and inter-professional field called “oncofertility” are developing fertility preservation (FP) technologies (Woodruff & Snyder, 2007). All FP technologies aim to secure the future option of genetic reproduction.

Most generally, there are two types of FP technologies. The first type is specific to the cancer context and involves methods that aim to minimize the amount of gonadal damage, which can occur during cancer treatments. One method, for example, involves placing a protective shield over a patient’s gonads during radiation therapy to minimize the amount of radiation that penetrates and damages the patient’s reproductive tissues (Georgescu, Goldberg, du Plessis, & Agarwal, 2008; Gracia & Woodruff, 2012; Jenniinga, Hilders & Louwe, 2008; Terenziani, Piva, Meazza, Gandola, Cefalo, & Merola, 2009).² The second type of FP technologies involves the removal, cryopreservation and subsequent storage of reproductive materials for future use. A considerable amount of oncofertility research focuses on improving this second type of FP technology. In the past, sperm and embryo cryopreservation were the only FP options

¹ Other long-term health issues include chronic pain, cognitive dysfunction, fatigue, peripheral neuropathis, cardiovascular and bond disease, or incontinence. (Woodruff, 2007; Sklar et al., 2006)

² Another method for minimizing damage during radiation is ovarian transposition. Ovarian transposition is the surgical repositioning of the ovaries away from the radiation field, which can also help to reduce the damage to the patient’s reproductive organs. Both gonadal shielding and ovarian transposition are standard practice for cancer therapy (American Society of Clinical Oncology, 2006).

available to men and women, respectively. More recently, oncofertility researchers have developed new FP technologies for women and children.

FP technologies that involve the cryopreservation of reproductive materials can also be used for fertility preservation outside of the cancer context. For example, these FP technologies could be used by individuals who wish to guard themselves against infertility that is caused by other diseases³ infertility due to age (what I call “age-related infertility”), employment or environmental hazards, or gender reassignment surgeries. At present, some FP technologies are experimental and only available to patients enrolled in clinical research trials within the cancer context. However, many FP technologies are available to men and women who wish to freeze their reproductive material to guard against age-related infertility.

Like all assisted reproductive technologies, FP technologies promise to expand people’s reproductive options and give them more control over their reproduction. In particular, FP technologies allow some people to become parents, who might not otherwise have been able (or willing) to do so. Indeed the opportunity to become a parent is a core social value. For some people, parenting means producing and rearing a genetically-related child. FP technologies can benefit such persons by satisfying their desires for genetically-related offspring. In addition, FP technologies can benefit people by helping them to avoid the personal and social harms that are associated with infertility. Also, in the cancer context, the use of FP technologies can benefit cancer patients by giving them a sense of control amid a difficult cancer diagnosis. FP technologies can also give cancer patients and their families some hope for a (‘normal’) life after cancer. Despite these potential benefits of using FP technologies, the use and provision of these technologies raise a number of ethical challenges.

³ Medical conditions associated with delayed puberty or amenorrhea, such as Cushing's disease, sickle cell disease, kidney disease and diabetes, can also compromise an individual's fertility (Mayo Clinic, 2011, <http://www.mayoclinic.com/health/infertility/DS00310/DSECTION=causes>)

This dissertation examines the ethical implications of FP technologies from a feminist perspective. My analysis focuses solely on the second type of FP technologies (hereafter, FP technologies), which involve the cryopreservation of reproductive materials for future use. In this introductory chapter, I first describe the different FP technologies used for male and female patients, respectively. Second, I outline the associated risks and success rates of the various FP procedures. Third, I list some of the ethical challenges that FP technologies pose and draw attention to the unique challenges that they pose for women specifically. In particular, I emphasize the ethical questions that arise in the context of choice about FP. Fourth, I describe the feminist philosophical approach that I employ in this dissertation and maintain that a feminist examination of choice is necessary for the ethical provision of FP technologies within patriarchy. Lastly, I conclude by summarizing each of the remaining chapters in my dissertation.

1.1 Summary of FP Technologies

The FP options available to young adults and children vary depending on a number of factors. In the cancer context, FP options vary depending on the patient's sex, the type of cancer, the particular cancer treatment plan, the patient's prognosis, the patient's age (including the stage of gonadal development), personal and/or familial preferences and the knowledge or preferences of the patient's oncologist. Outside of the cancer context, FP options vary depending on the age, health and individual preferences of the fertility patient. In addition, the available options depend on which assisted reproductive technologies are offered at any given fertility clinic. Lastly, some FP technologies are only available within the context of clinical trials involving cancer patients. In this section I provide a brief summary of various FP technologies. I first describe two general stages of FP technologies (as they occur both within and without the cancer context). I then describe the different technologies for males and females that are available at each stage of FP.

FP technologies occur at two distinct stages. The first phase, which I shall call stage 1 FP, involves the removal and cryopreservation of gametes or reproductive tissues. This frozen reproductive material is then stored for future reproductive use. The second phase,

which I shall call stage 2 FP, involves the thawing and subsequent use of this material in reproductive procedures, which aim to produce genetically-related offspring. In the cancer context, stage 1 must occur before the onset of aggressive cancer therapies such as radiation and chemotherapy, which can damage reproductive tissues. For many patients, FP decisions must be made quickly, often within days or weeks, so that cancer treatment can begin. Men and increasingly more women are presented with the option of using FP technologies prior to the onset of cancer therapies. Pediatric cancer patients are offered FP technologies only if they qualify for participation in a clinical research trial. Outside of the cancer context, stage 1 FP is available only for adults. Fertility patients must also be fertile at the time of stage 1 FP.

Patients who use stage 1 FP have the option of later using their reproductive material in stage 2 FP. This stage involves the thawing of stored reproductive material for use in subsequent methods of assisted reproduction in an attempt to produce a genetically-related child. Not all individuals who use stage 1 FP will need to or want to use stage 2 FP. Some patients may conceive naturally; others may decide against genetic reproduction. Patients who survive their cancer may choose to use stage 2 FP once their cancer has gone into remission. Cancer survivors who used stage 1 FP as a child may not use their reproductive material for decades. Outside of the cancer context, stage 2 FP will most likely be used after attempts at unassisted conception fail. Let me now explain in more detail what the options are for male and female patients at stage 1 and stage 2.

At stage 1, sperm cryopreservation is the predominant FP technology for males. This technology is well established and readily available to male cancer patients. It is also available to men outside of the cancer context. Sperm is collected after ejaculation or through surgery and then cryopreserved for future use (Trost, 2012). Experimental procedures for testicular tissue extraction are currently being developed. Testicular tissue extraction is aimed at preserving the fertility of prepubescent boys who are not yet able to

produce mature sperm. This procedure is being done in anticipation of the development of in vitro sperm maturation technologies or sperm grafting technologies.⁴

The second stage for men involves the thawing of cryopreserved sperm for use in one of several assisted reproduction options. This sperm can be used in in vitro fertilization (IVF), gamete intra-fallopian transfer (GIFT) or artificial insemination (AI) with a female partner, an egg donor, or a contract pregnant woman in order to produce a genetically-related child. In the future, when sperm maturation procedures are established, men who have stored testicular tissue will have the option of thawing their testicular tissue, maturing it in vitro and then using this mature sperm for one of the aforementioned reproductive procedures. Alternatively, this thawed testicular tissue could also be grafted onto the man's testes in hopes of reactivating natural sperm production.

Advancements in oncofertility research have resulted in improvements in stage 1 FP options for female patients. In the past, embryo cryopreservation was the only viable option for women. This option involves the removal and fertilization of oocytes, followed by the cryopreservation of embryos. Embryo cryopreservation can be problematic for women who do not have a suitable male partner and prefer not to use donor sperm. At present, women also have the option of extracting and cryopreserving mature oocytes. This involves a series of hormonal stimulations of the ovaries to produce multiple mature eggs and induce ovulation. These eggs are then extracted using an ultrasound-guided needle, in an outpatient surgical procedure (American Society for Reproductive Medicine 2008). The entire process for oocyte cryopreservation, or egg freezing as it is commonly called, takes approximately 2-6 weeks to complete. This FP option is available to women outside of the cancer context.

Alternatively, women in the cancer context who do not wish to undergo oocyte cryopreservation because of the hormonal stimulation or time constraints may undergo

⁴ Testicular tissue grafting and maturation of sperm from frozen testicular tissue have been performed in animal models (Geens., Goossens, De Block, Ning, Van Saen, & Tournaye, 2008).

ultra-sound guided transvaginal oocyte aspiration in order to obtain immature oocytes (Uzelac, Christensen & Nakajima., 2012, p. 82). Alternatively, women and prepubescent girls who are unable to ovulate may also opt to have an entire ovary or slices of ovarian tissue surgically removed (Georgescu et al., 2008; Uzelac et al., 2012; Silber, Kagawa, Kuwayama, & Gosden, 2010). Ovarian tissue can be immediately cryopreserved or it can first be matured using *in vitro maturation* (IVM). IVM is an experimental technique in which immature oocytes are recovered from ovarian tissue and matured in the laboratory (Chian, 2004). The resulting mature oocytes may then be cryopreserved. In many cases, patients will choose to cryopreserve both ovarian tissue and oocytes matured using IVM (Uzelac et al., 2012, p. 82). Both ovarian tissue cryopreservation and IVM technologies are likely to become available outside of the cancer context sometime in the near future.

Stage 2 FP technologies for female patients vary depending on what type of reproductive material was cryopreserved at stage 1 FP. Women who used oocyte cryopreservation at stage 1 FP can have these oocytes thawed, fertilized and used in IVF procedures at stage 2 FP. Some women might choose to hire a contract pregnant woman to undergo IVF with their stored reproductive material if they are unable⁵ or unwilling to gestate a child. Women who stored ovarian tissues could have this material thawed, matured, fertilized and then used in IVF, once post-thaw oocyte maturation procedures are established.⁶ Thawed ovarian tissue can also be used for orthotopic or heterotopic autotransplantation. In the case of orthotopic autotransplantation, ovarian tissue is re-implanted into the pelvic cavity in hopes of reactivating ovarian function and achieving a spontaneous ‘natural’ pregnancy (Demeestre, 2008; Donnez, 2004). Heterotopic autotransplantation, on the other hand, involves implanting ovarian tissue into another part of the woman’s body, such as her forearm, and using hormonal stimulation to mature this ovarian tissue. The resulting mature oocytes are then surgically removed, fertilized and used in IVF (Ibid).

⁵ An example is a woman who has had a hysterectomy as part of her cancer treatment.

⁶ A procedure called *in vitro* follicular maturation, which is similar to IVM, attempts to mature entire preantral follicles that have been extracted from frozen-thawed ovarian tissue (Uzelac et al, 2012, p. 87).

The stage 2 FP technologies that involve cryopreserved ovarian tissues are not presently available to women outside of oncofertility research trials.

All the procedures associated with stages 1 and 2 FP technologies for both males and females come with varying degrees of risk and uncertainty for patients. In the next section I outline some of the risks associated with FP technologies.

1.2 Risks Associated with FP Technologies

Although FP techniques aim to secure future options for genetic reproduction, they also pose serious physical and psychological risks to patients at each stage of FP. There are also different risks associated with each type of FP technology. In most cases, cancer patients are subject to a greater number of risks than fertility patients who use FP technologies outside of the cancer context. These risks generally have to do with the nature and influence of cancer. In addition, female patients face greater risks associated with FP than male patients do. This is because FP technologies for females are more invasive and onerous on women's bodies. In what follows, I explain each of these points in turn.

For men, sperm extraction at stage 1 FP often involves minimal to no physical risk. There are some health concerns for stage 1 FP for men that are unique to the cancer context (Tatiana et al., p. 2009) and surgical sperm extraction for men can pose some risks, though these are small (ASRM, 2008). The risks for prepubescent boys are much greater. In particular, some theorists worry that the removal of testicular tissue can affect hormone levels and delay the onset of puberty (Andres & Wallace, 2010; Ginsberg, 2011). Some researchers also worry that stage 1 FP in young boys or adolescents can cause psychological harm because it introduces or encourages masturbation within the clinical (cancer) context (Andres & Wallace, 2010). At stage 2 FP, methods that involve the thawing and use of sperm pose no physical risks to male patients. This is because gestation occurs within the bodies of female partners or contract pregnant women. If testicular tissue grafting is developed and used in stage 2 FP, some patients may be at risk

of having cancerous cells reintroduced into their body (Bockstaele, Tsepelidis, Dechene, Englert & Demeestre, 2012).

In contrast to FP for men, FP technologies for women and girls can be quite risky. Stage 1 FP that involves oocyte extraction requires hormone injections in order to stimulate the ovaries to produce eggs. The ovarian stimulating hormone injections can result in a serious condition called “ovarian hyperstimulation syndrome” (OHSS) (Alper et al., 2009, ASRM 2008; Delvigne & Rozenberg, 2003; Kondapalli et al., 2010). OHSS can cause bloating and exhaustion, along with pelvic infection, severe pain, ruptured ovarian cysts, intra-abdominal bleeding or injury of pelvic anatomical structures (Bodri et al., 2008; Kumar, Sait, Sharma, & Kumar, 2011). In some rare cases ovarian stimulation and oocyte extraction has caused infertility or death (Bratt, Schutee, Bernardus, Mooij, & van Leeuwen, 2010). Patients—both inside and outside of the cancer context—who have ovarian tissues extracted also risk going into premature menopause (Cheong & Ledger, 2007; Wallace, 2011), infertility (Ginsberg, 2011), a decrease in hormone levels, and a delay in the onset of puberty (Ibid). For cancer patients, ovarian stimulation and oocyte extraction can pose additional physical risks to the patient, because they require a delay in the onset of cancer treatments.

At stage 2 FP, women who use IVF are also subject to a series of risks. For example, IVF poses an increased risk of multiple pregnancies (in cases where there is multiple embryo transfer), ovarian cancer, premature delivery and low birth weight, first trimester bleeding, miscarriage, ectopic pregnancy, birth defects and stress, as compared to natural unassisted conception (Mayo Clinic, 2011). Many of these risks associated with IVF increase with pregnancy at an advanced maternal age (Carolan, Daey, Biro & Kealy, 2013; Yogev et al., 2010). There are also some risks associated with FP technologies that are unique to the cancer context. For example, patients who use ovarian tissue grafting or ovarian transplantation technologies are at risk of introducing cancerous cells back into their bodies (Jeruss & Woodruff, 2009; Shaw, Bowles, Koopman, Wood & Trounson, 1996)

FP technologies can also pose some risks to the offspring born from these technologies. Children born from IVF technologies showed a lower birth weight and a higher incidence of being born prematurely, and an increased risk of birth defects, as compared to babies conceived naturally (Hansen, Kurinczuk, Bower & Webb, 2007; Sutcliffe and Ludwig, 2007). Some theorists worry about possible damage to oocytes during freezing (Sönmezer & Oktay, 2008). In addition, procedures, such as IVF and IVM require in vitro gamete manipulation. Some theorists have suggested that the sort of gamete manipulation that happens in IVF and IVM could increase birth defects in the children resulting from these technologies (Allen & Reardon, 2005). Babies born from IVM technologies displayed an increased risk of Large Offspring Syndrome (LOS). This defect has been observed in domestic livestock born using in vitro technologies and causes respiratory problems and increases the chances of sudden death (when young) (McEvoy, Sinclair, Young, Wilmut & Robinson, 2000). The effects of LOS on human offspring are unclear. Due to the fact that many FP technologies are still relatively new, few pregnancies have resulted from the use of these technologies, and in the experimental stages, little is known about the long term effects of various FP technologies on women or the resulting children.

1.3 Success Rates for FP Technologies

The success of FP technologies is generally measured by a resulting clinical pregnancy⁷ or the birth of a genetically-related child. To date, an estimated 2000 babies have been born from the use of frozen eggs, but the births of only 900 of these babies have been recorded and investigated.⁸ As for IVM, it is estimated that nearly 1300 babies have been born worldwide. However, the birth and perinatal outcomes have only been reported for 400 IVM babies.⁹ These births involved IVM with fresh immature oocytes, or thawed cryopreserved oocytes which were matured using IVM prior to freezing. To date, there

⁷ A clinical pregnancy is one which is confirmed by ultrasonography or histopathologic examination. (ASRM, 2008).

⁸ http://www.uscfertility.org/fertility_options/egg_freezing/egg_freezing_faqs.php

⁹ <http://www.ivf-worldwide.com/education/ivf-egg-collection/in-vitro-maturation-ivm.html>

have been no live births of children born from the maturation of oocytes from cryopreserved ovarian tissue or an entire ovary (Uzelac et al., 2012, p. 82). Only about 28 babies have been born worldwide from ovarian tissue grafting (Silber, 2012). In comparison to the estimated five million babies born from assisted reproductive technologies, these numbers for births associated with FP are quite low. Nonetheless, live births resulting from oocyte cryopreservation, ovarian tissue cryopreservation and IVM demonstrate that FP technologies can be successful.

Determining the success rates of FP technologies can be tricky. This is true for several reasons. First, as I have already mentioned, some FP technologies are still experimental; their efficacy and reliability have not yet been determined (Demeestere, Bassa, Moffa, Peccatoric, Poirot & Shalom-Paz, 2012; Kim, 2006). Second, many patients who have used stage 1 FP have not yet used their stored reproductive materials in stage 2 FP. Third, there are no national or regional databases that systematically track the use of FP technologies, so large-scale comparisons of pregnancy and live births are lacking (Klonoff-Cohen, 2012). Fourth, fertility success rates may sometimes underreported (Vasireddy & Bewley, 2013). Success rates may also be exaggerated or skewed in order to attract prospective clients (Yee, 2011). Given some serious gaps or problems in the research concerning success rates, the estimates I outline below are apt to change as more information becomes available.

For men, sperm cryopreservation is a well-established technology. Sperm freezing yields a relatively high success rate for gamete viability. Approximately 60% of sperm will survive the freezing and thawing process (Genesis Fertility, 2008). The chances that cryopreserved sperm will result in a genetically-related child depend on the female partner's (or contract pregnant woman's) age, fertility status and the method of assisted reproduction that she uses. However, little is known about the probable success rates of experimental FP procedures, such as testicular tissue cryopreservation.

The success rates of reproductive technologies for females have dramatically improved in recent decades. One U.S. national study reported that 37% of IVF cycles led to a clinical

pregnancy, but only 30% resulted in a live birth (Center for Disease Control, 2009). However, in the context of FP technologies, determining an individual's chances of producing a child through FP technologies is especially difficult. Each technological intervention compounds the odds and affects the success rates. For example, the chances of success for a woman who uses frozen eggs and IVF will depend on the number of oocytes that survive the thawing process and the given success rates for IVF. The chances of a successful pregnancy might be further reduced if these oocytes were matured in IVM. Recent data suggests that the fertilization rates and pregnancy rates for oocytes frozen using vitrification are similar to the success rates for IVF using fresh eggs in young patients (ASRM, 2012; Cobo, Meseguer, Remohi, & Pellicer 2010; Noyes, Knopman, Labella, McCaffrey, Clark-Williams & Grifo, 2010). If oocyte cryopreservation or other FP technologies are as successful as IVF technologies, then persons using stage 2 FP might reasonably expect an approximately 30% chance of producing a genetically-related child. Indeed, no FP technology, or assisted reproductive technology for that matter, can guarantee a live birth. However, even a low chance of success may make FP technologies attractive to some people who desire genetically-related offspring, but fear they will become infertile before they have the opportunity to reproduce.

1.4 Ethical Challenges

Like other reproductive technologies, FP technologies raise a number of ethical questions. Most generally, assisted reproductive technologies raise concerns about the potential harms and benefits to individuals and society. FP technologies are unique insofar as they deal with potentially vulnerable populations, such as cancer patients and children, and they also involve the use of experimental technologies. In this section I describe some of the ethical challenges that arise in the context of FP and I highlight those challenges surrounding choice about FP technologies for women.

First, FP that occurs within the cancer context involves sick and vulnerable patients. Some of these patients will not survive their cancer. This fact raises ethical challenges about who should be offered FP technologies and what is required to promote the well-

being and autonomy of those patients involved in FP decision-making. Some healthcare providers have voiced concern about permitting patients with a very poor prognosis to use FP (Debono, Kohnke & Helft, 2009). The possibility that some patients will die before they can use their reproductive material also raises concerns about how stored reproductive material should be disposed of, or whether it is morally permissible to allow deceased patients' family members to have access to the stored reproductive material.

Second, many FP technologies that occur within the cancer context are still experimental. These technologies are only offered within the context of clinical trials, so the distinction between research and therapy is blurred. The overlaps between research and therapy can raise challenges for obtaining patients' informed consent about these procedures. There can also be challenges for obtaining patients' informed consent about non-experimental FP procedures in the cancer context. This is because the presentation of FP options could influence patient decision-making. In particular, patients might decide differently about FP procedures that are presented as therapeutic as opposed to those presented as elective procedures. Determining how technologies ought to be presented to patients is an important challenge for the provision of oncofertility research and services.

Third, an interesting question that underlies the use of FP technologies is whether genetic reproduction is valuable in itself. To put it another way, it is questionable whether being exposed to the risks associated with FP technologies are worth it to secure the *possibility* of future genetic reproduction. For some people, genetic reproduction (or reproduction, more generally) is not an option worth preserving. After all, family building and childrearing can also occur through adoption and foster parenting. So, some patients' parenting desires could be satisfied through other family building options. Yet others may have no desire to be parents.

Fourth, there are interesting problems that arise in the FP context for children. FP technologies used for children stress the three general problems I list above. These pediatric FP technologies are also ethically challenging because young children cannot consent to FP procedures. Some theorists maintain that some young children can provide

their *assent* (and *dissent*) to treatment, yet theorists disagree about *when* a child is capable of doing so and the extent to which pediatric assent should factor into parents' decisions about FP technologies (Clayman, Galvin & Arntson, 2007). There can be disagreement among parents, physicians and sometimes the patients themselves concerning at what age a child can give consent. Since FP technologies are future-directed, some children (or even young adults) might not be mature enough to understand or decide on their reproductive futures.

Decision-making in the pediatric FP context often occurs by parents on their child's behalf. Making such difficult and emotional decisions for one's child amidst a new and devastating cancer diagnosis cannot be easy for parents. Parents might worry that the use of FP technologies in children compromises their present or future well-being. This is because FP interventions are not benign. The removal of reproductive material, as mentioned, can delay the onset of puberty and cause hormonal imbalances. In addition, some theorists suggest that children who use FP might be unduly pressured to reproduce in the future (Nisker, Baylis & McLeod, 2006).¹⁰ FP in the pediatric cancer context is fraught with ethical challenges. However, the ethical challenges unique to pediatric FP context are beyond the scope of this dissertation.

In this dissertation I focus my attention on examining FP technologies for women. This is not because FP technologies for men are free from ethical challenges; admittedly, male-centred analyses concerning assisted reproduction and infertility are lacking (Inhorn, Tjørnhøj-Thomsen, Goldberg & Mosegaard, 2009). There is a particular need to consider ethical issues surrounding infertility and FP for men in the context of cancer.¹¹ However, given space limitations in this thesis and unique risks associated with FP for women, I focus on FP for women, rather than men. There are other reasons for my emphasis on FP

¹⁰ There is a particular worry in paediatric oncofertility that parents will choose FP for their young children out of their own self-interest in preserving their lineage or having grandchildren.

¹¹ Some of my discussions and policy recommendations, such as the importance of informed choice, the influence of biologism and the moral relevance of paternal age to reproduction will have bearing on ethical issues surrounding FP for men.

for women. Historically, social ideologies and public policy have shaped and constrained women's reproductive choices (Albury, 1999; Solinger, 2005). Women's reproductive capacities have served to define their womanhood and oppress women as a group within patriarchy. For many women, reproductive choice and control are central aspects of their well-being. This is because of the serious physical, emotional and social consequences that childbearing and rearing can have on individual women or on women as a group within patriarchy. For individual women, childbearing and rearing is physically, emotionally and often financially onerous, especially within patriarchal contexts where women are usually primary caregivers.

The increasing availability of FP technologies is sure to affect the reproductive landscape. On one hand, FP technologies are giving women opportunities for delaying motherhood and enabling them to have greater control over when or how they reproduce. On the other hand, these FP technologies are reinforcing the social mandates around procreation and motherhood that have historically been used to oppress women. Restrictions of access to abortion and contraceptives are paradigmatic examples of how reproductive policies can affect women's lives. Access to FP technologies for women outside of the cancer context is controversial in ways that sperm cryopreservation is not. The differences between FP for men and women suggest some unique and morally problematic issues surrounding choices about FP technologies for women.

1.5 A Feminist Analysis of FP

In this dissertation, I approach the challenges posed by women's use of FP technologies from, what can best be described as, an egalitarian liberal feminist perspective. In what follows I describe my feminist approach to the challenges surrounding FP technologies and defend my emphasis on choice.

In particular, my egalitarian liberal feminist perspective is one which emphasizes the importance of both personal and political autonomy for women. The freedom to live the life of one's own choosing and to participate in determining or shaping the social conditions under which one lives are fundamental personal and social values. However,

the ability to develop and exercise one's autonomy are dependent upon certain social conditions. Social conditions which can enable women's autonomy include, but are not limited to: freedom from violence and the threat of violence; freedom from paternalistic or moralistic laws that unfairly target particular groups of women; access to (meaningful) options; and the ability to assess one's own preferences and imagine life otherwise (Baehr, 2012). Insofar as the development and exercise of autonomy are important aspect of women's well-being, an egalitarian liberal feminist approach is committed to both promoting and securing the positive social conditions that can enhance women's autonomy.

Most generally, my feminist approach commits me to the following basic insights: that women (and girls) are oppressed; oppression is unjust; that oppression of women is pervasive in nearly all aspects of social life; and that political action is necessary to combat oppression. Within patriarchal societies, women suffer oppression from sexism, but also from other types of oppression, such as racism, classism, heterosexism, ageism and ableism. Each type of oppression involves the existence of systematic and structural injustices that can harm marginalized groups (Cudd, 2006; Frye, 1983; Young, 1990). Oppressive social contexts can unduly shape and constrain individual's choices, actions and desires. Often, the operation of oppression can be subtle and its detection requires the analysis of emergent patterns in social contexts. A feminist ethical analysis draws attention to intersectional oppression and recognizes that agents are contextually embedded in multiple relations of power.

A feminist perspective is useful within the healthcare context because the social position (age, race, religion and socio-economic status, etc.) of individual patients, families and healthcare providers can influence a patient's access to FP services. This social positioning can also influence patients' decision-making about FP. A feminist perspective emphasizes the social and political nature of individuals and the importance of social context, especially its oppressive dimensions. Social context can influence not only which FP decisions are made and how, but also which options are available to begin with.

Furthermore, certain positive social conditions are sought by feminist inquiry and required for autonomy. In this dissertation I will demonstrate how a feminist ethical analysis of oncofertility technologies is necessary to a fuller understanding of the moral complexities of female FP.

FP technologies raise some of the following ethical questions that specifically concern choice and are of interest to feminists. These ethical questions include: *Which social values ground the availability of certain reproductive choices? Which beliefs, norms or ideologies can influence FP choices? Who should have the choice to use FP technologies? What are the conditions under which the choice to use FP is morally permissible? What are permissible moral limitations on the choice to use FP?* Choice about FP is an important theme that runs through these questions and throughout the chapters of my dissertation. Given my emphasis on choice, my analysis will focus only on patients who are able to make choices about FP and give their consent to treatment. In other words, for the purposes of this dissertation I shall exclude the case of women who are unable to consent to FP.

An examination of choice concerning FP technologies is important because it draws attention to what values and ideologies ground the availability of various reproductive technologies, such as FP. It also highlights why various reproductive options might be valuable to women and how they might benefit from or be harmed by having these reproductive options. An examination of choice also concerns the extent to which our choices about reproductive technologies can be autonomous. There are important questions about how social structures, norms and ideologies can hinder or promote women's reproductive autonomy. The primary goal of this dissertation is to show how a feminist analysis is important for both understanding and improving women's choices concerning FP technologies.

Below, I summarize the remaining chapters of my dissertation.

1.6 Chapter Summaries

Together, the remaining chapters of this dissertation show why a feminist evaluation of choice helps illuminate some ethical questions about FP technologies for women. I begin my ethical analysis by considering which social ideologies can influence both the availability of FP technologies and the choices in favour of FP technologies. Using a feminist ethical analysis I show how some of these social ideologies are oppressive. I then consider in more detail how these oppressive social biases might hinder women's reproductive autonomy and offer ethical guidelines for promoting and securing autonomous decision-making about FP technologies. Having established how social context can both impede and promote choices about FP technologies, I next consider the moral permissibility of granting women access to FP technologies. I compare the moral permissibility of granting access to stage 1 FP to women who wish to guard themselves from infertility for disease-related reasons and those who wish to do so for age-related reasons. I show that granting access to both groups of women is morally permissible within a patriarchal context. Finally, I explore whether there should be limitations on women's access to FP technologies within patriarchy. In particular, I consider whether an upper age limit on women's access to stage 2 FP is morally justified. My evaluation in each of these chapters emphasizes the roles that social context can play in shaping and influencing women's choices about FP technologies. Together, these chapters illustrate some of the ways that a feminist analysis can inform the ethical provision of FP technologies. Let me now describe each chapter in more detail.

In Chapter two I offer conceptual analyses of two oppressive social biases that may coerce women into choosing reproductive technologies. In this chapter I draw a conceptual distinction between pronatalism and biologism. Most generally, pronatalism is a social ideology in favour of bearing children. Biologism, by contrast, names a social ideology in favour of genetic-relatedness. Feminists invoke the terms "pronatalism" and "biologism" in their evaluations of assisted reproductive technologies and adoption, respectively. However, they have yet to examine fully the nature of and differences between each of these social ideologies. In this second chapter I take up this task. I argue

that pronatalism and biologism, although related, are distinct social biases that can unduly influence reproductive decision-making. My analyses of pronatalism and biologism aim to distinguish these concepts from one another. My analyses also distinguish between non-feminist and feminist versions of each ideology. I argue that feminist conceptions of pronatalism and biologism pick out oppressive social biases and show that each of these biases is necessary for understanding women's choices surrounding FP technologies. Having established that these biases are distinct and can influence FP decision-making in different ways, I then consider whether their influence can be combated within an ethical FP decision-making process.

Chapter three explores the appropriate conditions for promoting autonomous choice about FP decision-making. In this chapter I engage with Natalie Stoljar's (2011) argument concerning whether informed consent secures patients' (relational) autonomy. I outline an account of relational autonomy and by appealing to real oncofertility case studies I demonstrate how pronatalism and biologism might influence patient decision-making. I then argue for a relational conception of informed choice that is equipped to protect and promote patient autonomy. I outline a process of informed choice for FP decision-making. My informed choice model offers some practical guidelines for promoting FP patient autonomy in the face of pronatalism, biologism and oppressive social contexts, more generally. I conclude that autonomous decision-making about FP technologies is possible through an ethical process of informed choice. However, I leave open the question of whether providing women with the choice to use FP technologies is morally permissible.

Although FP technologies have been praised within the cancer context, some critics have objected to uses outside of the cancer context. Chapter four explores the moral permissibility of giving women access to FP technologies. In this chapter I consider whether there are any morally relevant differences between stage 1 FP choices for women within and without the cancer contexts. In this chapter I engage with an argument by Imogen Goold and Julian Savulescu (2009) concerning women's access to FP

technologies. According to Goold and Savulescu, there are no morally relevant differences between each type of FP use that can ground a restriction on age-related FP, while allowing disease-related FP. In this chapter I show that Goold and Savulescu's arguments fail to address the concerns of critics of age-related FP. These critics believe that women outside of the cancer context have more reproductive control and opportunities than women inside of the cancer context. I argue that such views are mistaken because oppressive social structures and ideologies can make reproduction especially difficult for all women. Thus, I argue if we allow disease-related FP, then we ought to also allow age-related FP.

I also consider whether FP technologies should be offered to women within the context of patriarchy and I lay out some moral conditions for the moral permissibility of offering these technologies. Patriarchal societies are structured in ways that can make childbearing at a younger age burdensome for women and that seriously constrain women's reproductive choices, more generally, or impede their ability to make autonomous reproductive decisions. I suggest that FP technologies can help to alleviate some of these oppressive barriers within patriarchy and that there are good reasons to offer FP alongside other social policies and programs that aim to remove some of the patriarchal barriers that interfere with women's reproductive autonomy in the first place. Having established that access to stage 1 FP is permissible within a patriarchal context, provided that certain conditions are met, I next consider the moral permissibility of access to stage 2 FP.

Chapter five examines the moral permissibility of upper age limits on women's access to stage 2 FP and other assisted reproductive technologies. Many FP patients may wait several years or decades before using their stored reproductive material in attempts at reproduction. The foreseeable normalization of FP technologies reinforces the need to reconsider whether age is morally relevant to assisted reproduction. In this chapter I refer to the practice of childbearing through assisted reproductive technologies by women over the age of 50 as "advanced maternal age" or AMA for short. I engage with the argument

by Jennifer Parks (1999) who argues that arguments against AMA are ageist and upper age limits to assisted reproduction are arbitrary and unjust. In opposition to Parks, I suggest that arguments against AMA, if taken together, highlight concerns for women, children and society that accompany certain cases of AMA. I maintain that age serves as a proxy for a number of physical, psychological and social conditions and these conditions can help to determine whether the access to assisted reproductive technologies by persons in certain age groups is likely to cause more harm than good. My discussion of the risks to women, children and society associated with AMA help to show that age can be morally relevant to reproduction. I then suggest that as age increases, the moral permissibility of AMA decreases, so some upper age limit on women's access to assisted reproduction is morally permissible.

In Chapter six I conclude by summarizing my arguments and highlighting my contributions to the philosophical and bioethical literatures. I also review the policy recommendations that stem from the chapter in my dissertation. In Canada, there is a pressing need for the development and implementation of ethical FP policies, since at present, no such national regulation exists. I end this chapter by proposing some future research projects, which stem from my work in this dissertation.

My conclusions offer valuable feminist insights for the development and improvement of policies surrounding female FP technologies. Feminist responses to FP technologies, such as the ones I offer in this dissertation, should play an important role in establishing the appropriate ethical guidelines for the provision of assisted reproductive technologies. As my ethical analysis in this dissertation will demonstrate, a feminist perspective is useful for identifying and combating the oppressive social forces such as pronatalism and biologism that can impede autonomous choice about FP technologies. Feminist insights can also help to identify social conditions that enhance autonomy. These feminist insights can lead to social and structural improvements for the ethical provisions of FP technologies.

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Chapter 2

2 Social Biases and Fertility Preservation: Conceptual Analyses of Pronatalism and Biologism

Many feminists worry that under patriarchy, coercive pronatalist ideologies will influence a number of women's reproductive choices by compelling them to use assisted reproductive technologies (ART) (Corea, 1985; Overall, 1989; Purdy, 1996). Although pronatalism—a social bias in favour of bearing children—can influence women's decisions to pursue fertility preservation (FP) technologies, pronatalism alone fails to explain why some cancer patients accept the risks of FP given alternative options, such as egg donation. In this chapter I argue that biologism—a social bias in favour of genetic-relatedness—explains why some women pursue FP.¹²

To date, the terms 'pronatalism' and 'biologism' have been used in often ambiguous and conflicting ways within feminist and non-feminist scholarship, government policy and popular media. For the purposes of this dissertation, I am primarily interested in these biases as they occur within the domain of human reproduction. Yet, even in the domain of human reproduction theoretical disagreements exist concerning the nature and implications of pronatalism and biologism. In this chapter I offer conceptual analyses of pronatalism and biologism. Conceptual analysis aims to clarify the nature of concepts. By distinguishing the various meanings or conceptions of a particular concept, one can demonstrate theoretical disagreements concerning the nature or application of the concept under analysis. In *A Theory of Justice* (1971) John Rawls offers a conceptual analysis of justice and he shows that the general concept of justice and the various particular conceptions of justice are distinct. Rawls maintains that although we may have reasonable disagreement about the particular demands of justice, we can still have a

¹² In a presentation at Hypatia's 25th Anniversary Conference in October 2009 (and also in McLeod in Woodruff et al., 2010) Carolyn McLeod suggested that biologism could compel some people to choose to use oncofertility technologies. However, McLeod does not go into detail about the nature of biologism, nor does she examine the differences between pronatalism and biologism.

shared understanding about what the term ‘justice’ means. Indeed, such a shared understanding is necessary for any fruitful debate concerning the particular demands of justice to occur, because without it theorists would simply be talking past each other.

In what follows, I employ a similar concept/conception distinction in order to demarcate feminist conceptions of pronatalism and biologism from non-feminist conceptions. My conceptual analyses aim to distinguish the abstract and general definition of each concept from the competing substantive *conceptions* of these concepts. In other words, I will show that in general, people share a common understanding of what the concepts of pronatalism and biologism mean, while at the same time holding different or opposing ideas about the nature and implications of each bias. Further, by demarcating feminist and non-feminist versions of each social ideology I highlight the sources of theoretical disagreements concerning the nature, value and influence of pronatalism and biologism. In drawing these distinctions, I make a novel contribution to the philosophical literature.

I begin by offering definitions of each abstract concept. Next, I give an analysis of pronatalism by distinguishing non-feminist conceptions from feminist conceptions. Building on feminists’ uses of pronatalism, I outline and argue for a particular conception of pronatalism as coercive and then apply my definition to decision-making about FP technologies. My analysis shows that pronatalism cannot always account for why a woman might choose to cryopreserve her own reproductive material for future use.¹³ I then offer a conceptual analysis of biologism and apply my proposed feminist conception of biologism to oncofertility contexts. My account demonstrates how feminist versions of

¹³ Of course, some women might choose to use FP technologies for reasons other than pronatalist or biologicistic social pressures. For example, in the cancer context one might choose in favour of FP because it is future-directed and gives her hope for life after cancer. She might also be interested in minimizing the damage done to her body by cancer and cancer therapies. However, even these two alternative reasons for choosing FP respectively indicate that genetic reproduction is a valuable future option or reproductive capacities are important. I do not intend for my analysis in this dissertation to preclude other reasons for choosing in favour of FP technologies, but I wish to emphasize that social norms, especially those in oppressive contexts can unduly compel some women to choose in favour of FP technologies.

pronatalism and biologism, although related, are distinct social biases, which can each influence reproductive decision-making.

Distinguishing pronatalism and biologism from one another and from non-feminist versions of each social bias allows for a more nuanced analysis of reproductive technologies. Furthermore, insofar as discussions of pronatalism and biologism are largely confined to feminist analysis of ART and adoption, respectively, my conceptual analyses bridge feminist scholarship in these domains. Undoubtedly, dialogue and collaboration amongst feminists studying ART and adoption is long overdue.¹⁴ Since adoption and ART are both methods for creating families and also sites of potential harm and exploitation for women and children, feminist scholarship stands only to be improved by bridging the literatures on ART and adoption.

2.1 The Concepts of Pronatalism and Biologism

In this section I propose preliminary definitions of the general concepts of pronatalism and biologism. In the most general sense, pronatalism *is a social attitude, ideology or practice that promotes producing children*. This definition captures what most uses of the term ‘pronatalism’ have in common. The media, policy-makers, demographers and feminist scholars, (among others), use such a definition to describe any policies, practices or social norms that encourage the birth of children.

As it is used both within and beyond the domain of human reproduction, biologism identifies any social ideology in favour of biology. Outside the domain of human reproduction, biologism includes, for example, biases which favour the primacy of biological explanations of human behaviour and personality traits.¹⁵ However, in this

¹⁴ Francois Baylis and Carolyn McLeod are currently editing the first anthology in philosophy that will bridge work on adoption and ART. See Baylis, F., & McLeod, C. (Eds). 2013.

¹⁵ Arguably, this conception of biologism might be evident in reproductive practices insofar as assumptions are made about the character traits or appearance of potential children. For example, in choosing to create a genetically-related child, a woman might assume that the child she produces will share in her physical and character traits. Although this might turn out to be true, genetic-relatedness cannot guarantee that specific traits will be inherited by offspring. Attributing phenotype certainty to genetic-relatedness is misguided and places too great an influence on genes over environmental factors. Furthermore, even if biologism is

dissertation my focus is on the concept of biologism as it appears within the domain of human reproduction. The general concept of biologism is slightly more challenging to define than pronatalism because the term is less widely used and because the concept has been given different names in the academic literature. I propose that biologism, in the most general sense is *a social attitude, ideology or practice that promotes biological relationships*. As I will show, this social bias is especially evident in adoption and ART literature and practices.

My preliminary definitions of pronatalism and biologism pick out social practice and attitudes, which on the surface do not seem harmful or oppressive. Feminists maintain that many ‘-isms’ such as sexism, racism, ageism and ableism, are social biases that promote and maintain oppression (Cudd, 2006; Pharr, 1997). Of course, not all ‘isms’ are malignant. Hedonism, fallibilism and voluntarism are just some examples of ‘isms’ that are benign. Accordingly, one key task in this chapter is to consider whether pronatalism and biologism, like sexism and racism, are necessarily malign ‘isms’ or if benign conceptions of these social attitudes exist. I suggest that although a benign conception of pronatalism can exist, it is unlikely that a benign form of biologism would exist. Moreover, any manifestation of the feminist conception of each bias is by definition harmful and oppressive. My conceptual analyses define these oppression-promoting conceptions of pronatalism and biologism.

2.2 Pronatalism

The concept of pronatalism was defined above as a social attitude, ideology or practice that promotes human reproduction. This general definition is the foundation for competing conceptions of pronatalism that are invoked by demographers, (non-feminist) philosophers, religious organizations and feminists. In general, there are two types of

understood in this way, it is likely that most beliefs concerning this kind of reproductive ‘control’ are closely aligned with the belief that genetic relatedness is better than non-genetic relations, especially between parent and child.

pronatalism, those which assign a positive value to human reproduction and those which tie childbearing to women's identities.

Conceptions of pronatalism which assign a positive value to childbearing are used by demographers and some philosophers. In public policy literature, demographers¹⁶ identify "pro-birth" policies aimed at increasing national (or international) birthrates as pronatalist and define pronatalism as the "encouragement of all births as conducive to individual, family and social well-being" (Heitlinger, 1991, p. 344). An example of a pronatalist policy is the current Russian government's financial reward program for women who bear children (Momaya, 2011, p. 1; Poston & Bouvier, 2010, p. 350). Generally speaking, pronatalist government policies aim to encourage child birth. This is often done by implementing policy changes related to taxation, employment, housing, gender equity, family and child services or education that make childbearing easier or more profitable for prospective parents. Pronatalist policies are often in response to declining national birthrates and they address the need to secure future tax-payers, consumers, etc.

Similarly, pronatalism encompasses a philosophical position that stands in opposition to antinatalism. Antinatalism is a philosophical position that assigns a negative moral value to procreation (Benatar, 2006).¹⁷ Thus, a non-feminist philosophical conception of pronatalism is one that assigns a positive moral value to procreation and stands in opposition to antinatalism and perhaps neutralism about procreation.¹⁸ Both the demographer's and non-feminist philosophical conceptions of pronatalism are characteristic of a type of pronatalism that simply assigns a positive (practical or moral) value to human reproduction.

¹⁶ Feminist demographers generally adopt a different conception of pronatalism from most non-feminist demographers. For example, Judith Blake (1974) is critical of a "coercive pronatalism" that limits women's reproductive autonomy.

¹⁷ David Benatar (2006) argues the coming into being is always a harm. Thus, he maintains that there is a moral imperative for humans not to procreate.

¹⁸ For example, Smilansky (1995) argues that under certain conditions many people are morally required to attempt to bring children into being (in order to raise them).

The second type of pronatalism is one which connects human reproduction to people's identities. In particular, this type of pronatalism ties childbearing to women's identities and is evident within various religions and in many patriarchal societies. Religions, such as Christianity, Orthodox Judaism and Islam promote childbearing and childrearing as women's natural duty to a deity. For example, in the Hebrew Scriptures (Old Testament), Genesis 1.28 requires that humans "be fertile and increase, fill the earth and master it" and in the Bible women's salvation is achieved through childbearing (1 Timothy 2:15). Religious pronatalism mandates childbearing for religious followers, especially for (married) women and connects this childbearing to women's religious identities.

Likewise, a coercive form of pronatalism exists within patriarchal societies that mandate childbearing and motherhood as *natural* roles for women. This conception of pronatalism makes reproduction central to a woman's identity *qua* woman. Also, the mandate to bear children can significantly reduce women's (reproductive) freedom and serves to maintain men's dominance over women. Arguably, the sort of pronatalism that exists within patriarchal societies is perpetuated by (if not also grounded in) numerous religious ideologies and practices that are themselves patriarchal in nature. Although an examination of the relationship between religious and secular patriarchal conceptions of pronatalism is beyond the scope of this dissertation I wish to highlight the fact that religious and secular pronatalist ideologies overlap within patriarchal societies and I maintain that both religious and secular conceptions of pronatalism that tie childbearing to women's identities warrant feminist concern.

There are, then, two dominant types of pronatalism, those which simply assign a positive value to childbearing and those which tie childbearing to (women's) identity. The first type of pronatalism is not inherently malignant and one can imagine this type of pronatalism existing in a just society. A just pronatalist society might promote pronatalism in order to secure tax-payers and consumers in future generations and to promote other goods connected to rearing children. In such a society, childbearing could be encouraged through monetary or social incentives, such as extended parental leave.

For pronatalism to be benign, pronatalist policies and social norms would have to be accompanied by adequate healthcare, just employment opportunities, quality public education and a whole host of social welfare policies that could reduce or eliminate any costs incurred by women (and men) that choose to bear or rear children. Also, this just pronatalist society would need to value both childbearing and childrearing work, but at the same time afford its citizens the freedom to opt out of reproductive roles without incurring any social or financial harms. So it seems that a conception of pronatalism that merely assigns a positive value to human reproduction can be benign, provided that just social arrangements are in place, women's reproductive decisions are made freely and reproductive labour is socially valued and supported.

In principle, feminists would not object to such a benign type of pronatalism; however, to the degree that we live in an unjust and sexist society means that in practice, even benign conceptions of pronatalism will manifest in ways that will harm women. Of the two types of pronatalism mentioned, feminists are most critical, however, of the second type of pronatalism which ties childbearing to women's identity. This type of pronatalism is inherently malignant, and according to feminists, it operates to promote and perpetuate harm and oppression to women. In what follows, I outline the key components of a feminist conception of pronatalism and I propose and defend a feminist conception of pronatalism that plays a fundamental role in women's oppression within patriarchy.

2.3 Patriarchal Pronatalism: A Feminist Conception of Pronatalism

In 1974 Ellen Peck and Judith Senderowitz edited the first (and only) feminist anthology which explores pronatalism within patriarchy. At that time, the editors proposed that a feminist analysis of pronatalism was still in its infancy and pronatalism was only beginning to be understood as an oppressive and harmful social bias. To date, the majority of feminists readily criticize a conception of pronatalism that can unduly influence women's reproductive autonomy. However, despite feminists' frequent references to a coercive pronatalism, the feminist conception of pronatalism has been under-defined and under-examined within academic literature.

In this section, I describe what feminists have said about pronatalism, with respect to the sexist and patriarchal underpinnings of this ideology, the normative ideals mandated by pronatalism and the penalties associated with a failure to meet the pronatalist mandates. I begin by outlining the key features of a feminist conception of pronatalism, in order to demonstrate how it is distinct from non-feminist conceptions. I then propose a definition of a feminist conception of pronatalism, which I shall refer to as *patriarchal pronatalism*. Next, I sort out what is required for fulfilling the patriarchal pronatalist mandate, especially in light of ART advancements, such as contract pregnancy and ovum donation, which have fragmented the various components of human reproduction. For example, through contract pregnancy one woman can commission another woman to gestate her genetically-related offspring or using ovum donation, a woman can bear and rear children who are not genetically related to her. I maintain that pregnancy is an essential component in meeting the patriarchal pronatalist mandate and further, I argue that a genetic relation between a mother and the child she bears is not necessary for fulfilling this mandate.

There are four key elements to a feminist conception of pronatalism that distinguish it from non-feminist conceptions. First, as suggested above, feminists are critical of a conception of pronatalism that ties childbearing to a woman's identity *qua* woman. This type of pronatalism *essentializes* women as reproducers (Inhorn, 2007, p. 7-8, my emphasis), and *defines* women largely by their reproductive status (Purdy, 1996, p. 218, my emphasis). Peck and Senderowitz suggest that a key element in pronatalist thought is the idea that "a woman's role *must* involve maternity" (1974, p. 1, my emphasis) and Judith Blake suggests that "pronatalist ideologies measure an individual woman's worth on her ability to bear children and achieve motherhood" so that most women are not truly free to opt out of childbearing and rearing (1974, p. 290). This aspect of pronatalism is reflected in pronatalist stereotypes about what constitutes real and true womanhood.

Anne Cudd argues that the proliferation of stereotypes is one way in which oppressive social attitudes are learned (2006, p. 75). Stereotypes about femininity characterize

women as caring, nurturing, loving and selfless and these are also the characteristics that are stereotypically associated with motherhood. Such stereotypes promote pronatalist mandates by creating the illusions that childbearing and rearing are both *natural* and *normal* for women (Peck & Senderowitz, 1974, p. 21). In addition, women who achieve the pronatalist ideals are seen as real, true, complete and good women (Morgan, in Overall, 1989, p. 71). Thus, childbearing is constructed as a form of achievement and/or as a way of confirming or actualizing one's identity as a woman. Childbearing is also constructed as a locus of power for women and many women who bear children gain the social status that accompanies motherhood. Bearing children is construed as the highest satisfaction and good a woman can achieve.

The stereotypes around womanhood, femininity and motherhood are culturally relative and the pressure to bear children and to mother can vary in different social contexts. For example, in Western cultures, the pressure to bear children can differ with respect to a woman's age, class, race, etc. McQuillan et al. (2008) show that the importance of motherhood differs according to an individual's race/ethnicity. Undoubtedly, pronatalist mandates for affluent white women and poor black women are quite different (Roberts, 1995). Further, women who are deemed unworthy and fail to meet the stereotypical pronatalist ideals, such as disabled women, teenagers and poor women are often discouraged from bearing children (Thomas, 1998). Despite these conceptions, it remains true that in general, women's identities are intimately connected to their reproductive functions.

Second, pronatalism is coercive. 'Femininity' and 'womanhood' are (in part) defined by childbearing; so many women are unduly pressured into having children. However, the coercive nature of pronatalism is especially evident in the social stigmatization and personal sufferings that are experienced by many women who do not bear children. Since

women's identity, qua women, involves childbearing, childfree/ childless¹⁹ women are often perceived as *deficient*, *unnatural*, not *real* women and ultimately, are undervalued in a pronatalist society. Although all women are measured against the idealized standards of femininity and motherhood (Morell, 2000), the social stigmatization and personal sufferings can be different for voluntarily childfree women and involuntarily childless women.

Voluntarily childfree women are stigmatized as selfish and uncaring. One Australian study found that misconceptions and stereotypes about childlessness are pervasive, despite the rising trend of voluntary childlessness in Australia (and internationally) (Rich, Taket, Graham & Shelley, 2011). Quite often, childfree women are often perceived as *socially deviant* and their child-free lifestyles may be associated with individualism and the breakdown of the nuclear family (Park, 2002, p. 25). Indeed, many voluntarily childfree women face constant pressure to alter or to justify their child-free status. The social pressure to justify one's child-free status sends the message that failing to have children is socially (and perhaps morally) unacceptable for women. Ultimately, the stigmatization of childfree women reinforces patriarchal pronatalism.

In contrast, infertile or involuntarily childless women are stereotyped as *desperate*, *unfulfilled* and *failures*, despite any social sympathies that might be afforded to involuntarily childless women who try (and fail) to achieve pregnancy. For many women, infertility can include personal suffering and depression and the emotional responses can include distress, loss of control, and a disruption of the trajectory of adulthood (Cousineau & Domar, 2007).²⁰ Also, some studies have shown that many infertile women feel as though their inability to gestate a child has compromised their femininity (Dyer et al., 2002; Dyer et al 2005). Juraskova et al. (2003) found that women who were treated for gynecological cancer felt that their femininity had been lost when their ability to bear

¹⁹ I refer to women who choose not to have children as 'childfree' and use 'childless' to describe women who desire to bear children, but are unable to have any.

²⁰ Also see Greil (1997) for a critical review on the literature concerning infertility and psychological distress.

children was removed. So, for these women, infertility directly compromised their identities as whole and complete women. Such feelings of inadequacy and deficiency could compel some women to bear children. The stigma associated with childlessness is magnified in many developing countries where women have relatively few options and childbearing is often seen as the reason for marriage (Dyer et al., 2002, p. 1666).²¹ In some cases, this social stigma attached to infertility is accompanied by emotional and physical harm or abuse (Dyer et al., 2002).

The coercive nature of pronatalism is also evident in the social distribution of moral blame and responsibility assigned for infertility. Historically, women have assumed the blame for infertility and the power imbalances between men and women has given men “the power to assign responsibility to women” for male infertility (Kirkman, 2008, p. 242). Carolyn McLeod and Julie Ponesse (2008) argue that the bad luck associated with infertility is often bad *moral* luck for women. The authors maintain that pronatalist ideologies, which target women, can help to explain why many women blame themselves morally for infertility, even when the infertility is well beyond their control. One result of this self-blame is that women, as opposed to men, take managerial responsibility for infertility (Card, 1996; McLeod & Ponesse, 2008, p. 133). Women who attempt to manage their own (or their partner’s) infertility, by researching or arranging fertility treatments, for example, can suffer additional psychological and physical stresses that are associated with infertility, fertility treatments or childlessness. In addition, taking managerial responsibility can create the illusion of having more control over one’s fertility than one might actually have, and thus promote a sense of personal failure and blameworthiness if and when fertility treatments are unsuccessful.

Indeed, a sense of moral responsibility for infertility can compel women to desperately seek solutions for their infertility ‘problem’. Women express a willingness to go to great measures to overcome the “life crisis” of being unable to bear a child (Stuart-Smith, &

²¹ This does not mean, however, that there is not opportunity for resistance in highly pronatalist cultures. See for example, Riessman (2000).

Scott, 2011, p. 102) and many women turn to ART in an attempt to achieve childbearing and avoid the pain and stigmatization of infertility and childlessness. Although ART provide no guarantee that a child will be produced, some women are compelled to pursue motherhood at all costs. Often, failure to conceive or become pregnant is seen as an “opportunity for increasingly complex and distressing interventions” (Sherwin, in Overall, 1989, p. 265). Many infertile women are “no longer confronted with a moment when they can say, without guilt, that they tried and failed” (Ibid) and women who choose to get off the ART treadmill too early, or avoid it all together, are perceived as reproductive failures through the lens of pronatalism (Harwood, 2007; Sandelowski, 1991). The physical, psychological and financial costs of pursuing ART can be devastatingly high for many women or couples, yet many childless women perceive the treatment failing as the only risk (Stuart-Smith et al., 2011, p. 102). In this context, the pervasive social pressures to bear children along with the threat of social sanctions and personal grief make pronatalism a coercive social bias.

A third aspect of patriarchal pronatalism is that it mandates that women bear men’s genetically related offspring. Barbara Berg suggests that “women must bear children for their husbands” (2000, p. 211) and Gena Corea maintains that patriarchal institutions propagate the idea that “women are nothing unless they bear a man’s children” (1985, p. 169). The desire or pressure to bear a child for their husband comes up again and again as a primary reason for pursuing infertility treatments (Dyer, Abrahams, Hoffman & van der Spuy, 2002; Hussain, 2009; Stuart-Smith et al., 2011, p. 100). For example, one infertile woman believed that “a woman is useless if she does not bear the progeny of her husband” (Hussain, 2009, p. 86). Producing children is understood as the very purpose of marriage (Ibid) and many women felt that infertility posed a serious threat to their relationships (Dyer et al, 2002). In order to achieve womanhood and have social worth, women must bear their partner’s genetically-related offspring.²²

²² Arguably, this aspect of pronatalism may be less evident in North American culture.

Under patriarchy, paternity is extremely important. A genetic relationship between father and child (especially a male child) operates within patriarchy to maintain male dominance. One reason is that the transfer of property is patrilineal, that is, passed on from father to son (Clark & Lange, 1979). Genetic relationships between women and offspring are less important under patriarchy, since women have traditionally been viewed as the “property of men” and *not* as “owners of property” (Hirschon, 1984). Fatherhood is constituted by genetic relatedness in this patrilineal cultural context (Cully & Hudson 2009, p. 249) as opposed to being constituted by the lived or social relationship between parents and children. The result of this patrilineal focus is that women are often expected to bear their husband’s genetically-related children (Corea, 1985, p. 169).

Finally, patriarchal pronatalism serves to promote and maintain sexism. Pervasive stereotypes, which define women by their childbearing roles, the penalties suffered by childfree and childless women and the mandate to bear men’s children all create and reinforce an atmosphere that essentializes and devalues women as reproducers and serves the interests of men, at the expense of women. Women bear the majority of reproductive and rearing responsibilities, yet receive little financial or social rewards in return for assuming these social roles that are largely undervalued within patriarchal societies. Because these social roles are characterized as natural and normal roles for women, it can be easy to justify the lack of social or monetary rewards that accompany these roles. Reproductive and caregiving responsibilities are expected from women under patriarchy and some men have used facts about women’s reproductive biology to systematically disadvantage women.²³ Pronatalist mandates play an instrumental role in maintaining women’s subordinate social positioning within patriarchy by significantly constraining their choices as compared to men’s choices (Okin, 1989, p. 138). So long as women are assigned the majority of the reproductive and rearing responsibilities, women shall remain in a socially subordinate position to men.

²³ See for example, Clarke (1873)

In summary, patriarchal pronatalism connects childbearing to women's identities, is a coercive social force, is linked to sexism within patriarchy, and mandates that women bear men's genetically-related offspring. Accordingly, I argue that ***patriarchal pronatalism is a coercive social bias, which grounds women's identities on their reproductive roles and mandates that women bear men's genetic children.***

Given that gestational, genetic and social aspects of motherhood can be separated, my discussion of patriarchal pronatalism thus far has yet to address the requirements for meeting the patriarchal pronatalist mandate. To begin with, I have not commented on whether rearing a child that one bears is a necessary component of fulfilling the pronatalist mandate. Accordingly, I will briefly comment on the relationship between childrearing and childbearing and consider whether both are required for fulfilling the pronatalist mandate. Further, some theorists may disagree about whether gestation and a genetic connection between a pregnant woman and her fetus are each required for meeting the patriarchal pronatalist mandate. I argue that patriarchal pronatalism demands a pregnancy, but not a genetic connection between the pregnant woman and her fetus.

My above discussion alludes to the existence of a close relationship between childbearing and childrearing within patriarchal societies. Both childbearing and childrearing contribute to defining womanhood and motherhood and both can play a key role in maintaining and promoting women's oppression. However, my definition of patriarchal pronatalism does not include a rearing component. My view is that, although these two mandates are intimately connected, pronatalism and the motherhood mandate are theoretically distinct. These ideologies reinforce one another within patriarchal societies that define and constrain women by their reproductive capacities and fully understanding women's oppression under patriarchy will require an examination of both pronatalism and the motherhood mandate. Since the focus of this chapter is primarily to demarcate pronatalism and biologism, an assessment of the relationship between pronatalism and the motherhood mandate is a topic for another paper.

The role of pregnancy in fulfilling the pronatalist mandate is another point of potential disagreement. One might object to my definition of patriarchal pronatalism by claiming that pregnancy is not necessary for achieving womanhood, femininity or motherhood within a patriarchal society and argue that an intending mother who hires a contract pregnant woman to carry her husband's genetically-related offspring is fulfilling the pronatalist mandate. Since the intending mother is using a contract pregnant woman to *give her husband* a genetically-related child that she plans to rear, one might maintain that she is fulfilling the pronatalist mandate. I suggest that, although the intending mother may be filling part of the pronatalist mandate by giving her husband a genetically-related child, she fails to fully meet the requirements of pronatalism. This is because pregnancy plays a crucial role in promoting and perpetuating patriarchal pronatalism. Pregnancy is a key element of patriarchal pronatalism because it serves to mark a biological difference between women and men which, historically, has served to perpetuate men's dominance over women. Also, pregnancy plays an important symbolic role within patriarchy. I shall develop these two points in turn.

First, because the ability to gestate and bear children is a uniquely female attribute, it has served to justify biologically essentialist arguments that assign different (and unequal) social roles to men and women. Without this material difference in reproductive roles, women and men are (or could be) more equal with respect to childcare. Constructing childbearing and rearing as natural maternal instincts, makes it the case that women are expected to bear and rear children.

Pregnancy and postnatal infant care are physically and emotionally difficult for many women. Women, not men, bear the majority of the physical and emotional stresses and risks of pregnancy and women are most often responsible for (breast) feeding and caring for young infants. Male partners can participate in the pregnancy and neonatal processes in some of the following ways: by providing emotional support, attending Lamaze classes or doctor appointments and bottle feeding or caring for the infants. However, gestation

and caring for a neonate are much more onerous for women than for men (Luxton & Corman, 2001).

In contrast, adoption processes require relatively equal involvement by both prospective parents. The ability to bear children not only means that women have gestational responsibility, but it also serves to justify women's (as opposed to men's) 'natural' inclination to be caregivers. Pregnancy requires a steady nine-month bodily commitment that a woman cannot defer to someone else when she needs a break. Post pregnancy, many women will choose to breast feed which also requires a bodily commitment that women cannot easily delegate to another caregiver. After birth, however, many women can share or delegate the caregiving responsibilities to their partners, family or friends. Motherhood without gestation does not involve the pains and labour of pregnancy and postpartum care. In principle, family building that does not involve pregnancy for the female partner removes the material support for differences between men's and women's parenting responsibilities. It affords men and women the opportunity to share more equally in the processes of both acquiring and rearing a child.

Second, pregnancy plays a unique symbolic role within patriarchal society. Pregnancy is symbolic of motherhood; and the ability to gestate and give birth to a child is a way of achieving a sense of normalcy. Stuart-Smith, Smith and Scott suggest that, for women, experiencing pregnancy is central to achieving a sense of fulfillment, even when it is achieved through donor eggs (2011, p. 110). Quite often, women who use donor embryos are seeking to have the experiences both of pregnancy and of mothering. The gestational link is emotionally important for the woman who wants to feel that she is a normal mother who conceived 'naturally', despite the use of double gamete donation (Landau et al., 2008). Some women cite the importance of being pregnant and having others recognize that they are pregnant even if the child is not genetically-related to the pregnant woman (Culley & Hudson, 2009, p. 259). Further, pregnancy can be a way of achieving some normalcy for socially marginal women. For example, Israeli lesbian women are encouraged to bear children, even outside of the traditional (heteronormative) family

framework. These women recognized that their “mainstream” identity as mothers overrode their “marginal” identities as lesbians (Ben-Ari & Livni, 2006, p. 527). So, for some women, pregnancy can be a key avenue through which womanhood is achieved.

From a social perspective, women who are pregnant are perceived differently than non-pregnant women. This is especially true when these women are visually pregnant. First, the knowledge or assumption of pregnancy can lead people to make a host of normative assumptions about the woman and the child she will bear. For example, people might assume that she will rear the child she is carrying and also that the child is genetically-related to both her and her male partner. Second, pregnancy can change the way that people relate to a woman. In a recent study which compared the impact of pregnancy on gestational contract pregnant women and intending mothers, the researcher found that while contract pregnant women attempted to hide signs of pregnancy and often passed as non-pregnant, intending mothers gained weight or wore prosthetic pregnancy bellies to create the social illusion of pregnancy (Teman, 2009). This suggests that there is a performative element to pregnancy and the social recognition of pregnancy is important to legitimizing motherhood.

This differential treatment can be both positive and negative, depending on the context. A study by Hebl et al. (2007) illustrates how women who were perceived as pregnant were treated differently from non-pregnant women in traditionally feminine and traditionally masculine environments. In a retail setting, pregnant women were treated more favourably than non-pregnant women. However, in the job interview context, pregnant women were treated with hostility. These findings suggest that women’s reproductive biology can serve as a justification for restricting women to traditionally feminine domains (such as retail environments) and excluding them from traditionally male domains (such as corporate environments). The findings by Hebl et al. demonstrate how some patriarchal norms can reward pregnant women who conform to stereotypical gender roles and penalize those women who challenge patriarchal expectations about pregnancy.

Within patriarchy, being perceived as pregnant can significantly influence how a woman is treated by others.

Returning to the above objection concerning whether or not the intending mother in a contract pregnancy arrangement is fulfilling the pronatalist mandate, I suggest that she ultimately fails to fulfill the key aspect of patriarchal pronatalism. Without gestation, she cannot meet the patriarchal pronatalist mandate. She can, however, fulfill the motherhood mandate by rearing the child born by the contract pregnant woman. Similarly, I suggest that women who only adopt children are fulfilling the motherhood mandate, despite failing to actually give birth to children who are genetically-related to their male partner. Arguably, contract pregnant women may fail to fulfill either mandate. This is because contract pregnant women do not intend to rear the children they bear, nor are these children genetically-related to their male partners (if they are in a heterosexual partnership). But, more importantly, some contract pregnant women are disconnected from a personal mothering identity and do not see themselves as the mothers of the fetus they are carrying (Teman, 2009). It is possible that contract pregnant women might be less influenced by pronatalist ideologies. In this respect, contract pregnancy challenges both patriarchal pronatalism and the motherhood mandate as opposed to supporting or perpetuating them.

Finally, I consider whether patriarchal pronatalism requires that women (not their partners) be genetically-related to the child(ren) they gestate. Barbara Berg construes the pronatalist mandate as involving a *genetic* relation (2000, p. 211), yet as I will argue, there are good reasons to think that pronatalism does not require that women bear genetically-related offspring. First, the word ‘pronatalism’ comes from the Latin word *natalis*, which means birth (a derivation of ‘natus’, which means to bear or to be born). Other words that stem from ‘natalis’ include: prenatal, perinatal and postnatal. These words signify, *before birth*, *during birth* and *after birth*, respectively. The etymological root of pronatalism and the related terms give one reason to think pronatalism focuses on the bearing of children. Indeed, Peck and Senderowitz suggest that the “key element in

pronatalist thought is the age-old idea that a woman's destiny and fulfillment are closely wedded to the natal or birth experience” (1974, p. 1). So, the etymological root provides the first indication that the concept of pronatalism is picking out something about birth.

This patriarchal expectation to gestate men's (not women's) genetically-related offspring is reflected in some invasive infertility practices and patients' attitudes. Stuart-Smith et al (2011) observed that some infertile women with previous biological children chose to undergo IVF, despite their reservations about the associated risks, in order to give their husbands genetically related children. These women wished to “not deprive their husbands of the joys of fatherhood” (Stuart-Smith et al, 2011, p. 100), a fatherhood, which, given their IVF use, is constituted genetically (not socially). In addition, many women who are fertile but whose male partners have reduced fertility opt to undergo IVF with ICSI (intracytoplasmic sperm induction) to try and conceive a child which is genetically related to their male partner. These IVF/ICSI practices demonstrate how pronatalism can compel some women to undergo risky and expensive fertility procedures in order to give their husbands genetically-related offspring.²⁴

The value of male genetic-relatedness with offspring is also reflected in some the taboos against donor sperm. Many people, including both men and women hold negative attitudes towards the use of donor sperm (Cully & Hudson, 2009; Engert et al., 2004, p. 4-6; Eisenberg et al., 2010). A study by Eisenberg et al. (2010) measured men's and women's attitudes towards the use of donor sperm or eggs in achieving pregnancy found that men and women were skeptical about the use of donor sperm, but not of donor eggs. These findings suggest that donor sperm holds a different (more negative) social meaning than donor ova, especially within heterosexual relationships. This coincides with patriarchal ideologies, which can compel men to produce genetically-related children in

²⁴ Arguably, there may be some fertile women who choose IVF and ICSI in order to produce a child with their partner because they want a child that has their husbands physical or personality traits. An acceptance that pronatalism can compel some fertile women to choose these reproductive services is also compatible with the view that some women do so for other (additional) reasons.

order pass on their property and continue their family lineage.²⁵ Participants in Cully and Hudson's study, which examined religious and cultural attitudes towards third-party assisted conception found that the use of donor sperm is perceived as analogous to having "sexual relations with a third party" (2009, p. 255) and some women liken the use of donor sperm to "a form of adultery" (2009, p. 256). The cultural perception that donor sperm is analogous to adultery, in part, reflects cultural norms and restrictions concerning women's sexuality, particularly those women in heterosexual marriages. These norms construe women's bodies as the property of their husbands.

In contrast to men's and women's reactions to donor sperm, men and women are more accepting of the use of donor ovum (Cully & Hudson, 2009; Eisenberg et al., 2010) and there is no reference to ovum being like a form of adultery. Cully and Hudson found that women viewed the use of donor eggs as less problematic than the use of donor sperm because using "donated ovum fertilized with their husbands sperm was believed to be an inclusive technique that allowed for both parents to have 'ownership' over the process of conception, and for the child to be 'connected' to both parents" (2009, p. 257-8). So, for women the gestational process represents a biologically meaningful way to connect with their non-genetically-related child. In this study women believed that through gestation and birth they would bond and connect with the child and the father would maintain the more crucial genetic link with the child. Another study also reinforces the notion that, women feel more attachment to children that they bear themselves (whether genetically-related or not), than to a genetically-related child gestated by another woman (Power et al., 1990, p. 354). Thus, many women understand (or construct) motherhood in ways that do not necessarily require genetic-relatedness to their offspring. This helps to show that gestation, not genetic-relatedness is central to women's experiences of fulfilling the patriarchal pronatalist mandate.

²⁵ Similar patriarchal ideologies also mandate the conditions of manhood. Part of what being a man within a patriarchal society includes having power and wealth and property are one measure of power.

The above arguments give reasons to believe that pregnancy is a necessary feature of the concept of pronatalism and that a genetic relationship is *not* a necessary feature of pronatalism. In summary, I have argued that the differential treatment of women based on their reproductive functions, the symbolic nature of pregnancy, the etymology of pronatalism, the importance of genetic fatherhood and women's perception of donor ova, all support my definition of patriarchal pronatalism. This concludes my conceptual analysis of pronatalism. In the next section I examine the degree to which pronatalism might compel some women to choose FP technologies.

2.4 Fertility Preservation in the Cancer Context

Fertility impairments caused by some cancers and cancer therapies have triggered the development and provision of a number of technologies that aim to preserve the fertility of cancer patients. Arguably, fertility preservation is desirable for those cancer patients who wish to have biologically-related children post-cancer. Some studies have found that the majority of childless cancer survivors express a desire to have children in the future (Schover et al., 1999). Further, the social and personal importance placed on fertility (or potential fertility) is highlighted in numerous studies that cite the severe psychological distress that infertility can have on individuals (Carter et al., 2005; Carter et al 2010; Cousineau & Domar, 2007; Domar et al., 1993; McQuillan et al., 2003). Although not all cancer patients desire biological offspring in the future or wish to ever become parents, FP technologies aiming to secure the option of future biological reproduction address the desires and/or needs of some (if not many) cancer patients.

FP technologies have developed, in part, on the premise that biological reproduction holds great value for individuals. Cancer patients are no exception. According to some oncofertility researchers, many people find parenting their own genetic child compelling and some believe that this is because “a deep desire to propagate our own germ line is part of who we, as people, are” (Gardino et al., 2010, p. 447). The underlying assumption here is that desire to reproduce is a strong and natural desire for people. Biological

reproduction is seen as a primary (and perhaps superior) way of creating a family and FP technologies aim to secure this valuable family-building option.²⁶

Given the strong pronatalist pressures in society, it seems as though patriarchal pronatalism *could* compel some female patients to use FP technologies in an attempt to get pregnant in the future. It is not surprising that a coercive pronatalism that grounds women's value on their reproductive function could compel some women to seek medical interventions to preserve or protect their fertility. Since childbearing is perceived as a route to achieving womanhood, many women whose cancer therapies will threaten their fertility might perceive FP technologies as a sort of insurance plan, if attempts at natural coital conception post-cancer fail.

However it is not clear that patriarchal pronatalism alone, can compel women into pursuing FP. There are two reasons for thinking that pronatalism cannot fully explain why some women are compelled to use FP technologies. To begin with, FP cannot guarantee that pregnancy will be achieved in the future. Many FP procedures are experimental and the success rates have not yet been determined and even if reproductive material is successfully removed, cryopreserved and thawed in the future for subsequent use, the IVF procedures which may be required to achieve pregnancy cannot guarantee a viable pregnancy will occur. Pregnancy and birth are required to fulfill the pronatalist mandate, so the mandate will dictate that women use the eggs that are most likely to result in a viable pregnancy. Since one's chances of bearing a child are higher with fresh donor eggs than thawed cryopreserved ones, the logical choice (if compelled by pronatalism alone), would be to opt for using donor eggs in the future.

Another reason for believing that pronatalism cannot by itself compel women to choose FP is that the choice to pursue FP is accompanied by a host of physical and psychological risks that could otherwise be avoided if one were to choose a different avenue of

²⁶ For some people, biological reproduction is also more affordable and less complicated than other family building options, such as adoption or the use of assisted reproductive technologies.

achieving pregnancy. This is especially true in the cancer context where some patients are seriously ill and preparing to undergo taxing cancer treatments, such as radiation and chemotherapy. As mentioned in the first chapter, some of the risks associated with FP include a delay in the onset of cancer treatment (often 4-6 weeks for those procedures involving oocyte removal); speeding up the progression of cancer when using hormonal stimulation therapies required for egg retrieval; reintroducing cancer into the patient's body when ovarian tissues are re-implanted; and an unwanted pressure to use cryopreserved reproductive material in the future. Pronatalism cannot explain why some women expose themselves to these additional physical and psychological risks because if pregnancy is the goal, it would be possible to avoid many of these risks by using donor eggs in the future, if necessary.²⁷

Of course, it may be the case that the availability of donor eggs could influence a woman's decision to pursue FP. If a woman believes that donor eggs will be difficult to acquire in the future, she may be compelled to cryopreserve her own eggs rather than taking the risk of trying to obtain donor eggs. Some government regulations surrounding ART can make the acquisition of donor eggs more difficult. In Canada, for example, donor oocytes can sometimes be difficult to acquire. One reason for this is that Canada's *Assisted Human Reproduction Act* (2004) prohibits both the purchase of gametes and financial reimbursements or compensation for gamete donors. Although some studies have shown that some women donate eggs for altruistic reasons (Winter & Daniluck, 2004; Yee et al., 2007), it has also been found that financial compensation can be a primary reason why some women will undergo invasive and risky ovarian stimulation and oocyte extraction in order to donate their eggs to strangers (Kafoglou & Gittelsohn, 2000; Klock et al., 2003; Lindeheim et al., 2001). The risks associated with egg donation, the prohibition on gamete sales, and the regulations on compensation make it unlikely that the supply of oocyte donors will meet the growing demand for oocytes. Thus,

²⁷ Likewise, if raising children is the goal, then one could also choose to adopt post-cancer.

without a known donor, such as a sister or friend, it can be difficult for many women and couples to obtain donor eggs.

Obtaining donor eggs might also be more difficult for individuals or couples who wish to obtain a particular kind of donor egg. For example, a woman or couple might seek out an egg donor who has physical traits similar to the intending mother's physical traits.

Prospective egg recipients might desire an oocyte donor who meets particular physical criteria, has certain character traits or originates from a particular ethnic group. For those individuals who desire a particular type of egg donor, obtaining donor eggs that meet their criteria can make finding an egg donor even more challenging. Furthermore, donor eggs might be difficult or very expensive to obtain in some places, such as Canada where the sale of oocytes is prohibited or eggs are in high demand. However, as I discussed in the previous chapter, FP technologies can also be quite expensive. Furthermore, growing trends in reproductive tourism and a booming online marketplace for third-party assisted reproduction are making oocytes more readily available, even in Canada. Also, certain experimental FP technologies, such as those involving IVM, for example can yield much lower success rates than established procedures such as IVF using oocyte donation. Insofar as the costs of oocyte donation and FP are comparable, oocytes are available and the risks and uncertainty of FP outweigh the risks associated with third-party assisted reproduction, patriarchal pronatalism cannot fully explain why some women choose FP technologies. In the remainder of this chapter, I explore a feminist conception of biologism and consider whether it can compel some women to choose oncofertility technologies.

2.5 Biologism

Earlier, I defined the general concept of biologism as a social attitude, ideology or practice that promotes biological relationships. In what follows, I offer what I believe to be a novel conceptual analysis of biologism. I begin by demonstrating the various ways that biologism is highlighted within academic literature and I examine what it means to be biologically related to others. I outline some preliminary features of biologism and

offer examples from adoption and ART literatures and practices to illustrate the existence of this bias. Finally, I suggest that biologism would not likely exist in a just world.

Biologism has been identified by different names within the academic literature. For example, Elizabeth Bartholet (1999) argues that a “biologic bias” shapes the reproductive choices of women and Sarah-Vaughan Brakman and Sally Scholz (2006) raise concern over the “undue emphasis on biological/ genetic relatedness” in discussions about adoption. Also, Sally Haslanger (2009) criticizes the “bionormativity” evident in David Velleman’s 2005 work on biological ties, and Tim Bayne and Avery Kolers (2003) consider whether “geneticism” (genetic parenthood) is necessary or sufficient for establishing parenthood. Leslie Bender (2003) recognizes a “genetic essentialism” that permeates court rulings in child-custody disputes and likewise, Dorothy Roberts (1995) criticizes the social and legal tendencies to “give primacy to a genetic tie” in determining who counts as an individual’s parents and constructing that individual’s identity. In addition, Judith Grant (1989) claims that “biologism” can be problematic for stepfamilies (and other non-biologically related families) because it gives primacy to biology in defining families.

The different terms above, are all used to pick out social attitudes, ideologies and practices that favour biological relatedness. Usually, biological relatedness refers to genetic relatedness. When one says “they are my biological parents”, what one usually means is “they are my *genetic* parents”. In the case of pregnancy, however, ‘biology’ can be ambiguous because women can have two types of biological connections to their offspring. First, they can share genetic material and DNA with the fetus. Second, through gestation, a woman and a fetus share blood and nutrients. Of course, only the latter type of biological connection will be true of gestational contract pregnancy. In contrast, men can *only* have a genetic relationship with their offspring.

Despite this terminological ambiguity, what I call ‘biologism’ is typically used to refer to genetic relations. In lay or popular discourse the term biological relatedness is often used to refer to shared genetic material and the notion of the gene itself played an important

role in popular culture explanations of personal identity and familial relatedness (Duden & Samerski 2007; Nelkin & Lindee 1995). For example, the components of motherhood are usually broken down into the categories of intending, biological (genetic), gestational and social motherhood. Also, using ‘biologism’ is similar to the terms that feminist scholars have already employed to describe this social bias in favour of genetic relationships. Furthermore, biologism is concerned with kin relationships that extend beyond the mother-child relationship. So, an emphasis on the gestational relationship would be unable to capture the shared genetic relationship between kin. Thus, biologism is a social bias concerning the genetic connection between parents and their offspring and also between other genetically-related kin. Fourth, “biologism” can represent a broader set of social ideologies concerning kinship, blood-relatedness, biology and genetic lay theories. An appeal to biology can capture what “blood ties” represent for individuals without a coherent understanding of genetic relatedness. Jacqueline Laing suggests that the language of “blood” might actually be describing matters of identity formation that go beyond what is meant by a scientific and technical term like genes (2006, p. 551). Biologism can better represent the network of social ideologies that make up a bias that favours biological/ genetic relatedness. Biologism fits with both feminist and lay discourses concerning kin relations, so I will use it to refer to the strong social bias in favour of biology, i.e. genetic-relatedness.

Biologism enforces a hierarchy among biological family relations and non-genetic (or social) family relations, where the former are perceived as superior to, or more desirable than, the latter. This bias includes both the relationship between parent and child and also the relationships among extended family members, such as grandparents, siblings, aunts, uncles etc. Biologist ideologies suggest that genetic relationships represent the quality and strength of familial relationships and the degree of genetic-relatedness is often used as a social marker to identify the strength of the relationship. For example, people sometimes describe siblings as their *half*-brother or *half*-sister (even when they were raised in the same household). This suggests that the half-siblings are deficient as siblings; that half siblings themselves or the relationship between the siblings is *less* than

whole, *less* real, *less* valuable than siblings from the same two genetic parents. In contrast, full siblings are perceived as real siblings.

Ultimately, biologism is grounded in the lay assumption that a person's biological make-up or DNA is an essential part of who they are as a person. Genetic lay theories are organized belief structures that reflect the view that genes influence human traits and help people understand and predict human behavior (Jayarathne et al., 2006, p. 79). Lay genetic theories advocate a degree of genetic essentialism that is committed to the idea that individual heredity constitutes the essential nature of a person in a way that socially influences do not. Genes and DNA are posited as responsible for our physical appearance, personality traits and health. Quite often, genetic lay theories have a special standing as "valid" theories (Ibid) and are thus viewed as representing some objective truth about individual or family identity. Erica Haines (2003) suggests that DNA testing is perceived as the indisputable and objective measure of family relatedness. Trends in paternity testing, for example, have reinforced the idea that true paternity is identified through a direct genetic relationship between a man and his offspring. So, the belief that our DNA is an essential component of our identity is connected to the assumption that genetic connections are a main way (and perhaps the only way) of identifying who is a part of one's family.

Like pronatalism, biologism is a normative social ideology, which permeates social narratives, practices, policies and attitudes with messages about what is normal, acceptable and natural. Biologistic ideologies promote the idea that genetic relationships are more natural and more desirable than non-genetic relationships. Although this bias promotes genetic relationships as natural and desirable, biologism is not merely a biological instinct that favours one's genetically-related offspring over persons who are non-genetically related. Rather, it is a socially constructed ideology about how families ought to be.

Evidence for the existence of biologism is present in a number of family building practices and attitudes within ART and adoption. In the case of ART, some couples will

go to great lengths to produce a child who is genetically related to one (or both) parents. For example, the average cost of IVF in Canada is usually from \$7,750 to \$12,250 per cycle (London Health Sciences Centre, 2009). Many women who use IVF will require more than one cycle of IVF to achieve pregnancy. In order to save money and increase their chances of pregnancy some women choose to transfer more than one embryo per IVF cycle. Multiple embryo transfers, however, come with a series of increased pregnancy risks (Orentlicher, 2010). The costs of using reproductive technologies are compounded if donor gametes are required and if reproductive material is frozen and stored for future IVF cycles. In addition to these monetary costs, IVF (and other assisted reproductive technologies) can be physically and emotionally difficult for woman and their partners.

In contrast, the cost of adoption can be much lower than the costs associated with some reproductive technologies. For example, in Canada there are usually no costs or minimal costs associated with a domestic adoption through a public adoption agency. Private domestic adoptions can cost between \$10 000 to \$20 000, while international adoptions usually start at approximately \$25 000 (Canada Adopts, 2011). Although the wait times for adoption can be long, especially if parents wish to adopt infants, the adoption process is more likely to result in having a child, than most assisted reproductive technologies. In addition, the adoption process does not have the same sort of physical and emotional hardships that are typically associated with IVF.

The prevalence of ART uses, despite the physical, emotional and monetary costs associated with these reproductive technologies, as compared to the costs associated with adoption illustrate a strong social preference in favour of producing genetically-related offspring. Although some prospective genetic parents might take comfort in 'knowing where their child comes from' (insofar as we can have any useful 'knowledge' about our genetic ancestry), it is not clear that this 'comfort' is worth the costs associated with reproductive technologies. Perhaps if biologicistic social pressures did not exist, intending

parents would try to adopt a child instead of or prior to pursuing costly and potentially dangerous fertility treatments.

Furthermore, social attitudes and practices surrounding adoption also confirm the existence of biologism in Western cultures. For many couples struggling with infertility, adoption is seen as a back-up plan that gives them comfort from the pending threat of childlessness (Daniluk & Hurtig-Mitchell, 2003, p. 392). Some infertile couples also see adoption as a way for infertile couples to reconnect with the fertile world, by sharing the experiences of parenthood (Daniluk & Hurtig-Mitchell, 2003, p. 396). The rate of adoptions has declined sharply since the 1970s and only small minorities of women who have been treated for infertility have ever sought to adopt (Fisher, 2003, p. 338). So, as a family building option, adoption is a last resort for many infertile couples. As I will show, biologism perpetuates social attitudes that families created through unassisted reproduction are superior to those that require degrees of assisted reproduction, which in turn are superior to those families constructed through adoption.

Government and agency regulation surrounding adoption practices also suggests that adoption is an inferior form of parenting. The rigorous home studies and evaluations that are required by adoptive parents is one example of how prospective adoptive parents are treated differently than those prospective parents seeking to build a family traditionally or via ART. In general, no comparable tests or licenses exist for biological parents, although some theorists have argued in favour of state-issued parenting licenses for all parents (Lafollette, 1980; McLeod & Botterell, 2013). Since biological parenting is perceived as natural, biological parents are sometime characterized as more trustworthy than non-biologically-related persons and adoptive parents are treated as “suspicious until they prove otherwise” (March & Miall, 2000). The adoptive family is seen as requiring intervention and often, the “best interest of the child” is used to justify heavily state regulation on adoption practices (Ibid).

Another policy that perpetuates biologism is the requirement of many adoption agencies that intending parents ‘resolve’ their infertility issues prior to qualifying for adoption

(Smolowe, 2011). These adoption agencies often assume that intending parents wishing to adopt a child are resorting to adoption due to infertility; however, it is not always the case that prospective adoptive parents are infertile. In some cases, adoption may be viewed as the socially responsible family building option. This is because through adoption, prospective parents are giving a home to children who need a home. Furthermore, adopting, rather than creating a child (whether through unassisted or assisted measures), does not increase the population. Insofar as overpopulation is a serious global problem, the choice to adopt can be viewed as ethically superior to creating a child. The characterization of adoption as a 'back-up' plan for infertility strongly reinforces biological norms that construe adoption as an inferior and less desirable form of parenting. Policies and regulations that characterize adoption as a last resort undermine the legitimacy of adoptive families by promoting the idea that the adoptive parents would not have adopted the child(ren) they did, had they been able to produce biologically-related children.

Some feminists are critical of government regulations that treat families created through adoption differently than families created traditionally or via ART (Haslanger & Witt, 2005). Although the traditional coital method of family building would be difficult to regulate and doing so would be undesirable because it would likely result in invasive or unjust restrictions on women's lives (Engster, 2011; McLeod & Botterell, 2013), it seems that adoption and ART practices could be regulated more similarly. Bartholet (1999) maintains that the main reason for differences in adoption and ART regulations is that in the former case, there is no biological connection between adoptive parents and adopted children. Indeed, adoption and ART policies that differ primarily because of a lack or presence of a genetic connection between parents and (potential) children demonstrate the existence of biologism.

Further evidence to show that biologism exists is the practice of using donor gametes from siblings or other family members. Some infertile women and men choose to use their sibling's reproductive material in order to become pregnant or impregnate their

partner (Kirkman, 2004). Also, in some cases, daughters have donated eggs to their mothers and vice versa. It is telling that these sorts of gamete donations exist in light of the attending taboos around incest (Pennings, 2001); the challenges gamete donation can pose for familial relationships (especially intergenerational ones); and the harm that ovum extraction can cause female relatives who donate. The sharing of gametes among family members, despite these concerns, illustrates the importance placed on a genetic link.

Interestingly, the manifestation of biologism is also evident in many cases where a genetic connection is lacking. For example, some intending parents using ART try to mimic genetic-relatedness through carefully selected donor gametes or by adopting a child with similar phenotype traits as themselves (Bartholet, 2004, p. 327). In the case of adoption, during most of the twentieth century, adoption practices were structured to mimic biologically related families and adoption was a source of shame and secrecy (Kolars & Bayne, 2001, p. 530). In addition, Modell & Dombacher (1997) found that intending parents sometimes seek to adopt children of the same race or who have similar physical traits.

Likewise, the practice of choosing gamete donors with characteristics similar to prospective parents suggests that the appearance of genetic relatedness is important for many couples, families or healthcare practitioners. Seline Szkupinski-Quiroga showed that race matching often occurs in the selection of donor gametes. In one study, a participant claimed that in choosing a gamete donor it was important for her child to have “brown eyes/ hair and medium skin so that the child ‘*blends*’” (2007, p. 154, my emphasis). Similar physical characteristics are used as social markers to signify genetic-relatedness. Another example, which illustrates the prevalence of race matching in gamete donation is the need for more “Asian donors” expressed by some fertility clinics (Yuan, 1996). Choosing to adopt or create children with similar physical features to oneself can serve to conceal the use of adoption or gamete donation. In effect, these

practices seek to create the appearance of biological-relatedness and are reflective of strong cultural biases surrounding family building practices and kinship.

Moving to whether a benign version of biologism could exist: at first glance, this bias does not appear to be inherently harmful or oppressive. It is possible for one to argue that the preference for genetically-related children is a ‘natural’ desire for humans.²⁸ Indeed, the thought of having biologically-related children probably seems very desirable (and unproblematically so) to most people. Some desires, such as the desire to create and rear biological children may seem natural and genuine but it is not necessarily the case that such desires are natural or authentic. Indeed, the influence of social ideologies on our individual desires can be difficult to discern. However, there is an important distinction to be drawn between individual preferences for a particular kind of family and the sorts of social ideologies that can have an impact on people’s family building preferences.

Biologism functions not only at the individual level, but also at the social level insofar as it can guide or sanction individuals’ family building and relationship choices. The main question at hand is not whether the strong desire to produce or rear biological children would exist in a just world, but rather, whether a social ideology and practice that promotes genetic reproduction and the valuing and maintenance of genetic relationships over social relationships would exist in a just world.

It is helpful to think about *why* such an ideology or practice would ever exist in a just society. One might argue that social ideologies in favour of genetic relations could be used to compel people to reproduce. Such an ideology might be similar to demographer’s

²⁸ It could be the case that humans have a natural desire to reproduce genetically (if we understand some sexual urges to have this end). It might also be the case that for many (but not all) new parents, parental instincts drive them to prefer their genetically-related children. If these things are true, then they are much different from the sort of systemic biologicistic norms that I am concerned with in this paper. Furthermore, if these preferences or desires were natural for the majority of people, it is not clear why a society would need to reinforce these preferences through ideologies and norms around childbearing. One way these norms are reinforced is through language. For example, there is a common social script of meant to pick out one’s ‘real’ parents (a.k.a. genetically-related parents) and one’s ‘own’ children (a.k.a. genetically-related children). Describing genetic relations as real or authentic have the undesirable and harmful result of making non-genetic relations less real or authentic than genetic relations.

conception of pronatalism. Society might have an interest in encouraging people to procreate in order to secure future citizens and taxpayers. However, it seems that procreation could also be achieved through third-party assisted reproduction, so it is not clear why the children one produces need to be genetically-related. Even if third-party reproduction were deemed unjust and not a part of a just society, there is no reason to think producing genetically-related children requires that one also needs to rear their own genetically-related offspring. It is possible in a just society, children would be reared by the parents who are most capable of fulfilling children's individual needs and parents need not be a child's genetic parents. Pronatalism alone seems sufficient for encouraging people to reproduce.

Another possibility might be that a just society would promote biologicistic social policies in order to ensure that genetic parents take procreative and reproductive responsibilities for any children they assist in producing. First, this ideology could guarantee that most children have (at least) two caregivers (with the exception of those children whose parents are deceased). However, having two caregivers does not mean that children will have two adequate (or good) caregivers; surely quality is more important than quantity when it comes to caregivers. It seems to be the case that some individuals (or couples) are not suited (or able) to successfully care for children on their own.

Biologicistic ideologies might exist in order to compel genetic parents to better care for their offspring because it assumes a special and strong bond exists between genetically-related kin. But, evidence from some adoptions or gamete donations and cases of childhood abuse or neglect prove that a genetic link is incapable of guaranteeing that all genetically-related parents and offspring have a strong and special bond (Bartholet, 1993; LaFollett, 1980, p. 2010). So, an ideology that promotes responsibility for genetically-related offspring could not ensure that children will be properly cared for.

In her discussion of contract pregnancy, Elizabeth Anderson considers a broader version of this ideology. She suggests that a system of obligation amongst people for involuntary (genetic) ties, if enforced, could assure children a more secure place in the world

(Anderson, 1990, p. 80). Anderson maintains that this security will come in the form of children having access to a wider network of associations and obligations that are based on genetic kinship. In addition, such a system would support the roles of grandparents and other extended family members in nurturing children. This extended family could assist in providing stability for children whose parental homes are ill-functioning.

Although such a system may assist in promoting or protecting some valuable relationships, it seems that any system based on the primacy of biological relationships will suffer other problems that make it undesirable (or impossible) in a just world.

First, it could be harmful to orphaned children, especially those who lack any genetically-related relatives. This is because adoptive parents or foster parents would view (or be encouraged to view) caring for these orphan children as second best to caring for their genetically-related children. Second, a version of biologism that is understood as a social pressure to take responsibility for one's genetic offspring could not fully explain what might compel individuals to actually produce genetically-related offspring when building a family. This ideology could only compel biological parents to take responsibility for their genetically-related offspring. Biologism might compel parents to care any genetically-related offspring that they create. However, if the world is truly just, it would not include the sorts of social problems, such as extreme poverty, for example, that lead some parents to relinquish their genetically-related children for adoption, nor would it be the case that parents abuse or neglect their children (genetically-related or not) in a just world. It is not likely that biologism would exist in a just world for the sole purpose of protecting children from estrangement or neglect.

Another possibility for having biologism in a just society is that biologism might encourage the procreation of a particular *type* of citizen that is represented by the population's gene pool. For example, if one thinks that Greek culture is rooted (in part), in 'Greek' genetic heritage, then biologism could be used to encourage the reproduction of Greek citizens for the purpose of promoting (or preserving) Greek cultural heritage. But, such reasons for promoting biologism seem intimately linked to ethnic, race or class

divisions that support an in-group vs. out-group mentality. Such in/ out group divisions based on race, class etc. are undoubtedly part of an oppressive or harmful system.²⁹ Some theorists (Cudd, 2006) have shown that in-group and out-group thinking is the foundation of stereotypes and prejudices that contribute to oppressive social ideologies. If a world is truly just, one racial or ethnic group would not be preferred over another group. In a just world ethnic or racial divisions might not even exist.

Alternatively, the purpose of biologism in a just world could be to discourage women (and men) from engaging in third-party assisted reproduction. In this case, biologism might discourage ova (or sperm) donation and contract pregnancy in hopes of protecting women from the many risks that third-party assisted reproduction poses for them. However, an ideology in favour of biological relations would fail to discourage all forms of third-party assisted reproduction because this bias could encourage the use of gestational contract pregnant woman in order to help infertile couples produce genetically-related kin. So, it seems that a bias in favour of genetic-relatedness in a just world could not serve to protect women from the harms associated with ova donation or contract pregnancy or to discourage third-party assisted reproduction, more generally.

Although I am open to the possibility of a benign version of biologism existing, the above considerations illustrate that it is unlikely that such a social ideology in favour of genetic familial relations will serve any unique purpose, nor that it can exist without resulting in harm to particular individuals or groups. So long as biologism infers a social hierarchy between different types of families, family relationships or the individuals who occupy these relationships, it will result in harm for those who do not meet the biologicistic mandate. As such, what we are left with a feminist conception of biologism, which, like patriarchal pronatalism, is coercive.

Accordingly, I define *biologism as a coercive social attitude, ideology or practice that promotes the primacy of genetic relationships within families and grounds familial and*

²⁹ For a discussion of in/ out groups see Cudd, 2006, p. 28-54.

individual identity on genetic heritage. In the next section I defend this definition and offer some reasons to think that biologism warrants feminist concern.

2.6 A Feminist Conception of Biologism

In 1974 Peck and Senderowitz faced the challenge of employing ‘pronatalism’ in a new context, namely, feminist inquiry, at a time when there had been “little recognition of pronatalism as a controlling force” (1974, p. 2). Biologism now presents a similar challenge for feminist theorists, since biologism is only recently beginning to be recognized as a controlling social force within the domain of human reproduction. In what follows, I offer an analysis of what I believe to be not only the most plausible conception of biologism (given my discussion in the previous section), but also a feminist conception of this bias. *Biologism, defined as a coercive social attitude, ideology or practice that promotes the primacy of genetic relationships within families and grounds familial and individual identity on genetic heritage* is a feminist conception in so far as it highlights a systemic social bias and recognizes that this bias is connected to oppressive social structures.

In this section I argue that biologism concerns individual genetic identity with respect to physical traits, character traits and ancestry and I show how this social bias can be coercive. I maintain that biologism is inherently malignant and is oppressive both on its own and by virtue of being connected to other axes of oppression. I conclude by suggesting some reasons why biologism is especially worrisome from a feminist perspective.

I suggested earlier that biologism is grounded in the lay assumption that a person’s biological make-up or DNA forms an essential part of who they are as a person. Genes determine (in part) three broad aspects of individual identity, namely, one’s physical attributes, one’s psychological or character traits, and also one’s ancestry. Physical attributes include things like an individual’s sex, height, hair, eye and skin colour, facial features, etc., while psychological attributes can include things like a person’s temperament, natural talents or even an individual's propensity for addictions.

Meanwhile, ancestry encompasses a person's entire genetic lineage. Ancestry can include things like the histories, identities and traditions of a person's genetic predecessor and quite often, discussions of ancestral roots will make reference to particular geographic locations, ethnicities and cultures that are used to identify a group of ancestors. According to biologism, possessing knowledge of these aspects of identity, by virtue of knowing one's genetic relatives, gives an individual self-knowledge that contributes to the development of a whole or complete human identity. In what follows I examine these aspects of genetic identity in more detail and explore how biologism makes them central to personal identity.

With respect to physical attributes, individuals may have physical markers that place them in certain social groups and they may come to identify as members of this particular group. Skin colour, hair texture and other physical features can serve to place an individual into a particular racial or ethnic group and this is especially true within cultures that emphasize racial and ethnic identity.³⁰ Physical features can also mark differently abled persons. For example, persons with Down Syndrome have physical markers that are indicative of a particular genetic make-up. So, one's physical appearance can serve as a social marker indicating (or imposing) group membership.

Similarly, psychological attributes can affect how individuals perceive themselves and are perceived by others. For example, one might have natural musical talents, athleticism, intelligence or a quick wit that characterize one's personality and impact one's behaviour. Insofar as psychological attributes can have an impact on one's behaviour, they can affect interpersonal interactions. The social positioning and expectations that are placed on individuals with respect to particular physical and psychological traits can contribute to an individual's self-definition(s). These traits may then become essential features of the individual, as opposed to socially-constructed aspects of identity, for those who believe they are genetically determined.

³⁰ I should note that genetic theories of race are problematic and many theorists accept the notion that 'race' is a social construct. For a critical discussion of race in North America, see Haney-Lopez 1994.

Although environmental factors can have a profound effect on an individual's physical and psychological traits, lay genetic (or some scientific) theories fuel social narratives that attribute a primary and essential role to *genes* in establishing who one is as a person. Indeed, genes are often the target of moral blame for unfavourable physical or psychological traits or the site of moral praise for traits that are favourable. The belief that genes are responsible for one's appearance and behaviour is highlighted by the social tendency to comment on apparent similarities between biologically-related kin. For example, people often seem fascinated by any visible similarities in physical features or behaviour between parents and their children. Family members who don't resemble one another can sometimes be subject to scrutiny or questioning. Here, biologism presumes that those physical and psychological similarities are a concrete way of recognizing genetic-relatedness among persons. Similarities in physical and psychological traits can serve to affirm the connection between family members; a connection, which as mentioned previously, is characterized as *natural*, *deep*, and *strong*.

Indeed, some people assume that this genetic-connectedness is what plays a crucial role in the formation of personal identity. Velleman (2005), for example, argues that knowing one's relatives, especially one's parents provides a kind of self-knowledge that is of "irreplaceable value in the life-task of identity formation" (2005, p. 365). According to Velleman, self-knowledge requires knowing and being familiar with "people 'like me'" (i.e., our genetic relatives) (2005, p. 366). So, familiarity with our genetic relatives, especially our parents, is supposed to allow for us to see ourselves reflected in others through shared physical and personality traits, mannerisms, etc. This sort of self-knowledge is supposedly only acquired through genealogical knowledge and acquaintance. He claims that "not knowing any biological relatives must be like wandering in a world without reflective surfaces, permanently self-blind" (2005, p. 368). Some theorists, in addition to Velleman, have argued that this sort of knowledge is crucial in forming a healthy and complete personal identity (Blyth, 2002; Kramer, 2011). Other researchers have shown that this genetic-connectedness is used to construct individual and family narratives (Kirkman, 2004).

This possibility of acquiring self-knowledge also extends to knowing about one's genetic ancestry, or the entire group of one's predecessors. Knowledge of one's ancestry can involve feeling connected to a particular geographical location, or a particular ethnic group, cultural customs or traditions. For example, learning that one's ancestors came from Greece, could according to biologism, contribute to self-knowledge and invoke a sense of connection to Greece or Greek culture, or to other Greeks, more generally. In a way, knowing one's ancestral origins or genetic lineage is akin to extending one's family history and constructing connections with distant kin. The popularity of websites like Ancestry.ca and Familytreesearcher.com, which allow users to search the Internet for information about past relatives and connect with living genetically-related kin show the value that is placed on ancestral knowledge. Unlike one's appearance or behaviour, one's ancestry cannot be changed. Thus, according to biologism, genetic lineage contributes to an essential and unalterable part of individual identity.

The emphasis on genetic-connectedness and the supposed role it places in self-knowledge can be coercive. The coercive nature of biologism comes, in large part, from the idea that those who lack knowledge of their genetic-relatives or ancestry are somehow "less than whole" and "incomplete" insofar as they are missing supposedly crucial information to forming a complete self-identity (Velleman, 2005, 368).³¹ These sentiments are most strongly echoed in discussions around adoption and anonymous gamete donation in third party reproduction. Critics of these practices argue that adopted children and those born from anonymous gamete donation will lose access to their genetic relatives and thus be deprived of the self-knowledge that comes from knowing their relatives and ancestry (Velleman, 2005).³² Some theorists have referred to this lack of genetic knowledge as genetic or genealogical bewilderment (Jones, 1997; Laing, 2006, p. 563 footnote). This

³¹ The harm that adopted children experience as a direct result of not being familiar with their genetic relatives has been characterized as "genealogical bewilderment" (Sants, 1964).

³² Other theorists, such as McGee et al. (2001), are in favour of disclosing genetic information regarding adoptive parents and gamete donors for other reasons, such as the negative consequences of holding family secrets (regarding adoption or gamete donation) and the child's right to or medical need for information about her or his biological origins. These reasons are different from Velleman's "genetic bewilderment" because they do not play a central role in one's personal identity.

genealogical bewilderment is the supposed harm that adopted children experience as a direct result of not being familiar with their genetic relatives. The adoption and gamete donor registries aimed at connecting genetically-related kin and the life-long searches undertaken by some adopted children or those born from gamete donation has led some theorists to believe that those who lack this knowledge have been seriously harmed.³³ It is worth noting, however, that some theorists have disagreed with the notions of genetic bewilderment and deficient identities (Bartholet, 2004; Haslanger, 2009) and there may be good reasons to reject the belief that those who lack knowledge of their genetic relatives are harmed.³⁴ So, biologicistic ideologies promote the idea that only those with (close) genetic relationships can have full or complete personal identities.

What follows from this is that biologism can unduly influence family-building decisions. This social perception that adopted children are damaged or deficient can negatively effect prospective parent's willingness to adopt (Bausch, 2006; Miall 1987). Also, the stigmatization around non-genetically related families and the pressure to pursue biological reproduction through ART can unduly influence some people's reproductive decision-making.

Like pronatalism, biologism can unduly influence reproductive autonomy and compel some women and couples to choose risky ART in order to try and produce genetically-related offspring. Biologism can coerce people into enduring lengthy and costly ART procedures in an attempt to produce genetic offspring, rather than adopting or fostering

³³ Genetic bewilderment picks out a type of harm that has to do with personal identity and social/ familial positioning. It is worth noting that there is a different sense in which one might be harmed by not knowing her genetic ancestry/ relatives and it has to do with knowledge of one's ancestor's medical history. One could argue that medical knowledge about one's ancestors is helpful for identifying or preventing some illnesses or hereditary conditions. This second type of harm may be a legitimate concern and could warrant full disclosure and access to medical records in cases of adoption and third-party gamete donation. Nonetheless, claiming that individuals who lack knowledge of their genetic ancestry have deficient personal identities, is highly problematic.

³⁴ What I have in mind here are studies which show adoptees and children of gamete donation have life satisfaction levels, which are comparable to their (non-adopted) peers (Borders, Penny & Portnoy, 2000; Golombok & Murray, 1999). Also, further investigation of adoptees and persons born of gamete donation is warranted to determine whether or not the lack of genetic relations has been harmful.

children already in need of a home. ARTs promise to offer additional control over the future child's characteristics (even if this sort of control is not possible). So, it is not surprising that biologism can compel some infertile couples (even those requiring a double gamete donation) to pursue ART over adoption in an attempt to race-match or match for other psychical and psychological characteristics. Some intending parents using ART might try to mimic genetic-relatedness through carefully selected donor gametes or by adopting a child with similar phenotype traits as themselves (Bartholet, 2004, p. 327).

The lay belief that genes pass along physical characteristics, psychological attributes and genetic heritage contributes to making biologism an inherently malign ideology because it perpetuates various kinds of oppression. I suggest that biologism is connected to oppression in two distinct ways, namely, on its own as a type of oppression and as connected to other forms of oppression, and suggest why these connections are worrisome for feminists.

First, biologism acts as its own axis of oppression insofar as it creates a hierarchy between genetic and social relationships. This hierarchy is normative in nature and thus involves the following premises: that genetic-relatedness is superior to non-genetic relatedness; the traditional nuclear family is preferable to other models of the family; and that individuals who lack genetic connections are deficient.³⁵ To this last point, it should be noted that the trouble with an ideology that establishes a hierarchy between different families and individuals was already examined during my consideration of biologism in a just world. That discussion revealed that biologism is coercive and can seriously harm some individuals and families.

³⁵ It remains to be proven as to whether individuals who lack knowledge of their genetic origins are lacking a substantial 'basic good'. Although it is beyond the scope of this dissertation to prove that this is not the case, I think it's worth noting that there are good reasons to believe that persons who lack genetic relationships are not 'deficient'. First, the majority of adopted children do not seek out their genetic relatives. This might suggest that they do not believe that they're identity is 'incomplete'. Second, there is no evidence to suggest that adoptive children fare any worse than their non-adopted peers.

Second, the prevalence of biologism results in the proliferation of other dimensions of oppression such as sexism and racism. I briefly explore each of these in turn. Biologism can perpetuate sexism insofar as an emphasis on genes discounts “the relational, nurturing, biological contributions to reproduction that only women make— gestation and birth” (Bender, 2003, p. 4). This bias establishes parental ties on the grounds of genetic-relatedness and is dismissive of the unique contributions that only women can make so it serves to perpetuate sexism by discounting the legitimacy of reproductive labour as work. Of course not all women want to experience or value pregnancy, so the gestational relationship should not be held as natural or indicative of true womanhood. My previous argument concerning the stigmatization and harms incurred by women who do not meet the pronatalist mandate to bear children ought to have made it clear why construing pregnancy as universally desirable and natural for women is problematic. So, biologism reinforces the denigration of women’s reproductive labour and caregiving work and reinforces sexism.

Biologism is also connected to racism. What it often means to produce and maintain genetic connections is to create and value relationships with persons who have similar racial markers, similar to oneself. Indeed, according to Velleman the “basic good” (2005, p. 365) that comes from seeing ourselves reflected in our relatives is a reflection of similar, racial or ethnic characteristics. When people are compelled to produce their *own* children who share their characteristics, they may be trying to select for characteristics that serve as social markers for membership in a particular family, racial group, nation etc. Like biologism, socially ascribed racial differences are often marked by physical attributes, personality traits and ancestral heritage (Smart, Tutton, Martin & Ellison, 2012). Different races are (socially) marked by physical differences (like skin colour), (supposed) psychological differences (like intelligence) and differences in ancestral roots which often correspond to particular geographical regions, cultures and traditions. Thus, genetic ancestry is similar to racial ancestry, insofar as it is perceived as fixed and not apt to change.

Racism and biologism are also linked when race is construed as genetically determined and when genetic theories incorporate this robust sense of what our genes represent. So long as we believe our genes represent the essential components of who we are, and we also think that our race is an essential component of our genetic identity, favouring a genetic relationship over a non-genetic relationship will probably amount to favouring one's own race over another.

Feminists (Bender, 2003, p. 4; Haslanger, 2005) have rejected the premise that race is genetically determined and argued instead for an understanding of race as a social construct. The connection between biologism and race is worrisome from a feminist perspective because the biologicistic desires that compel parents to produce or mimic biological connections can also contribute to maintaining the belief that race is genetically (rather than socially) constructed.³⁶ So long as race is understood as genetically determined, the compound socio-political meanings and implications of racial identities may go unchallenged.

It should be noted that like pronatalism, biologism is context sensitive and will not have an impact on all persons equally. For example, sex reassignment surgeries and long histories of forced sterilizations, unequal access to prenatal care and ART, suggests that only some genes (or persons) are deemed valuable and worthy of replicating. Some people with severe hereditary diseases³⁷ are discouraged from having genetically-related children if they will likely pass along a severe or fatal disability (Purdy, 1996). Also, the American "Baby Scoop Era" (1940-1970) resulted in millions of babies being surrendered for adoption by 'unfit' mothers in relinquishments that were not always voluntary (O'Shaughnessy, 1994, p. 115). These examples suggest that in some cultures only select genes (or persons) are deemed valuable enough to replicate and only some genetic-relationships are deemed worthy of maintaining.

³⁶ It could also be possible that the concept of race includes both social and biological concepts. However, such a conception of race is contested (for good reasons) by some feminists (See Roberts, 2012).

³⁷ Tay-Sachs Disease, for example.

In this section I have offered a conceptual analysis of biologism and argued for a feminist conception of biologism that is coercive and intimately connected with individual and familial identity. In the next section, I review the case of oncofertility and offer an additional reason why feminist ought to be concerned about biologism.

2.7 Fertility Preservation in the Cancer Context- *Revisited*

In my previous examination of FP in the cancer context I concluded that pronatalism fails to explain why some women opt to undergo risky fertility preservation technologies. In this section, I argue that biologism can explain why some women choose to cryopreserve their own genetic material for future use. I suggest that this is especially true for any woman who cannot or would not carry a pregnancy, since if she wants biologically-related children, she must resort to commissioning a contract pregnant woman to gestate and bear her genetically-related offspring.

Fulfilling the biologicistic mandate, especially in the context of oncofertility, is much riskier for women than for men. As I outlined earlier, FP requires that women undergo onerous and invasive treatments and also commit to cryopreservation of their reproductive materials; a decision, which can ultimately constrain and shape their future reproductive autonomy.

Of course, oncofertility patients might be compelled to use FP technologies for reasons other than meeting the biologicistic mandate. For example, there are potential psychological benefits to pursuing fertility preservation (both for individuals in and out of cancer treatment). For cancer patients, FP can symbolize hope for a life after cancer. FP technologies might also offer some women a sense of control during an emotional and difficult cancer diagnosis and treatment process. Cancer patients and physicians might also understand FP technologies as a way to leave the patient's body (or bodily functions) intact, post-cancer.

Although these may all be legitimate reasons for pursuing oncofertility technologies, they do not preclude recognition of biologicistic ideologies that ground FP. Arguably,

biologistic values ground nearly all choices to cryopreserve reproductive material. This is because if this reproductive material was not (intrinsically or extrinsically) valued in the first place, then there would be no reason to try to save it from the potential damage caused by radiation and chemotherapy.

2.8 Concluding Remarks

‘Biologism’, understood as a social attitude, ideology or practice that promotes the primacy of genetic relationships within families and grounds familial and individual identity on genetic heritage can help to explain why some cancer patients are compelled to preserve their own genetic material, as opposed to using donor eggs or relying on adoption in the future. In this chapter I have shown that an examination of biologism is necessary for understanding reproductive decision-making about FP technologies. My conceptual analyses have distinguished the feminist conceptions of pronatalism and biologism from non-feminist conceptions and demonstrated why each bias warrants feminist concern. Given the coerciveness of patriarchal pronatalism and biologism, these biases seriously undermine women’s reproductive autonomy, especially concerning FP decision-making. In the next chapter I outline the necessary criteria for an ethical informed consent process that can identify and combat the impact of pronatalism and biologism on reproductive decision-making.

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Chapter 3

3 Relational Autonomy and the Moral Requirements for Informed Choice about FP Technologies

As FP technologies become more readily available to women, there is a growing need to address the ethics of informed consent about FP. Autonomy, especially reproductive autonomy, is a central aspect of well-being for women. FP technologies can advance women's autonomy by expanding their reproductive options. These technologies can also benefit some women by helping them to satisfy their desire for a child to whom they are genetically related. However, FP technologies are worrisome from a feminist perspective because oppressive social norms such as pronatalism and biologism can coerce some women into choosing FP. Insofar as FP technologies are offered to women, an ethical analysis of these technologies must deal with the conditions under which FP technologies can be chosen autonomously.

Most generally, the concept of autonomy refers to the capacities for self-governance, self-determination and self-authorization.³⁸ In bioethics, autonomy requires, at a minimum, the capacity for understanding one's healthcare options, reflecting on one's values and desires and then choosing and acting on the basis of the values that one endorses. Tom Beauchamp and James Childress maintain that *respect for patient autonomy* is a central principle in bioethics and their work *Principles of Biomedical Ethics* 6th Edition (2009) has been enormously influential on how theorists and practitioners understand patient autonomy in healthcare (Dodds, 2000; Ells, 2001; Spriggs, 2005). Although Beauchamp and Childress suggest that their principle of respect for patient autonomy is compatible with various particular conceptions of autonomy, some feminists maintain that a non-relational account of autonomy is implicit in Beauchamp and Childress' work (Donchin,

³⁸ Catriona Mackenzie made this distinction between three separate aspects of autonomy at the Relational Autonomy workshop in Montreal 2012. There are several different and competing conceptions of autonomy in moral and political theory (See Christman 2011).

2000, p. 238-9; McLeod, 2002; Mackenzie & Stoljar, 2000, p. 3-12; Sherwin, 1998). These feminists are critical of the standard non-relational conception of autonomy in bioethics because they believe that it is excessively individualistic and excessively rational. They argue that non-relational conceptions of autonomy neglect the social nature of persons and of persons' capacities, such as autonomy. As such, non-relational conceptions of autonomy fail to recognize the impact that social contexts, especially oppressive ones, can have on the development and exercise of autonomous choice, desires and actions.

In response to criticisms of non-relational conceptions of autonomy, some feminists propose an alternative conception of autonomy, namely *relational autonomy* (Donchin, 2000; Mackenzie & Stoljar, 2000; McLeod, 2002; McLeod & Sherwin, 2000; Sherwin, 2001, Stoljar, 2013).³⁹ Relational autonomy theorists are committed to the idea that "persons are socially embedded and that agents' identities are formed within the context of social relationships and shaped by complex and intersecting social determinants, such as race, class, gender and ethnicity" (MacKenzie & Stoljar, 2000, p. 4). According to these feminists, relational autonomy is essential for both identifying and understanding the effects of oppressive socialization on autonomous decision-making. Relational theories of autonomy construe agents and their capacities as dependent upon and influenced by various social relations. Some social relations, mainly oppressive ones, can interfere with autonomy, but other social relations are necessary for both the development and exercise of autonomy. Relational autonomy theorists generally accept the conditions for autonomous decision-making outlined by Beauchamp and Childress, but believe that the standard account fails to do enough to promote or secure patient autonomy because it does not recognize the relational nature of persons and their capacities, such as autonomy. Relational theorists emphasize that some relations, mainly oppressive ones, interfere with autonomy, yet other types of social relations are necessary for autonomy.

³⁹ Others reject the value of autonomy altogether (Gilligan 1982; O'Neil 2002).

Insofar as a relational approach to autonomy helps to identify the impact of oppressive socialization on patient autonomy, it seems well-suited for identifying the effects of pronatalism and biologism in the FP context. However, it is unclear how a commitment to relational autonomy is supposed to function in the healthcare context. In bioethics, a respect for patient autonomy is paradigmatically expressed through the physician (or researcher) obligation to obtain patients' written or verbal informed consent before any medical interventions. Informed consent requires that competent patients are given a choice from a set of healthcare options. It also requires that patients are given information about these healthcare options, so that they understand these options. Patients must also decide between various healthcare options in a manner that is free from explicit coercion, force or manipulation. Some feminists suggest that a commitment to relational autonomy can improve the informed consent process (McLeod, 2002; McLeod & Sherwin, 2000; Sherwin, 1998; Shkedi-Rafid & Hashiloni-Dolev, 2012). But, the idea that informed choice can secure patient relational autonomy (hereafter, patient autonomy) is controversial (O'Neil, 2003; Stoljar, 2011; Taylor, 2004). Natalie Stoljar (2011) argues that informed consent is insufficient for securing patient autonomy. She maintains that once we understand autonomy relationally, it becomes clear that the process of informed consent cannot ensure that patients exercise autonomous choice: that is, choose and act in accordance with their authentic desires. Ultimately, she suggests that the principle of autonomy is not an appropriate foundation for informed consent.

The promotion of autonomous reproductive choices is important within oppressive social contexts. In the previous chapter I argued that pronatalism and biologism are distinct social biases, which can unduly influence FP decision-making. In this chapter I consider whether (and how) relational autonomy can be secured in FP decision-making. Although I agree with Stoljar that informed consent processes that are based on non-relational conceptions of autonomy are ill-equipped for promoting patient autonomy, I do not think that severing the relationship between autonomy and informed consent is an appropriate response. Instead, I insist that a relational understanding of autonomy can serve as the theoretical basis for informed consent. I suggest that respecting patient autonomy can be

achieved by re-conceptualizing informed consent *as a relational concept*, which is grounded in relational autonomy. I shall refer to this re-conceptualized version of informed consent as *informed choice*. I argue that an ethical process of informed choice is essential in the oncofertility context, where pronatalism and biologism can seriously impede autonomous choices, actions and desires.⁴⁰

The main goals of this chapter are to critique Stoljar's arguments against informed consent and to show that relational autonomy can be secured through a process of informed choice.⁴¹ In what follows I outline the conception of relational autonomy that Stoljar endorses. I introduce and evaluate two oncofertility cases that illustrate how pronatalism and biologism can impede patient autonomy within the context of FP decision-making. I outline and evaluate Stoljar's arguments concerning the standard model of informed consent and relational autonomy (hereafter, "patient autonomy"). I then describe a relational conception of informed choice and I offer practical recommendations for enhancing patient's autonomy in the FP context. In short, I show that informed choice can protect patient autonomy.

3.1 Stoljar's Relational Autonomy

Stoljar describes a relational account of autonomy, which is inspired by Charles Taylor's work on human agency (1985; 1989). As she describes it, relational autonomy emphasizes the importance of social context for the development and exercise of autonomy and it also draws attention to the ways in which oppressive social contexts can impede one's ability to be self-governing and to critically evaluate one's own desires.

⁴⁰ A full defense of why informed consent should be grounded on autonomy would require a discussion of the value of autonomy for persons; but this defense is beyond the scope of my chapter. I think it is reasonable to assume that for most feminists, respecting some degree of autonomy is valuable for persons because it is necessary for combating oppressive social conditions.

⁴¹ Admittedly, Beauchamp and Childress' principle of respect for patient autonomy may be able to accommodate feminist concerns about the impact of oppressive socialization on persons and their capacities. Similarly, some non-relational conceptions of autonomy might be able to accommodate feminist insights about autonomy. But if that is true, then arguably these conceptions are themselves relational, and Stoljar's concerns about autonomy and informed consent apply to them as well. Nothing in my argument hangs on whether relational approaches to autonomy provide genuine alternatives to what feminists conceive of as non-relational approaches.

Stoljar identifies four themes in Taylor's work, which she claims correspond to a theoretical framework that grounds a feminist relational understanding of autonomy. These four themes include: the idea that agency develops within a social context; the claim that the exercise of agency occurs in social contexts and that this agency can be influenced by the emotional states of an agent; the notion of positive freedom which involves a kind of self-realization; and finally, the idea that a strong evaluation of one's desires is required for agency. Below, I describe how each of these connects to feminist relational theories of autonomy, according to Stoljar.⁴²

The first theme in Taylor's work is the idea that agents and their capacities develop within a complex set of social contexts (Stoljar, 2011, p. 377). Relational theories of autonomy emphasize that agents are embedded in historical, social and relational contexts, which influence the development of their capacities, including autonomy. These theories also stress that certain types of social conditions are necessary for the development of autonomy skills (Meyers, 1989). In other words, what Diana Meyers calls "autonomy competency" is the "repertory of coordinated skills, including introspective skills, communicative skills, reasoning skills, imaginative skills and volitional skills" which are all necessary for performing the kind of critical reflection that is required for autonomy (1992, p. 126). Autonomy competency is the result of certain positive social conditions that help to develop these various skills. Agents can develop these skills, such as communicative skills or imaginative skills, to different degrees. As such, the capacity for autonomy also comes in degrees (Meyers, 1989).

Relational autonomy theorists maintain that oppressive socialization can seriously hinder the development of autonomy. In oppressive social contexts, agents who are in disadvantaged social groups might have a diminished ability to fully develop the necessary skills for autonomy (Stoljar, 2011, p. 377). For example, women who are

⁴² Stoljar's description of relational autonomy may not cohere with all relational autonomy theories. However, the description she gives captures what I believe to be the most important differences between non-relational and relational conceptions of autonomy.

socialized in a sexist social context that excludes girls and women from participating in the social arts and imaginative play might not fully develop their capacity for imagination. Without such a capacity for imagination, agents may lack the ability to conceive of different ways of desiring, acting or choosing that are important for the determination of which type of action (or life) one authentically desires. Deciding which desires are worth desiring for example, requires the ability to imagine oneself acting on these desires (Mackenzie, in Mackenzie & Stoljar 2000, p. 124-150). In sum, the first aspect of relational autonomy that Stoljar discusses amounts to the claim that autonomy is causally relational, such that social contexts allow for and influence the development of autonomy.

The second theme in Taylor's work is a variant on the above thesis about the social nature of autonomy, namely the idea that agency is exercised in social contexts and the emotional states of persons that emerge from these social contexts can influence their agency. According to Stoljar, the second component of relational autonomy is that it requires the presence of certain positive non-oppressive external social conditions in order for an agent to exercise her capacity for autonomy (Stoljar, 2011, p. 377-8). In other words, the capacity for autonomy is constitutively social. This means that social context is part of what defines one's autonomy. For example, relational autonomy requires the kind of social context that allows agents to engage in (authentic) self-interpretation (the way one sees oneself in relation to others), which is essential to autonomy. Self-interpretation is important because it results in the development of self-referring attitudes that can have an impact on an agent's ability to exercise her autonomy. Let me explain.

Self-referring attitudes, such as self-trust (McLeod, 2002), self-worth (Benson, 2000) or self-esteem (Bartky, 1990) permit an agent to act autonomously by ensuring that she regards herself as both capable and worthy of exercising her capacity for autonomy. In other words, these self-referring attitudes can be characterized as a type of self-authorization. Such self-interpretation is relational insofar as it depends, in part at least,

on how we are interpreted by others. We come to understand our own value and worth partly on the basis of how others judge our worth. In positive (non-oppressive) social relationships agents can develop appropriate self-esteem and self-trust. For example, such development could take place, in part, in the context of parent-child relationships, where the child is reassured of their worth and encouraged to make increasingly difficult decisions that help to build her self-trust. In oppressive social contexts, agents can certainly hold inappropriate self-referring attitudes, such as diminished self-trust and self-worth. These inappropriate self-referring attitudes can seriously impede an agent's ability to choose and act autonomously (Stoljar, 2011, p. 378).⁴³ For example, under patriarchy, some girls and women are socialized to defer to male authority when making important financial decisions. These women may be taught to believe that they lack the reasoning skills necessary for making good and responsible financial decisions. A woman who is socialized in this way may not have the level of self-trust or the feeling of self-worth that is required for her to choose autonomously about financial matters.

The third theme in Taylor's work is that of self-realization and positive liberty. Stoljar describes this ability for self-realization as one's ability to discern one's core values. Liberty, or what Stoljar calls self-government, on the other hand, involves exercising control of one's life. To be autonomous, one must be able to discern one's (authentic) core values and then have the type of authority or control that is necessary for choosing and acting on the basis of these core desires. Both Taylor and feminist relational autonomy theorists emphasize that psychological impediments, such as false consciousness or deformed desires, can seriously impair an agent's ability for self-government (Bartky, 1990; Cudd, 2006). An agent with deformed desires is characterized as one who desires that which contributes to one's own oppression and that which she would likely not desire in a non-oppressive social context. The internalization of norms,

⁴³ McLeod also points out that one could also have an inappropriate self-referring attitudes that are inflated, rather than diminished. For example, one might overestimate her abilities in a particular domain. As such, McLeod suggests that to be appropriate, self-trust must be "justified" (2002, 104). Arguably, appropriate self-referring attitudes, in general, are those attitudes that are justified. Inappropriate self-referring attitudes are those which are unjustified.

according to relational theorists, can block agents' abilities to critically assess social norms and values that they adopt (Stoljar, 2011, p. 379). For example, under patriarchy girls are socialized to be caregivers and mothers. Through language, social practices and the media (among other things), the desire for motherhood is instilled in many girls and women such that they come to identify with mothering and to 'deeply' desire children. According to relational autonomy theorists, women who are socialized to strongly identify with motherhood might lack the ability to critically assess their desires to mother (Benson, 1991). The point here is that being autonomous requires that we act on those desires that we *authentically* endorse, but that oppressive social contexts can make it difficult to determine whether our desires are authentic or the result of oppressive socialization.

The fourth theme in Taylor's work, which is also a part of feminist relational autonomy, concerns the requirement of "strong evaluation" or what feminists call normative competency (Stoljar, 2011, p. 380-1). Strong evaluation is the "capacity to make distinctions using a vocabulary of worth among desires" (Stoljar, 2011, p. 380).⁴⁴ Stoljar explains the contrast between strong and weak evaluation. A weak evaluator is one who is capable of preferring one value over another. Weak evaluators are those agents who act in accordance with their second-order desires or act in accordance with desires that she wants to have or identifies with (Frankfurt, 1982). A strong evaluator, on the other hand, is one who does an additional assessment of her desires in asking whether her second-order desires are worth endorsing. For example, in deciding on a career, a weak evaluator would pick that job which she most desired (and most wants to desire) from a list of jobs. A strong evaluator, in contrast, would ask the additional questions, *should* I want this career? Would it be *good* for me to have it? This critical reflection, according to Stoljar, constitutes normative competency and it is important for determining whether one's

⁴⁴ To be clear, that strong evaluation is not a strong substantive account of autonomy. On strong substantive accounts of autonomy, some preferences and values are incompatible with autonomy because of their content. Strong evaluation does not restrict any preferences or values on the basis of their content. Rather, strong evaluation only requires that agents perform a normative evaluation of their preferences and values.

desires are authentic. Relational autonomy requires that agents subject their desires to normative evaluation. To be clear, such evaluation does not entail the rejection of all values that are promoted in oppressive social contexts. Normative evaluation requires that agents critically examine whether their desires are worth endorsing.

In sum, relational autonomy emphasizes that agents—their capacities, desires and evaluative skills—are profoundly shaped by their social contexts. Central to relational autonomy is that being in relation with others is morally relevant for autonomous choices, actions and desires. Relational autonomy highlights how oppressive socialization can seriously impede both the development and exercise of agents' capacities for autonomy⁴⁵ and it also emphasizes that certain sorts of relationships are crucial for the development and exercise of autonomy.

3.2 Stoljar and Informed Consent

Stoljar challenges the mainstream bioethical view that informed consent is both necessary and sufficient for patient autonomy. This is because according to Stoljar, informed consent simply fails to guarantee patient autonomy once we understand autonomy relationally (as we should). By appealing to the general conditions for relational autonomy described above, Stoljar gives two arguments against the idea that informed consent is sufficient for securing patient autonomy. The first argument concerns the conceptual incompatibility of informed consent and relational autonomy, and the second has to do with the particular demands of relational autonomy. Each of these arguments is intended to show that informed consent cannot be a mechanism for promoting autonomy, where autonomy is understood relationally. To be clear, her claim is not that we should do away with the legal requirement for informed consent, but rather that the moral requirement for informed consent cannot be grounded in the promotion of patient autonomy.

⁴⁵ As with the standard theory of autonomy, not all relational autonomy theorists agree on exactly how social contexts influence the development and exercise of autonomy.

Stoljar's first argument begins with the assertion that informed consent and relational autonomy are fundamentally different types of concepts. The former, she maintains, is an opportunity concept, while the latter is an exercise concept. She uses this opportunity/exercise concept distinction that Taylor (1985) uses to describe the differences between negative and positive liberty. In his work, Taylor construes negative freedom as an opportunity concept and contrasts it with positive freedom, which he characterizes as an exercise concept. Taylor maintains that having negative freedom (that is, being without external impediments) "is a matter of what we can do, of what is open to us to do, whether or not we do anything to exercise these options" (Taylor, in Stoljar, 2011, p. 381). In this way, it is an opportunity concept. By contrast, positive freedom is an exercise concept: it involves a degree of self-realization or the engagement of our will when exercising autonomy. The willing of a particular course of action is what separates negative and positive freedom. Positive freedom is a matter of what we do, whereas negative freedom is a matter of what we can do. Negative freedom understood as the opportunity for action, which is free from external impediments, is qualitatively different from positive freedom, understood as an agent's ability to exercise her authentic choices.

According to Stoljar, informed consent is qualitatively different from relational autonomy because the former merely opens up a space for action, while the latter requires that agents act in a certain way, namely, with a degree of self-realization. As Stoljar understands it, informed consent involves only "the weighing up of medical evidence that is presented" and ignores the factors or oppressive social conditions that can have an impact on decision-making (Stoljar, 2011, p. 382). Stoljar maintains that "informed consent as an opportunity concept is inadequate to ensure that agents exercise their preference formation with the required subject-referring attitudes" (Ibid). Stoljar's point here, I believe, is that the appropriate self-referring attitudes are prerequisites for the activity of self-realization. The opportunity to choose a medical treatment from a number of options (as characterized by informed consent) does not recognize the fact that oppressive social contexts can damage self-referring attitudes, such as self-trust or self-worth. Without the appropriate self-referring attitudes, patients cannot engage in the

activity of self-realization and thereby exercise their authentic choices. Since informed consent does not recognize or promote the importance of these self-referring attitudes, informed consent fails to guarantee the exercise of autonomy.

Stoljar's second argument concerns the failure of the informed consent process to ensure that patients exercise normative competency when making their decisions. According to Stoljar, informed consent does not require agents to exercise strong evaluation of their desires. Rather, it only requires that patients exercise a weak evaluation (Ibid) and merely identify their strongest preference. She maintains that requesting an agent's informed consent will not "encourage her to make a qualitative assessment of the internalized value or to imagine other options so that she can properly evaluate whether the internalized value is a relevant consideration in this case" (Ibid). By this, Stoljar means that informed consent will not require an agent to normatively evaluate the personal values that one refers to when making decisions. Informed consent normally requires that patients weigh the costs and benefits of certain medical procedures and decide the course of treatment based on how the medical options satisfy their strongest preferences. Since informed choice allows a patient to choose without strongly evaluating whether their preferences or desires are valuable or worth having, Stoljar maintains that informed consent cannot guarantee that patients will choose autonomously.

An obvious objection to Stoljar's criticism of the standard informed consent process is that there is little way for physicians to guarantee that patients will engage in the normative critical assessment required. In addition, a patient may reflect on their desires but fail to drop those (deformed) desires that contribute to her own oppression within patriarchy. Normative evaluation can be especially difficult for patients because desires which stem from oppressive socialization can be, or appear to be, deep and natural desires. A charitable interpretation of Stoljar does not take her to be requiring that physicians guarantee patients perform the required evaluation, rather that they be able to recognize and promote normative evaluations of desires, especially when those desires conform to oppressive socialization. Nor does Stoljar require that patients reject all

desires that cohere with oppressive socialization. Stoljar's claim, as I understand it, is not that agents need to decide against the terms of their oppression, but rather that they need to be critical of their desires, considering oppressive social contexts. However, as it stands, the process of informed consent (and the standard non-relational account of autonomy) does not require that patients evaluate the worth of their desires and values. Ultimately, Stoljar claims that informed consent does not ensure that patients make autonomous decisions either to accept or forgo medical treatment (Stoljar, 2011, p. 382).

From the above arguments, Stoljar concludes that informed consent should not be grounded in the principle of respect for patient autonomy. Stoljar's arguments concerning informed consent draw attention to some serious feminist concerns regarding the impact of oppressive socialization on some patients' choices. I agree with Stoljar that, at present, the informed consent process fails to identify or challenge the impact of oppressive socialization on patient autonomy. Where we disagree, however, is about whether the appropriate response to this problem is to sever the relationship between autonomy and informed consent or, instead, to re-conceptualize informed consent in a way that better reflects our commitments of relational autonomy. While Stoljar thinks that we are forced to concede that informed consent cannot be grounded in autonomy, I suggest that informed consent should be re-conceptualized. Before I respond to Stoljar's argument and outline a model of informed choice, I present two real-life oncofertility cases. I shall use these cases to illustrate how oppressive social norms, such as pronatalism and biologism, might impede autonomy in the FP decision-making context. I will later return to these case studies to show how an ethical process of informed choice is useful for promoting patient (relational) autonomy.

3.3 Two Oncofertility Case Studies

In the previous chapter I argued that biologism and pronatalism can explain why some women choose FP in the cancer context. I suggested that biologism can coerce some women to choose FP in an attempt to secure the option of future biological reproduction, while pronatalism can unduly compel women to choose the medical procedure or action that is most likely to result in pregnancy. In this section I employ the feminist relational

account of autonomy described above, in order to illustrate how pronatalism and biologism can impede patient autonomy in the FP decision-making context. To do this, I evaluate the oncofertility cases of Idelle and Jenn (below).

Case 1- Idelle

Idelle is a 39-year old woman who is diagnosed with breast cancer. She is single, has no children and works in business development. Upon her cancer diagnosis, healthcare professionals discussed Idelle's FP options with her. Although Idelle describes her relationship with her parents as good, her parents have always placed pressure on her to have children so that they could have grandchildren like the rest of their friends. Idelle's father was very "proactive in encouraging Idelle to undergo oocyte harvesting". According to Idelle, her parents played a direct role in her decision to cryopreserve oocytes. Her father paid for the FP procedure because he wanted to make sure he had "insurance on a grandchild". Idelle accepted her father's offer to pay for the FP procedures and proceeded with ovarian stimulation, egg retrieval and cryopreservation prior to the onset of her cancer treatment. (Snyder et al., 2010, p. 424)

Case 2- Jenn

Jenn is a 23-year old woman who is diagnosed with breast cancer. She is married and has no children. Jenn was informed that her cancer treatment could cause infertility and told to consider FP. She was devastated by the news that her cancer treatment could cause infertility because ever since she was a little girl she knew that her "purpose in life [was] to raise a family". Jenn says that as she got older, this desire to "be a mommy" developed into a desire not only to want to be a parent, but also to "want to experience pregnancy and childbirth". According to Jenn, adoption, surrogacy and egg donation were not options for her because she "feared [they] would not complete [her] the same as bearing [her] own children". Jenn contemplated forgoing cancer treatments in order to protect her fertility, but she elected instead to undergo oocyte harvesting prior to the onset of her cancer treatment. The extracted oocytes were fertilized and the resultant

embryos were cryopreserved. Jenn claims that she prefers to get pregnant on her own; the cryopreserved embryos are a “back up plan just in case” natural conception fails. She also says that she can now rest easy knowing that her “lifelong dreams will be fulfilled”. (<http://fertilefuture.ca/patients/survivor-stories/jenn-23-breast-cancer-survivor/>)

I maintain that the cases of Jenn and Idelle warrant examination from a feminist perspective. This is because both Idelle and Jenn’s decisions occur within a(n) (American) patriarchal social context in which oppressive social norms around women’s reproduction can unduly influence women’s reproductive autonomy. As such, women’s choices about reproduction, especially those that can be risky for women (as in the cases above) raise concerns about whether the reproductive choices were autonomous. In what follows I do not intend to prove that Idelle and Jenn’s FP decisions were influenced by pronatalism and biologism. Indeed, too little is known about either case to discern (as a matter of fact) the extent of which Idelle’s or Jenn’s decision was autonomous. Instead, in this section I show how a feminist theory of relational autonomy is useful for uncovering how oppressive social norms, such as pronatalism and biologism, can impede patient autonomy. I begin by discussing the similarities between the cases of Idelle and Jenn. I then describe how each of these cases of oncofertility decision-making could have been influenced by pronatalism or biologism.

The cases of Idelle and Jenn share some important similarities. Both patients were diagnosed with breast cancer and offered the option of undergoing FP procedures before beginning treatment. Each woman chose to undergo oocyte retrieval and a subsequent cryopreservation of reproductive material (oocytes and embryos, respectively). Prior to oocyte retrieval, each woman was injected with oestrogen hormones, which stimulated her ovaries to release multiple mature oocytes. In each of these oncofertility cases (and nearly all oncofertility cases involving breast cancers) the patient’s breast cancer is especially sensitive to oestrogen hormones (Azim et al., 2008; Prest et al., 2002; Sonmezer & Oktay, 2006). The hormone injections required for ovarian stimulation and

oocyte retrieval are risky to patients because they can accelerate the rate at which the cancer spreads. Furthermore, the process of ovarian stimulation and oocyte retrieval usually takes between two to six weeks to complete, so patients, like Idelle and Jenn, experience a delay in the onset of their cancer treatments.⁴⁶ Both hormone stimulation and delays associated with oocyte cryopreservation are serious risks for breast cancer patients, such as Idelle and Jenn. For these reasons, some physicians are uncomfortable with offering oocyte or embryo cryopreservation to breast cancer patients (Kondapalli, 2012, p. 64). It is likely that choosing the option of oocyte cryopreservation was more risky for these women, as opposed to choosing another type of FP procedure or foregoing FP altogether. I now examine how biologism and pronatalism may have influenced each woman's FP decision-making.

In Idelle's case, she attributes her FP decision to her father's wishes for genetically-related grandchildren and his offer to pay for the FP procedure. On one reading, it may seem as though Idelle's choice in favour of FP is an example of shared decision-making with her father. On another reading Idelle's choice to use FP might have been caused by the desire to please her father. This desire might itself have been caused by sexism because within patriarchy, many women are conditioned to view men (especially their fathers and husbands) as figures of power and authority. Both of these interpretations are possible, but below I shall focus on how pronatalism and biologism may have impeded Idelle's autonomy.

Insofar as Idelle lives in a pronatalist society, she may be conditioned to believe that her womanhood is connected to her fertility. She may also believe, because of biologism, that providing her parents with genetically-related offspring is important and markedly better than giving them grandchildren who are not genetically-related (to her parents) or not giving them any grandchildren. It is possible that social pressures to (genetically) reproduce and the high social value that Idelle's parents placed on having genetic

⁴⁶ The urgency with which cancer treatments must begin depends upon the stage of the patient's cancer and how fast the cancer is spreading.

grandchildren could have caused Idelle to distrust her own judgements about FP. Also, she may have over-identified with her parents' biologicistic desires for grandchildren. In part, the biologicistic pressures from her parents may have compelled Idelle to choose FP and biologism may have directly compelled her to value genetic ties over social ties and thus not really see adoption or future egg donation as equally valuable options for reproduction or for making her parents into grandparents. The serious risks incurred by Idelle in order to preserve the option of giving her parents genetically-related grandchildren lend support to the idea that oppressive social norms unduly influenced Idelle in making her FP decision. In addition, Idelle may have been conditioned to tie her sense of self-worth to fulfilling the pronatalist and biologicistic mandate. In other words, Idelle may have believed that her value and identity as a woman (and as a daughter) rested on whether or not she would produce genetically-related children in the future. Idelle may lack the appropriate self-referring attitudes such as self-worth or self-trust that are necessary for autonomy. If this is the case, Idelle's FP decision would have not been autonomous.

On Stoljar's account of relational autonomy, oppressive socialization within patriarchy could have caused Idelle to distrust her own ability to decide about reproduction. This distrust could have compelled Idelle to defer to her parent's wishes when deciding whether or not to maintain her future option for genetic reproduction by using FP technologies. If Idelle distrusts her ability to choose well with respect to FP specifically or reproduction generally, it explains why she agreed to undergo oocyte harvesting at the request of her parents. This inappropriate self-referring attitude would compromise Idelle's autonomous choice about FP.

In the case of Jenn, she clearly expressed her desires to gestate genetically-related offspring. However, her case raises some question as to whether her desire to become a genetic (and gestational) mother is an authentic desire. Within patriarchy, women are conditioned to desire and place high personal and social value on motherhood. However, patriarchal practices surrounding reproduction and mothering can contribute to women's

oppression. Jenn's assertion that she has desired to be a mother "ever since she was a little girl" along with her admission that she believed that motherhood was "her purpose in life" could both be indications that Jenn has internalized oppressive patriarchal norms concerning reproduction and parenting. Her desires conform to the oppressive pronatalist norms that mandate gestation (and motherhood) for women. These desires are also in accordance with biologism and value genetic ties over social ties. Jenn could easily be suffering from false consciousness, in which case she fails to meet the authenticity condition for autonomous agency.

In Jenn's testimony, there is no indication that she considered whether she ought to desire biological gestational motherhood. Thus, her desires could have been unduly shaped by pronatalist and biologicistic social norms. A theory of relational autonomy calls attention to whether her strong desire to "be a mommy" and to fulfil her "lifelong dream" are authentic. In Jenn's case, a relational theory of autonomy draws attention to the possibility of Jenn holding deformed desires that inhibit her ability to be self-governing. Moreover, Jenn might lack the normative competency required to critically evaluate her desire to be a mother. This is because under oppressive social conditions, the values or goals promoted by society can limit the "self-concepts or identities" of members in oppressed groups insofar as oppressed persons come to adopt values and goals that further their own oppression (McLeod, 2002, p. 112-3). This is not to say that there is no value in becoming a mother, nor that some women do not or should not desire motherhood (as individuals). Rather, desires that match up with oppressive social norms warrant at least some degree of normative evaluation.

To count as autonomous, according to Stoljar's description of relational autonomy, Jenn must perform a strong evaluation of her desires and discern whether wanting to be a mother or wanting to gestate a genetically-related fetus are indeed authentic desires for her. A strong evaluation of her desires would require that Jenn compares the value of gestational and genetic motherhood to other types of motherhood or other ways of becoming a mother. Insofar as Jenn's use of FP puts her at risk for worsening her cancer

and her discussion of motherhood suggests little indication of seriously entertaining other ways of becoming a parent and that her desires match pronatalist and biologicistic ideologies, there are some reasons to question the authenticity of Jenn's desires.

If the FP decision making of Idelle and Jenn were influenced by pronatalist and biologicistic norms, then a relational theory of autonomy is well-suited for identifying the ways in which patient autonomy might be impeded. Through the lens of relational autonomy, Idelle's FP decision will only count as autonomous if she holds appropriate self-referring attitudes with respect to reproduction, such as self-trust and self-worth. In the case of Jenn, her FP decision will only count as autonomous if she critically and strongly evaluates her desires for genetic reproduction and chooses on the basis of those values which she authentically endorses.

Relational autonomy provides an ethical framework for assessing the impact of oppressive socialization on Idelle and Jenn's FP choices. The application of a relational theory of autonomy is important for two reasons. First, it can pick out instances where decision-making fails to be sufficiently autonomous. Second, what is more important is that it can help to establish the conditions that are necessary for autonomous choice, action and authentic desire. Enhancing patient autonomy in oncofertility contexts is important for women because FP technologies are risky and because reproductive autonomy is closely tied to women's well-being. In the remainder of this chapter I respond to Stoljar's criticism of informed consent. I also show how patients' (relational) autonomy can be secured through an ethical process of informed consent.

3.4 Response to Stoljar

Stoljar's arguments against the idea that informed consent can secure patient (relational) autonomy are misleading. They fail to show that informed consent could not secure relational autonomy or that relational autonomy *cannot* serve as the foundation for informed consent. In this section I briefly explain why Stoljar's arguments concerning informed consent are misleading.

Stoljar's first argument holds that informed consent is an opportunity concept, while relational autonomy is an exercise concept. Since informed consent and relational autonomy are two fundamentally different concepts, Stoljar concludes that informed consent cannot secure autonomy. This argument is problematic for a couple of reasons. First, it is not the case that informed consent and relational autonomy are fundamentally different kinds of concepts. Informed consent requires that patients actively consider their medical options against the backdrop of their own values and beliefs and come to a decision about a particular medical treatment plan. The very process of deciding on a medical treatment cannot appropriately be thought of as anything less than an exercise of agency. As such, informed consent is more than a 'mere opportunity' for action. So, informed consent is not simply an opportunity concept and is not fundamentally different from the concept of relational autonomy.

Second, the problem Stoljar highlights has nothing to do with what *type* of conception informed consent is; rather, informed consent is problematic because it cannot guarantee a *particular* kind of exercise of agency. The kind of exercise that is required for securing relational autonomy is one of self-governance that is accompanied by the appropriate self-referring attitudes. Informed consent fails to secure relational autonomy because it cannot ensure that the patients who make decisions have the self-trust or self-worth that is necessary for autonomous choice. The difference between failing to secure any exercise and failing to secure a certain kind of exercise is important because it shows that there is no incompatibility between the concepts of autonomy and informed consent. And if that is true, then Stoljar's first argument does not give us a reason to sever the relationship between these two concepts. I later suggest that informed consent fails to ensure patients choose with the appropriate self-referring attitudes because it is grounded on a non-relational conception of autonomy, which is itself not equipped for recognizing the impact of social context on autonomy.

Stoljar's second argument against informed consent is based on the idea that informed consent requires only that patients perform *weak* evaluation as opposed to the strong

evaluation that is required for autonomy. The distinction Stoljar draws between strong and weak evaluation is slightly misleading because like autonomy, normative competency comes in degrees. Some agents might simply raise the question “*is this preference worth endorsing?*” but not spend a considerable amount of effort trying to answer it. This might be the minimum threshold for what counts as normative evaluation. Other agents might raise the normative question but fail to consider the value of their preference against the backdrop of social norms, including oppressive ones. Yet other agents might raise normative questions, consider these questions against the backdrop of their oppressive socialization and spend a considerable amount of time and effort contemplating the worthiness of their desires. In short, some agents could subject their desires to a much stronger evaluation than other agents.

Further examination of what constitutes strong evaluation and what degree of evaluation one could reasonably expect from autonomous agents is important for determining whether informed consent could require strong evaluation. What Stoljar needs to show is that informed consent could not (possibly) ensure that patients meet the minimum requirement for normative competency. The minimum requirement for strong evaluation, I believe, would amount to ensuring that patients ask themselves whether their preferences are worthy of endorsement. If this is the minimum requirement, then it seems that informed consent could encourage strong evaluation. To determine whether the requirement for normative competency is something stronger, more needs to be said to explain the nature and goals of normative competency. If the ideal of normative competency involves such a strong and thorough evaluation that most agents could not achieve it, then securing relational autonomy will be difficult in any context, not just in the informed consent context. However, relational autonomy can be promoted and secured in the context of informed choice about FP if patients are prompted as to the right sorts of normative questions. I will explain this in more detail in the next section.

In sum, Stoljar’s arguments are misleading because they fail to show that informed consent could not be improved in order to ensure that agents have the appropriate self-

referring attitudes or that agents perform a strong evaluation of their desires. Essentially, Stoljar's criticisms are directed largely at the conception of informed consent that is grounded on a non-relational conception of autonomy. Also, her arguments target a thin conception of the present informed consent process. Although, at present, the majority of informed consent practices fail to recognize the influence of inappropriate self-referring attitudes, or the existence of oppressive social norms that can deform agent's desires, there is no reason to think that informed consent could not do so. The arguments given by Stoljar do not support the claim that informed consent could not be grounded on a relational conception of autonomy. Given Stoljar's arguments, there is little reason to accept her proposal to sever the relationship between autonomy and informed consent.

In opposition to Stoljar, I argue that the relationship between informed consent and autonomy should not be severed. I suggest that relational autonomy can serve as the appropriate foundation for informed consent and, furthermore, that a revised conception of informed consent can secure patient autonomy. In the next section I outline my model for a revised conception of informed consent, which I call informed choice. I then apply this model to the FP decision-making context.

3.5 A Model of Informed Choice

Stoljar's reasons for rejecting the connection between relational autonomy and informed consent rest on the worry that informed consent cannot ensure that patients have the appropriate self-referring attitudes or that they perform a normative evaluation of their healthcare preferences. I illustrated this concern above by discussing the cases of Idelle and Jenn. In this section I argue for a re-conceptualization of informed consent as a concept that is inherently relational and grounded in relational autonomy and can help to secure patient autonomy. In particular, I address Stoljar's worries concerning self-referring attitudes and normative competency. To begin, I defend my use of the term "informed choice" and I explain how this concept is relational. I then outline a general model of informed choice and I apply this model to the context of FP decision-making. To conclude, I revisit the cases of Idelle and Jenn show how an ethical process of informed choice can promote autonomous decision-making about FP.

I am not the first person to refer to the concept of informed choice for describing (improved) healthcare decision-making (Baylis, 1998; College of Midwives in Ontario, 2008; McLeod, 2002; Nisker et al., 2006; Woolf et al., 2005). Many people, including myself, maintain that the language of ‘choice’ is important because it draws attention to the possibilities of both consent and refusal. The emphasis on refusal is especially important in the context of reproductive technologies because oppressive social norms that mandate motherhood are often embedded in the presentation of reproductive technologies, which are seen as standard, routine and the expected course of action. The refusal of reproductive assistance can be difficult for some people, so the language of ‘choice’ serves as a way to emphasize the option of choosing against a treatment option. Furthermore, having a choice or the process of choosing are things that can be on-going and dynamic. That is, the process of choosing can occur over a long period of time. This process can involve changes in beliefs and values and be subject to influence from others. In contrast, the term ‘consent’ signifies an accomplishment or an event. For these reasons I adopt the term ‘informed choice’ for my revised and relational conception of informed consent.

Informed choice is grounded on a relational conception of autonomy, so the framework of informed choice is built on the centrality of social relations. Informed choice construes agents and the various components of decision-making (such as what choices are available and how decisions are made) as both causally and constitutively social. In other words, agents, the mere availability of healthcare options and patient decision-making are both developed and exercised in social contexts. So, most generally, a theory of informed choice must take seriously the ways in which social relations can influence the existence, development and exercise of autonomous choices, actions and desires.

First, informed choice is relational because healthcare choices are made available only within social contexts and the socio-political relations within these contexts can determine what options are made available (and to whom these options are available). Social context can also influence the social meanings or values that attach to these

options. For example, the choice to use FP is available to patients only as a result of the social contexts that lead to the development and provision of FP. In particular, these technologies are available because genetic reproduction is believed to be valuable. Accordingly, recognition of social norms, such as biologism and pronatalism are important for understanding FP. So healthcare choices, like patients, are situated within a complex matrix of social norms and values.

In addition, an evaluation of choice in healthcare situations can prompt one to consider which options are not available to patients and why this might be the case. FP technologies, for example, are situated within broader healthcare and social frameworks. The mere availability of FP is connected to other reproductive healthcare options, such as the availability of birth control and healthcare practices around gynaecological examinations. Reproductive decisions are also situated within a broader social framework concerning things such as employment and education, which can influence which FP options are made available to women. A relational conception of informed choice points to the need to situate and evaluate the medical decision-making process within a much broader framework. So, FP decision-making should include a space for discussion and evaluation of the ways in which FP options are influenced by other healthcare options or broader social context.

Informed choice is also relational because it construes agents and their decision-making as relational. As such, agents and their healthcare decisions can be influenced by relationships with others. Informed consent may not necessarily deny that relationships play a role in patient decision-making, but informed choice differs because it necessarily emphasizes that role of both autonomy-promoting and autonomy-reducing social relations. In the FP context, patients' relationships with physicians and other healthcare professions are important for determining the nature of FP choices. Positive healthcare relationships can foster patients' autonomy and promote their well-being. For example, a supportive and caring healthcare team can help patients to feel safe and capable of making an informed and autonomous decision about FP. If a particular healthcare

relationship is negative or oppressive, patient autonomy and well-being can be compromised. For example, a patient who feels intimidated by healthcare professionals might fail to express their authentic reproductive desires.⁴⁷ An ethical process of informed choice recognizes the importance of some relationships for patient decision-making and the dangers of other relationships.

To summarize the above points, healthcare practices and the agents involved in healthcare choices are inherently and necessarily relational. Informed choice describes a decision-making process that must be attuned with any positive or negative social relationships that can promote or hinder patients' autonomy. For these reasons, informed choice is a relational concept that supports relational autonomy. A number of conditions for a model of informed choice flow from the relational nature of informed choice and the relational nature of agents and their capacities, such as autonomy. I shall describe these conditions below.

To begin, informed choice must take the importance of all (relevant) social relationships into account for promoting patient autonomy. This includes social relations that promote patient autonomy, as well as those relationships that might impede patient autonomy. As I describe above, positive physician-patient relationships that are built on trust and effective communication can help to promote a patient's autonomy. Other social relationships, such as those between a patient and her partner or family and friends can also support or hinder reproductive autonomy. An ethical process of informed choice should respect these positive social relationships and recognize how these relationships can promote patients' autonomy. In some cases, this might mean allowing patients to have family or friends involved in FP discussions and decision-making.

⁴⁷ Some non-intimidating relationships may also be problematic. For example, a healthcare practitioner who appears sympathetic and offers patients biased or misleading advice could unduly influence some women's decision-making. Such cases of coercion may be less conspicuous and more difficult to notice, in comparison to other blatantly intimidating healthcare interactions.

An ethical process of informed choice should also ensure that healthcare practitioners are trained to recognize negative social relationships that can impede autonomous choice and action about FP. In some cases, relationships can be abusive or obviously coercive. Patients may need to be shielded from overbearing or harmful relationships by carving out a safe space in the healthcare setting for patients to work through their FP choices alone, or with others who are more supportive of their reproductive autonomy. However, in many cases, the negative influence of some relationships will be much more subtle. For example, a parent might ‘support’ their daughter’s FP decision-making by reminding their daughter of the importance of genetic reproduction. Informed choice must be equipped to recognize how such ‘support’ from parents could make it difficult for some women to choose against FP decision-making. To combat subtler forms of oppression, an ethical informed choice process should also provide patient-only support or counselling spaces that allow patients some distance from potentially negative social relations. Obviously, healthcare professions should not be policing patients’ relationships in a way that is invasive and paternalistic, but healthcare professionals should be trained to identify the helpful or coercive roles that relationships can play and offer patients safe spaces for including or excluding others in their healthcare decisions. Likewise, patients could be encouraged to identify these supportive relationships for themselves. Supporting autonomous decisions leads to further conditions for informed choice.

Informed choice will require counselling to be made available to patients. In the context of FP this counselling should be feminist-inspired. This means that counsellors must be aware of how social contexts can promote or impede autonomy. They should also be sensitive to the influence of social ideologies on patients’ choices, actions and desires. The informed choice process in FP should also encourage patients to discuss FP, reproduction or parenting with others, including: cancer survivors, childless women, and adoptive parents, especially those who have chosen against pronatalist and biologicistic norms. Discussing cancer and potential infertility with those who have been through it already can give patients a glimpse of what they might expect. Peer support groups might also benefit patients making difficult healthcare decisions. Discussing FP with other

people, especially those who have chosen against it, will help patients to imagine themselves in various contexts. The ability to imagine one's self or one's life differently is important for securing autonomous choice, action and desire. For example, imagining oneself as an adoptive parent might prompt some patients to see themselves as capable of parenting a non-genetically-related child. Imagination might also help patients to identify whether their desires are authentic or deformed. If a patient is asked to imagine her life without children, and she has never before done so, she might discover childlessness could allow her to excel in other areas of her life. She might discover that remaining childless is an acceptable life choice that she could choose for herself. On the contrary, she might discover that her desire for children is deeply personal and worth endorsing.

A model of informed choice also requires that patients strongly evaluate their preferences. What this means is that healthcare professionals need to raise the normative questions, such as "*is this a valuable option for you?*" or "*is this desire worth valuing?*" when it is apparent that patients have not done this work for themselves or when their desires may have been unduly shaped by social contexts. Raising normative questions like the ones that I have mentioned can help patients discover whether their preferences are valuable or good for them. One way of facilitating patients' autonomous decision-making would be to have the relevant information available in a variety of formats (oral, pamphlets, electronic sources, etc.) and give patients a series of options for working through and understanding their options (counselling, peer support groups, the opportunity to ask their physician questions etc.). The informed choice process must be one that is structured to encourage discussion and understanding of choices that are meaningful to patients. One way to encourage such discussion and understanding would be for counsellors and other healthcare providers to ask patients open-ended questions that create space for patient's independent reflection. An appreciation for the impact of social norms requires that the informed choice process includes information and options that directly oppose oppressive norms. If presented with options that oppose social norms, patients might find that these options are equally valuable or more valuable than the standard healthcare options.

Moreover, the ways that FP information is presented to patients is extremely important. Some physicians or theorists may also assume that FP interventions are necessary because all women do (or will eventually) desire to bear their “own” children. It may be true that some patients will regret not having chosen to pursue FP technologies, but other patients may come to regret choosing in favour of FP technologies if they incur significant physical, emotional, or financial costs from doing so. The ways in which information is relayed to patients can be just as important as the content of this information. Women should be given information in a manner that is non-judgemental and not coercive.

However, relaying information that counters strong social norms or ideologies might require some repetition or support from physicians so that the counter-oppressive values are recognized as legitimate alternatives. Again, the presentation of this material should be unbiased, but information regarding treatment options that oppose social biases might need to be repeated or emphasized so that these options are legitimated or seen as equally valuable. In addition, physicians or counsellors should not tell patients that they will come to regret their decisions if they choose against the use of FP. Surprisingly, this is the sort of comment that arises in some of the mainstream discussion surrounding FP technologies. Some physicians and theorists express the worry that patients who do not use FP technologies will feel regret in the future when they come to desire genetically-related children (Jeruss, 2010, p. 464). This worry is ultimately grounded in the biologicistic assumption that desiring genetically-related children is natural. If physicians express these sorts of beliefs to their patients they will add an additional level of pressure to use FP and may seriously undermine some women’s self-trust or abilities to choose autonomously about FP.

Also, a model of informed choice should be sensitive to the role that digital and visual communication plays in establishing and shaping interpersonal and intrapersonal relationships. In the context of FP, various communication tools could be useful for promoting patient autonomy by helping patients work through and decide on their

healthcare options. These tools can include videos, pamphlets or brochures, information on websites, blogs or social media or even smartphone apps aimed at physicians, other healthcare professionals, patients and their families, which can be useful in the informed choice process. One example of an online tool for assisting cancer patients with FP decision-making is *myoncofertility.org*. This site features cancer patients' testimonies concerning FP, some of whom chose FP and some of whom did not. Watching these patient testimonials can help newly diagnosed cancer patients overcome barriers to their autonomy, such as a lack of self-trust or the failure to assess the value of what they might desire. Watching others navigate the decision-making process could help patients gain confidence or move them to question their own desires.

Finally, informed choice requires an understanding of information that extends beyond the risks and benefits of a particular medical treatment and considers the patients' broader social context and how a particular healthcare decision relates to the patients' overall autonomy. Each individual patient and their medical decision should be considered against the backdrop of broader social norms and values. Effectively, what this means is that physicians and healthcare providers need to be aware of oppressive social norms and the impact that they can have. This is important because people in oppressed groups might require different types of information or support for understanding this information and for making autonomous choices. For example, in social contexts where women are conditioned to value childbearing and taught to distrust their own abilities to make choices, an ethical process of informed choice may have to provide these women with additional support and information. Healthcare professionals should have some degree of understanding of the marginalized groups in their communities. Physicians might need to treat patients in marginalized groups with added sensitivity and support when discussing healthcare options.

I now return to the cases of Idelle and Jenn. In both FP cases, relational autonomy and Stoljar's arguments against informed consent helped to accentuate the impact of

oppression on autonomy. Using the cases of Idelle and Jenn, I will show how a model of informed choice can address Stoljar's concerns.

First, the case of Idelle helped to illustrate how inappropriate self-referring attitudes could impede autonomous choice. Stoljar claims that the standard model of informed consent does not require that choices are made with the appropriate senses of self-worth, self-trust etc. In contrast, a model of informed choice must promote and foster the appropriate self-referring attitudes. In cases like Idelle's, physicians (and other healthcare professionals) need to be attuned to the social norms concerning reproduction that can make some women doubt their abilities to make certain autonomous reproductive decisions. In such cases, physicians and other healthcare providers might prompt patients to trust their capacities by using a vocabulary of self-worth. For example, a physician might tell her patient that she is capable of making an informed decision about FP and capable of reflecting on her desires and preferences.

In the case of Idelle, physicians might emphasize her worth and value as a single professional and remind her that she is not measured by her fertility or motherhood status. Idelle might also benefit from learning about other women, who chose against FP and remained childless or created a family through other means. Sharing this kind of information could be helpful for building Idelle's confidence in sticking by her own values and desires. Furthermore, Idelle might benefit from exposing her parents to alternatives to having genetically-related grandchildren. For example, Idelle's parents might learn to see the value of grand-parenting children who are not their genetic relatives. Discussing alternative options to FP and genetic reproduction with Idelle's parents might reduce the amount of pressure Idelle feels to pursue FP. Within the context of oncofertility, the social norms around women's reproduction should be an explicit part of the conversations with patients. Counselling informed by feminism could be an appropriate place to discuss the pronatalist and biologicistic pressures around reproduction. Counsellors could emphasize that FP is indeed an option, as is having children, despite

the social pressures that one might feel. Patient counselling will play a central and crucial role in informed choice about FP.

The case of Jenn helps to illustrate how deformed desires might compel patients to choose in accordance with oppressive social norms. Jenn's case also suggested how informed consent fails to ensure that patients subject their desires to a strong evaluation. In the context of informed choice about FP, healthcare providers should introduce a vocabulary of worth and value into their discussions with patients. This could involve raising a question about whether the option of genetic reproduction is valuable for a given patient. In the case of Jenn, healthcare providers would need to ask her if her desire to be a (genetic/ gestational) mother is valuable to her and why. Providers might also ask whether her desire to parent could be satisfied by bearing or adopting a non-genetically-related child. Allowing Jenn to have such discussions with physicians or counsellors might not cause her to change her values, or to know with confidence that her desires are authentic. The purpose of strongly evaluating one's desires is not to simply change one's mind. Rather, strong evaluation is meant to help patients detect when preferences that they may hold unreflectively are not worth endorsing. Bearing a genetically-related child might be valuable for Jenn. But, to know whether this is the case, she should ask herself whether and why this choice is valuable and worth the risks associated with FP.

In general, healthcare professionals need to be especially careful that patients are not pressured into using or not using FP technologies. Reducing or eliminating such pressure is especially important as FP becomes a part of standardized cancer care and become normalized outside of the cancer context. The pressure to reproduce or to use FP could be combated by making sure that FP is not presented as a routine part of cancer care. It could be routine to offer FP technologies to women, but the information about FP technologies should not be presented to patients with the assumption that they will choose in favour of FP. If physicians or other healthcare providers assume that all patients will choose in favour of FP technologies, their expectations could have a coercive effect on patients. Patients who are already suffering from a diminished sense of

self-worth or self-trust, for example, might find it more difficult to choose against FP technologies if they are expected to pursue FP.

One might worry that the above model of informed choice is too demanding for the short timeframe that characterizes oncofertility decision-making. However, the measures I describe above could be included in the patient decision-making context. To help secure patient autonomy in informed choice, patients should be given information about FP as soon as possible. If such measures are put into place, then the informed choice process could secure patient autonomy in the context of FP.

Finally, I suggest that along with the measures described above in my ethical informed choice process for FP, there are also measures that are external to informed choice that can help to foster patient autonomy in the FP context. Social change is the most difficult but also the most important element of overcoming the influence of biologism and pronatalism on cancer patients' reproductive autonomy. Such changes will involve eliminating the language of 'real parenthood' (i.e., biological parenthood), for example. These changes would challenge the assumptions that all women want children, that biological ties are better than social ties and moreover, that those who fail to meet the pronatalist or biologicistic stereotypes are deficient. Undoubtedly, personal, medical and social contexts in which these technologies are delivered will affect the degree to which these reproductive options challenge or support the autonomy of both individual women and women as a group. So we should develop a more nuanced examination of the possible effect of these norms and how they interact with other axes of oppression.

In this section I have suggested a few ways in which informed choice may identify and combat oppressive socialization. For the most part, my recommendations in this section are compatible with much of what Stoljar suggests in her conclusion. Stoljar suggests that healthcare providers must be aware of the impact of oppressive socialization and take positive measures to counter the effects of oppression. She says, for example, promoting autonomy in the healthcare context could amount to "encouraging imaginative reflection on different options" and creating the conditions in which "patients feel authorized to

speak for themselves” (Stoljar, 2011, p. 383). This is similar to what I have outlined above. Where Stoljar and I disagree is whether such measures could become a part of the informed consent (or what I have called informed choice) process. Stoljar does not think patient autonomy can be secured in informed consent. In opposition to Stoljar, I think that an ethical informed choice process can help to enhance and protect patient autonomy.

3.6 Concluding Remarks

If we take the commitment to respect patient autonomy seriously, then the informed choice process about FP technologies ought to address the ways in which pronatalism and biologism can impede women’s autonomy. Incorporating relational autonomy and the feminist insights discussed in this chapter into the healthcare setting will mean, in part, changing the way we understand the goal and process of informed consent. In this chapter I have argued that through an FP informed choice process that is grounded in relational autonomy, healthcare providers and patients can identify the ways in which pronatalism and biologism can affect patient decision-making and can attempt, at least, to minimize these barriers. Once these barriers are identified, which is often not an easy task, healthcare practitioners and patients can be better prepared to address these barriers.

In this chapter, I have argued that a process of informed choice is able to secure patient relational autonomy. More important, I have shown how FP technologies can be chosen autonomously within the context of informed choice. Insofar as the women’s reproductive decision-making about FP technologies can be autonomous, there is a question as to whether women should be given access to these technologies. Within the cancer context, FP technologies have been praised as a key aspect of improving the lives of cancer survivors. However, the use of FP technologies by women outside of the cancer context has been very controversial. In the next chapter I examine whether there are any morally relevant differences between FP choices within and outside of the cancer context. I also consider whether the uses of FP technologies, in general, are morally permissible within patriarchy.

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Chapter 4

4 The Moral Permissibility of Age-Related Fertility Preservation⁴⁸

Opportunities for higher education, a demanding career, an increased cost of living and difficulties finding a suitable long-term partner are just some of the reasons why many women are bearing their first child at an older age. On average, female fertility declines rapidly after age 35 and women who delay childbearing until their 30s are more likely to have difficulties with natural conception and pregnancy. In response to the social trend of delayed childbearing, some fertility clinics are now offering oocyte cryopreservation to healthy young women outside of the cancer context. This FP practice, dubbed ‘social’ egg freezing, is marketed to young healthy women as an ‘insurance plan’ to guard against ‘natural’ infertility and as a way of ‘stopping the biological clock’. Women who use egg freezing technologies are better able to focus on their careers, gaining financial security or finding a suitable life partner, without the anxiety associated with anticipated infertility or the pressure to reproduce before their fertility declines.

In this chapter I shall use *age-related FP* to refer to this ‘social’ egg freezing and *disease-related FP* to refer to FP in the cancer context.⁴⁹ In the previous chapter, I argued that an ethically informed choice process, which is grounded in relational autonomy, can help to

⁴⁸ An earlier version of this chapter was published in *Cancer Treatment and Research* 156: 223–235 (2010). My comparison of age-related and disease-related FP, along with my summary of Goold and Savulescu’s arguments and parts of my discussion of reproductive choice and control were taken from this earlier version, however a substantial amount of this paper has been changed and some new arguments have been added.

⁴⁹ The use of FP technologies outside of the cancer context has been described as ‘social’ egg freezing or FP, while ‘medical’ FP has described the use of these technologies in the context of cancer (or other diseases). In this chapter I refer to the former as age-related FP and the later as disease-related FP. These labels are preferable to ‘social’ and ‘medical’ because both social and medical reasons can factor into any woman’s decision to use FP, so they fail to appropriately demarcate between each type of FP use. Furthermore, the terms ‘medical’ and ‘social’ are value laden. The former term points to a need for medical intervention, for what is considered a medical problem. The later term suggests that woman have a ‘social’ problem, which is less legitimate than a medical one.

enhance women's autonomous decision-making about FP by identifying and challenging the impact of oppressive social forces. Pronatalism and biologism can act as barriers to autonomous decision-making about FP in both the age-related and disease-related contexts. Insofar as FP decision-making occurs in the context of informed choice, there are good reasons to believe that women should have access to age-related FP, especially since these technologies are currently available to women at risk of disease-related infertility.

However, oocyte cryopreservation for age-related reasons is controversial. Critics of age-related egg freezing have labelled it an "expensive confidence trick" (Jones, 2009) and a "contestable form of wishful medicine" (Schermer, 2009). The American Society for Reproductive Medicine (ASRM) continues to discourage physicians from marketing egg freezing to women as a means of deferring reproductive ageing (ASRM Practice Committee, 2008; ASRM, 2012).⁵⁰ Popular responses to age-related FP are dramatically different from responses to disease-related FP. In the cancer context, FP has been praised for securing the valuable option of genetic reproduction, giving patients hope of life after cancer and helping to give patients a degree of control amidst a devastating cancer diagnosis (Fletcher, 2009; Woodruff, 2010). In recent years, critics who reject age-related FP, but promote disease-related FP, point to the uncertainty and experimental nature of egg freezing technologies in order to justify an ethical distinction between different FP uses. However, as I discussed in Chapter 1, egg freezing is no longer considered experimental and stage 2 FP that uses IVF and thawed oocytes has comparable pregnancy success rates to IVF with fresh oocytes (Garcia, Santos, Arenas, Gonzalez, Ramirez & Patrizio, 2008). Furthermore, the health risks associated with egg extraction for FP are no different from the risks associated with egg extraction for IVF or oocyte donation.

⁵⁰ The ASRM recently changed their position on the status of egg freezing and no longer deem it to be experimental. However, they continue to recommend that egg freezing is only used within the cancer context and for egg donation (ASRM, 2012). I find it peculiar that egg freezing for third party donation is viewed as more acceptable than egg freezing for self-donation, given the fact that self-donation in the case of age-related FP can avoid some of the problems associated with the acquisition and transfer of donor oocytes.

Clearly, the safety and efficacy of egg freezing is no longer a reasonable justification for the differential treatment of disease-related and age-related FP (Lockwood, 2011). Yet, vehement criticisms of age-related FP persist. It seems that criticisms of age-related FP might be grounded in reasons other than the safety and efficacy of these technologies. I shall consider what other reasons one might have for believing that age-related FP is morally impermissible.

Imogen Goold and Julian Savulescu (2009) consider that age-related FP might be morally impermissible because of the timing and cause of fertility in such cases. In disease-related FP infertility can occur rather quickly after cancer treatment and is caused by cancer or cancer therapies. In contrast, infertility in the case of age-related FP occurs in the distant future because of age-related menopause. Goold and Savulescu maintain that these temporal and causal differences between disease-related and age-related infertility are not morally relevant. They argue that there are no reasonable moral grounds for rejecting age-related FP, but accepting disease-related FP.

In this chapter I examine the moral differences between age-related and disease-related FP and consider the moral permissibility of FP, more generally. I argue that there are no reasonable moral grounds for restricting age-related FP, while allowing disease-related FP. I also maintain that women's access to FP technologies is morally permissible within a patriarchal society if certain moral conditions are met. Society is structured in ways that can make childbearing at a younger age quite burdensome for women, so there are good reasons to believe that women's choices to use FP can help to alleviate some of these oppressive barriers within patriarchy.

I begin this chapter by considering the similarities between disease-related and age-related uses of FP. I then consider the differences in timing and cause of infertility that are discussed by Goold and Savulescu. I show that the interpretations of the moral significance of timing and cause offered by Goold and Savulescu does not adequately capture why many critics object to age-related FP. I suggest that criticisms of age-related FP are grounded in much different understandings of why the timing and cause of

infertility might be morally relevant. I explain how those who object to age-related FP understand the moral relevance of timing and cause. I argue that these objections concern the notions of reproductive opportunity, control and choice. Next, I give a feminist analysis of women's reproductive choices about FP and show how the critics' understanding of age-related FP fails to show that it differs morally from disease-related FP. In the final sections I consider the moral permissibility of FP in general. To conclude, I argue that under certain conditions both disease-related and age-related FP can be morally permissible within the context of patriarchy.

4.1 A Comparison: Disease-Related vs. Age-related Fertility Preservation

There are a number of similarities between disease-related and age-related uses of FP. Women who choose to cryopreserve reproductive material for either reason undergo the same FP procedures, use these procedures with similar intentions, suffer similar social pressures to reproduce and are subject to similar risks and benefits associated with FP technologies. In this section I review these similarities between women who use FP for disease-related reasons and women who use FP for age-related reasons.

First, the processes involved in stage 1 FP are the same for all women, regardless of their reasons for choosing FP. For example, as I described in Chapter 1, stage 1 FP for oocyte cryopreservation requires a woman to take hormones for ovarian stimulation to induce ovulation and to undergo a procedure to extract these oocytes prior to cryopreservation.

Second, women who use FP for either disease-related or age-related reasons share the same motivation for choosing FP, namely, the desire to have the option to secure future genetic reproduction. At this initial stage of FP, women in both groups are fertile. In the cases of disease-related and age-related stage 1 FP is used to guard women against anticipated future infertility. Women who anticipate disease-related infertility use FP technologies as a back-up plan if they are unable to conceive naturally. Likewise, women who anticipate age-related infertility use FP in case they require reproductive assistance in the future. Women who cryopreserve their reproductive material in either context are

doing so to maintain the option of genetic reproduction. For most women, FP is a type of reproductive-insurance aimed at guarding against future infertility. Even though FP cannot guarantee a successful pregnancy and birth in the future, women use these technologies as a back-up plan or last resort if natural conception fails.

Third, as I have already discussed in the previous two chapters, the reproductive choices, actions and desires of women in each group can be unduly influenced by pronatalism and biologism. Neither group of women is immune to the impact of these social ideologies. As such, decision-making about FP can be difficult for women in each group. In both cases, a process of informed choice is necessary for targeting the impact of oppressive social norms.

Fourth, women in each group experience similar benefits from using FP technologies that may stem from alleviating the psychological harms associated with infertility or from securing a degree of reproductive control or autonomy. As I discussed in Chapter 2, infertility can be devastating for some women, especially within pronatalist and biologicistic contexts. So women who use FP technologies for either disease-related or age-related reasons can benefit from the alleviation of some stress or pressure and the reproductive control that comes with FP use. In the disease context, infertility can be as devastating as the cancer diagnosis (Schover, 1997; Schover, 2009). Some women diagnosed with cancer may find that FP gives them hope for life after cancer and a sense of empowerment amidst the loss of control and vulnerabilities that accompany disease and disease treatments. Outside the disease context, women who anticipate age-related infertility can also face hardships and pressures that are worsened by threat of future infertility. Indeed, many of the life choices or events that lead women down paths that delay motherhood can also be quite difficult in their own right. The availability of age-related FP can help alleviate some of the financial pressure of trying to have a family at a young age, the emotional stress of finding ‘Mr. Right’ or the guilt and anxiety experienced when having to choose between obtaining a higher education and establishing a career or starting a family at an earlier age. For a young woman who finds

herself unable to satisfy a desire to bear children at present, FP can help lessen her anxiety about reproducing by offering her some security (or increased hope) for the future and for giving her some level of reproductive control. So, both disease-related and age-related FP can benefit women by reducing the harms associated with anticipated infertility and maintaining their option of having genetically-related offspring in the future.

Fifth, women who choose FP can have similar financial obligations with respect to the cost of FP procedures and services. For example, they will be required to pay storage fees for their reproductive material. In some places there is insurance coverage for disease-related FP and bursary programs to assist with storage fees. Women in both cases must also pay for the latter stages of FP when the reproductive material is used. In the case of oocyte cryopreservation, Stage 2 FP requires the use of IVF. Women in each group are also subject to similar legal and ethical obligations regarding the transfer or disposal of their stored reproductive material. In both cases, women may not have the opportunity to use their stored reproductive material because of natural conception occurring or death.

Finally, women in both groups are affected by the risks associated with FP technologies, which I outlined in chapter one. Although the risks associated with FP are similar for women in both groups, FP is more risky for women in the cancer context. This is because the use of FP can sometimes require a delay in the onset of cancer treatment and during this time the cancer could spread. Also, FP can require hormones for ovarian stimulation that can worsen hormone sensitive cancers, such as breast cancer. There is also a risk of reintroducing cancerous cells into the women's body upon future use of cryopreserved reproductive material (Shaw et al., 1996). These additional risks seem to suggest that opposition to disease-related FP is more reasonable than opposition to age-related FP. But, as I have already mentioned, the latter FP use is subject to harsher criticism than the former FP use.

For the reasons listed above, cases of disease-related FP and age-related FP are similar and fail to explain the rejection of age-related FP alongside the praise of disease-related

FP. Goold and Savulescu argue that the timing and the cause of women's infertility in the disease-related context and the age-related context are two main differences between FP use that appear to ground the distinction between the two types of FP. Indeed, in most cases of disease-related and age-related FP, the timing and the cause of women's infertility are different. However, it is not clear whether these differences are morally relevant. In the next section I look more closely at Goold and Savulescu's argument for why differences are not morally relevant

4.2 Goold and Savulescu: Timing and Cause

Goold and Savulescu argue that all women should have access to FP technologies on the basis of equal concern and respect for women. They maintain that provided women are fully informed and prepared to deal with the potential "failure of their insurance policy", women should not be restricted from freezing their eggs because they are outside the disease-related context. In their consideration of the differences in the timing and the cause of infertility, Goold and Savulescu argue that ultimately neither difference is morally relevant.

The first difference Goold and Savulescu consider is the timing of infertility. In the disease-related cases and the age-related cases, the time of anticipated infertility is different. In general, women who cryopreserve for disease-related reasons can expect to become infertile much sooner than women who cryopreserve for age-related reasons. Women who have cancer and use FP for disease-related reasons often experience decreased fertility or infertility at the onset of cancer treatments, such as chemotherapy and radiation. In contrast, women who cryopreserve their reproductive material for age-related reasons are generally less certain about when they will experience infertility. On average, fertility begins to decline around the age of 35 years, but menopause occurs on average at age 51 (Best Start, 2007). So, for example, a woman who cryopreserves her oocytes in her twenties might have about a decade of optimal fertility and increasingly reduced fertility until menopause. If she enters menopause around age 50, she will have had up to 30 years of fertility after the time of stage 1 FP. Goold and Savulescu

understand the difference in timing of infertility as the temporal difference in the occurrence of menopause.

The difference in timing, according to Goold and Savulescu, is not morally relevant. To show this, they invoke the principle of temporal neutrality (Goold & Savulescu, 2009, 43). The principle of temporal neutrality states that the time at which benefits and harms happen in one's life has no normative significance in itself (Brink, 2010, p. 1). As such, this principle demands that all times in a person's life be given equal concern with respect to the occurrence of a particular harm or benefit. In other words, all things considered, a particular harm that occurs today is not morally more important or more valuable than a similar harm that happens next year. As such, the timing of a harm (or benefit) is independent of any analysis of an agent's overall well-being. With respect to FP, the harm of infertility is no worse for a woman if it happens sooner (as in the disease-related context) or later (as in the age-related context). So, the time at which a woman becomes infertile bears no moral weight; it is not relevant to the moral permissibility of her choice in favour of FP because the harm she incurs with infertility is similar. In other words, a woman's choice to use FP to guard against infertility that will occur in two months' time is no different morally speaking, than a woman's choice to use FP in order to guard against infertility that will occur in ten years' time.

The second difference between disease-related and age-related FP that Goold and Savulescu identify as a possible morally relevant difference is the cause of infertility for women in each group. In the context of disease-related infertility, infertility is often caused by therapeutic interventions by the physician.⁵¹ This type of infertility is iatrogenic. In contrast, infertility in the age-related context, is non-iatrogenic (or self-generated). Goold and Savulescu identify menopause as the cause of age-related infertility. Insofar as infertility in the disease-context is caused by medical interventions, one might be inclined to think that it is morally different from infertility that occurs

⁵¹ Some women do conceive naturally following a fertility-threatening cancer treatment.

‘naturally’. However, Goold and Savulescu argue that in types of FP the cause of infertility is not morally relevant, because many infertile women who desire a biologically-related child will still experience the psychological hardships and losses that are associated with infertility, regardless of the cause of infertility (Goold & Savulescu, 2009, p. 52).

According to Goold and Savulescu, the timing and cause of infertility seem to bear little, if any moral relevance to the permissibility of FP choices. Their analyses draw attention to the harms and hardships incurred by women who become infertile, regardless of whether the harm of infertility occurs sooner or later, because of medical interventions or because of menopause. In both the disease-related and age-related cases, the harms associated with (anticipated) infertility can be alleviated by allowing women access to FP technologies.

In one respect, Goold and Savulescu are correct to highlight the comparable suffering incurred by infertile women, regardless of how or when this infertility incurs. For women who wish to bear a genetically-related child, the inability to fulfil this desire can cause a tremendous amount of suffering and pain. In chapter two I discuss some of the harms associated with infertility. Critics of age-related FP might agree that any woman who is infertile suffers some harm, but the suffering associated with infertility is only one part of the moral picture.

I suggest that many critics of age-related FP understand the moral relevance of the differences in the timing and cause of infertility in a way that is different from what Goold and Savulescu describe. Critics of age-related FP believe that the difference in the timing and cause of infertility in each FP context represents a difference in the degree of reproductive control and choice that are afforded to women for each FP context. As such, Goold and Savulescu’s arguments about the moral differences between disease-related and age-related infertility fail to show that there is no moral difference between age-related and disease-related FP. In the next section, I explain in more detail, the objections to age-related FP that are grounded on differences in choice and control.

4.3 Critics of Age-related FP: Choice and Control

It is likely that many critics of age-related FP will not be moved by Goold and Savulescu's argument. This is because I doubt that critics of age-related FP understand the moral significance of timing and cause in the ways that Goold and Savulescu have described. Again, critics of age-related FP might think that the timing and cause of women's infertility is morally significant because these differences signify differences in opportunities for reproduction and differences in control over reproduction. As I shall argue, critics believe that age-related FP is morally impermissible because women who use FP for age-related reasons have greater levels of reproductive opportunity and control than women who use disease-related FP in most cases. In what follows I offer some support for the claim that objections to age-related FP centre on the notions of opportunity and control and I illustrate the inadequacy of Goold and Savulescu's arguments for responding to these objections.

Many objections to age-related FP hint at a difference in the amount of reproductive control between women who cryopreserve for disease-related and age-related reasons. For example, the ASRM that advocates egg freezing to guard against disease-related infertility, but discourages women from freezing eggs to guard against age-related infertility, maintains that women with cancer or other illnesses are "appropriate candidates" for egg freezing since they may have "no viable *options*" (ASRM, 2008, my emphasis). The ASRM's policy on informed consent about egg freezing also states that disease-related egg freezing is permissible because these women have "no other *choice*" (ASRM, 2008, my emphasis). This implies that women who choose to undergo age-related egg freezing do have other options. The emphasis on 'options' is one clue that the differences in timing and cause are marked by apparent differences in reproductive choice for each group.

Others critics argue that women should have children at a younger age (Meikle, 2005) and that women should simply "live with their life choices" (Schermer, 2009). These criticisms support the idea that women who use age-related egg freezing have more (or

better) options than those who use disease-related egg freezing and also that women who use age-related FP also have more reproductive control than women in the disease contexts. So, the criticisms levied against age-related FP invoke the differences in timing and cause as a way to highlight the moral significance of differences in reproductive choices for women in each group. Next, I consider these different significances of timing and cause in more detail.

Goold and Savulescu suggest that the timing of one's infertility is irrelevant to a moral evaluation of FP uses, because infertility at any time can be harmful for women. Critics of age-related FP could agree that infertility at any time may harm women. Also, critics need not object to Goold and Savulescu's arguments for temporal neutrality. I suggest that those who object to age-related FP hold the timing of infertility is morally relevant because it represents a difference in the degree of reproductive choice and opportunity that women in each group might have. Accordingly, one might object to age-related FP on the grounds that these women are not threatened by immediate (or near) infertility still have the opportunity to 'fix' the problem of infertility. For example, a woman who decides to freeze eggs in her mid-twenties may still have approximately a decade to have children before she has difficulties with conception or becomes infertile. Critics think that she can and should 'fix' the harm before it occurs. On the other hand, a woman who freezes her eggs for disease-related reasons does not usually have the same window of opportunity since her infertility usually happens quite soon because of her cancer or cancer treatment. A woman with a life threatening cancer diagnosis might not be able to delay chemotherapy or radiation for nine months (or longer) in order to have a child before her fertility is compromised, but objectors would argue that a healthy woman can have children before she is too old to conceive naturally.

Critics of age-related FP might also disagree with Goold and Savulescu concerning the moral relevance of the cause of infertility. Goold and Savulescu suggest that age-related infertility is caused by menopause. Menopause is a biological event that is beyond a woman's control. Objectors recognize that in the cancer context infertility is usually

iatrogenic and the physician or treatment is the cause of women's infertility. But, the infertility of women who freeze for age-related reasons is non-iatrogenic. Critics of age-related FP may point to this difference in cause of infertility to show that women who use FP to guard against age-related infertility are (at least partly) responsible for their infertility because they have 'chosen' to delay childbearing. Objectors might claim that a woman's actions (or lack thereof) that result in her delayed attempts at bearing children makes the woman herself morally responsible for the infertility.

Essentially, critics of age-related FP draw a moral distinction between something being a choice and something being a result of circumstance.⁵² In the disease-related FP context, cancer patients are perceived as having very little reproductive choice and control. Disease-related infertility is a matter of circumstance. In contrast, in the age-related FP context, women are perceived as having a significant degree of reproductive choice and control. Unlike disease-related infertility, age-related infertility is a matter of choice. Critics assume that causal responsibility is linked to moral responsibility and they believe that women who freeze eggs for age-related reasons are voluntarily choosing to delay motherhood. Mainstream discussions of age-related FP often rest on the idea that women are actively delaying motherhood in order to pursue higher education or advance a career.⁵³ These two objections to age-related FP are grounded in the assumption that women who freeze eggs for age-related reasons could choose to do otherwise. Objectors to age-related FP assume that an analysis of women's reproductive choices that emphasize alternative opportunities and control are relevant for differentiating between the moral permissibility of age-related and disease-related FP.

To summarize, critics of age-related FP assume that women who delay childbearing could simply have children at an earlier age. In addition, those who object to age-related FP believe that women outside of medical treatment are different from women

⁵² Rosalind Hursthouse makes a similar distinction between character and circumstances (1999, p. 95).

⁵³ Interestingly, the ASRM 2012 recognizes the problems with these assumptions and clearly expresses the need to banish these social stigmas against age-related FP. Despite this recognition, the ASRM continues to be reluctant to advocate age-related FP.

undergoing treatment because they choose to delay childbearing and to subject themselves to the risks associated with egg freezing. In this section I have shown that Goold and Savulescu's arguments fail to adequately address the underlining objection many critics have to age-related FP. In the next section, I employ a feminist analysis of women's reproductive choices in order to show that, in the context of patriarchy, the notion of choice fails to ground a moral distinction between age-related and disease-related FP.

4.4 Reproductive Choice within Patriarchy

In the previous section I suggested that many of the objections against age-related FP distinguish between cause and circumstance. Critics who think that the differences in the timing and cause of infertility represent moral differences in women's reproductive opportunities and/ or control are mistaken about the nature of women's reproductive choices within patriarchal contexts. The claim that women could simply 'fix the problem' of infertility or 'choose' to have children at a younger age, grossly misrepresents the degree of reproductive control that some women have within patriarchal contexts. Such claims also undermine the importance of reproductive autonomy for women.

The misconception of women's reproductive choices within patriarchy is grounded, in part, on a non-relational understanding of autonomy. As I discussed in the previous chapter, non-relational accounts of autonomy generally fail to acknowledge the importance of relationships and social contexts for both the development and exercise of autonomy. In addition, non-relational conceptions of autonomous decision-making are unable to fully account for the ways in which pronatalism and biologism can hinder autonomous choice in the FP decision-making context. In this section I employ the conception of relational autonomy outlined in the previous chapter to show how women's reproductive choices are seriously constrained within patriarchy. Understanding that women's reproductive choices are embedded within pronatalist, biologicistic and patriarchal social contexts can help to explain why the above criticisms of choices in favour of age-related FP are unfair. There are several reasons to think that the reproductive decisions of many women in patriarchal contexts are often instances of

circumstance, rather than choice. Using a feminist analysis I show why this is the case. Not all the reasons I discuss below are explicitly feminist, but many are.

First, there are good reasons to believe that some women who use age-related FP have less choice over the timing of childbirth than the objectors claim. In other words, for some women, the ‘problem of future infertility’ is not easy to fix. Women who use age-related FP may wish to have children before the onset of age-related infertility, but getting an education and establishing one’s career can take up much of women’s 20s and 30s. Women who start a family after this time can run into difficulties with conception and pregnancy.

One might argue that women who want biological children should forgo a career. It seems that having a career is a matter of choice and does represent a difference in choice between the disease-related and age-related cases. Some critics have expressed this concern (Trunk, 2010). However, the claim that women should choose childbearing over a career is unfair. It is reasonable to believe that women have a well-fought right to a career. Indeed, the negative right to a career is one which many men have enjoyed throughout modern times. For the most part, men have been able to have careers and biological children because women have foregone careers of their own and assumed childbearing and rearing responsibilities. The expectation that women will continue to do so, if they want their own biological children is unfair.

Another reason that many women delay childbearing has to do with difficulties in finding a suitable partner.⁵⁴ Single women nearing their mid-thirties (or older) usually have a very small window of opportunity to meet someone and begin the process of becoming pregnant before they suffer from infertility. In a culture where some women wish to complete post-secondary education and begin a career before settling down and starting a family, the window of opportunity for bearing children can be quite small. In addition, some patriarchal norms can put pressures on men which cause some of them to avoid

⁵⁴ Other woman may have remarried at an older age and wishing to start a family with a new partner.

commitments, such as marriage and parenting or to simply delay fatherhood. These factors can explain why some women have difficulties with finding a suitable partner during their reproductive prime.

Just like women who freeze eggs for disease-related reasons, women nearing the end of the fertile period of their lives may have few or no other options to secure having their own biological children in the future. Women who wish to have their own biological children, but do not use egg-freezing technologies can either settle for an unsuitable partner or use donor sperm and becoming a single parent.⁵⁵ Some women might be compelled to rush into partnerships with unsuitable mates because of the social pressures to do so. Furthermore, coupling can seem advantageous because of the high cost of living, uncertainties with employments and inadequacies with affordable childcare services. Rushing into a relationship can make it difficult for some women to recognize physically or emotionally abusive partners. Feminists would agree that women should not have to settle for male (or female) partners who reinforce sexist and oppressive family structures. Further, it usually takes some time for people to recognize whether potential partners are suitable, to develop a strong relationship and to become prepared for starting a family.

Although single women have the option of becoming mothers, many women might feel uncomfortable with the use of donor sperm or feel that the task of raising children on one's own is just too difficult. This might be especially true in a patriarchal society because deeply imbedded social norms reinforce the 'naturalness and superiority' of the nuclear (two-parent) family. Single parenthood can be especially challenging for women who fall into the lower income brackets. This is because raising children is expensive. On average, in our patriarchal society, women still earn less than men and are more likely than men to work in jobs with little security and no benefits. Women who work in establishments or professions with family-friendly policies are more likely to have their

⁵⁵ Women could also choose to delay childbearing and hope that she is still fertile at a later attempt at childbearing.

preferred family size as compared to women who work in other sectors, ones that hinder their ability to raise children and have a career (Ranson, 2009). In general, standard work schedules are not conducive to childrearing, and day-care is expensive.

From a feminist perspective, neither of these options is ideal. Rather than rushing into a relationship for the sake of reproducing at an earlier age, women should be able to find a stable, reliable and loving partner with whom they can build a family. Age-related FP can benefit women because it gives them a greater opportunity to find a suitable life partner and gain some financial independence and security before becoming a parent.

A second reason for why women have limited reproductive control and choice within patriarchal contexts has to do with men's roles in childbearing and rearing.⁵⁶ Women's choices to delay motherhood have played a central role within discussions about delayed parenthood and age-related egg freezing, but the reproductive and 'lifestyle' choices made by men are neglected. On average, the age at which men bear children has increased in recent decades. If men are reluctant to commit to long-term partnerships or choose to have children at a younger age, this has a direct impact on the childbearing decisions made by some women. It is important to consider the ways that men's reproductive choices can compel some woman to use FP technologies. FP technologies can help women avoid unhappy marriages, single parenthood or unwanted childlessness. A further issue is gender equality with respect to future reproduction, since men have been able to freeze sperm for decades.

Recent studies on women's reproductive decision-making lend support to my claims that the reproductive choices made by many women are less than fully voluntary within the context of patriarchy. In a recent study, Cooke and Lavender found that delayed childbearing is rarely a conscious choice for women within patriarchy. Many women interviewed perceived a serious lack of choice about the timing for when to start a family

⁵⁶ In general, men's childbearing preferences do not have a direct effect on lesbians or single women who choose to become mothers through the use of sperm donation.

(2012, p. 30) and felt that some of their reproductive actions were beyond their control. The initial results of a similar study that examines women's reasons for pursuing age-related egg freezing (this study is still in progress) also shows that women feel they have little 'choice' when it comes to the timing of childbearing (Baldwin, Kylie, personal email correspondence, November 19, 2012). These findings suggest that like in the cases of disease-related FP, healthy women can also experience reduced reproductive control and options. Within a patriarchal context, a number of women both within and outside the disease-context might experience the harms and benefits associated with infertility, childbearing and FP technologies.

Patriarchy restricts and shapes women's reproductive options and influences family planning in ways that suggest women's choices to delay childbearing are not as voluntary as some critics might think. Given the oppressive constraints placed on many women's reproductive choices within patriarchy, the timing and cause of infertility are not a morally relevant difference between FP choices for age-related and disease-related reasons. There are constraints on both age-related and disease-related FP choices, so a moral distinction between choice and circumstance does not capture the distinctions between age-related and disease-related FP. Arguably, constraints on choosing whether to delay childbearing are substantial enough that if we grant access in the cancer context, we should also grant it in other contexts. If disease-related FP is available to women, then age-related FP should also be available to women within a patriarchal society.

I have shown that there is no morally relevant difference between age- and disease-related FP. Still, there remains the question of whether FP technologies should even be available in the first place. In the next section I consider whether FP technologies can be morally permissible within a patriarchal context.

4.5 The Moral Permissibility of FP Technologies

FP technologies, like all other reproductive technologies, are morally neutral. The ways in which these technologies are marketed and used, along with the various affects that these technologies have on both individuals and society, more generally, is central to a

moral evaluation of reproductive technologies. From a feminist perspective such evaluations must consider the various meanings and effects of reproductive technologies within a patriarchal context. In particular, feminist analyses emphasize the ways that social contexts, especially oppressive ones, can shape, confine or unduly influence women's reproductive choices.

Feminists respond to assisted reproductive technologies in various ways. Some feminists oppose technological interventions on reproduction on the grounds that they exemplify male control over women's bodies, they fragment motherhood and reinforce women's oppression (Corea, 1989; Raymond, 1989), while some other feminists suggest that reproductive technologies are a source of liberation for women (Firestone, 1972). Contemporary discussions of reproductive technologies within bioethics are much more nuanced and try to navigate the difficult terrain between respecting individual women's reproductive desires and critiquing the social and structural institutions that shape such desires and that make these reproductive technologies available. Some of these discussions emphasize the importance of respecting women's reproductive choices (Parks, 1999; Warren, 1989), drawing attention to the social structures that push some women towards using reproductive technologies (Harwood, 2009; Satz, 1992; Shrage, 1994). Determining the moral permissibility of FP technologies from a feminist perspective requires being sensitive to the diverse set of feminist concerns surrounding reproductive technologies.

In this section I consider whether FP technologies should be available to women within a patriarchal society.⁵⁷ In doing so, I outline some general conditions for the ethical

⁵⁷ One thing that still remains to be considered is whether decisions to use FP can be morally permissible outside the context of patriarchy. My arguments in this chapter have not necessarily precluded the moral permissibility of FP outside of patriarchal contexts. In some respects, FP choices that occur outside of patriarchal contexts could avoid the feminist worries concerning the proliferation of pronatalism and biologism that can harm women. However, a non-patriarchal society could be structured in ways that make childbearing easy at a younger age, so it is not apparent to me why someone in this sort of social context might choose to incur the risks of FP, other than wanting to wait to find a suitable partner, perhaps. Fully

provision of FP technologies. In particular, I consider the extent to which FP technologies are safe and effective; whether the decision to use FP can be autonomous; and also the effects that choices in favour of FP will have on individuals and groups.

First, the moral permissibility of FP is contingent, in part, on the safety and efficiency (success rates) of these technologies. In chapter one I discussed the current success rates and risks associated with various FP technologies for women. Given that the success rates and risks depend on a number of factors, including the type of technology used, blanket policies on access to FP may not be appropriate. Instead, FP technologies should be evaluated independently and only those that yield reasonable rates of success and risks will be morally permissible. Some FP technologies might be too risky for the women or the resulting offspring in order to warrant women's access to these technologies.

Second, in order for the availability of FP technologies to be morally permissible, women should be able to make autonomous choices about whether or not to use these technologies. Within a patriarchal context some women can be coerced into desiring gestational and genetic motherhood (among other things). If women are unduly pressured to choose FP technologies then their decisions will fail to be autonomous. This is problematic because the use of FP technologies and also childbearing and rearing pose certain risks for women. If women do not choose FP technologies (or parenting, for that matter) freely, there is some chance that they will not benefit or experience the benefits that can result for using FP or becoming a parent. Accordingly, an ethical process of informed choice, such as the one that I described in the previous chapter is necessary for securing and enhancing women's autonomy with respect to FP decision-making. Recall, an ethical process of informed choice is equipped for identifying the impact of oppressive social norms, such as biologism and pronatalism on patients' autonomy and securing

envisioning what a non-patriarchal society might look like (with respect to family structures, education, employment etc.) is a task for a different paper.

patient autonomy with respect to FP decision-making. The informed choice process should occur at each stage of FP.

Insofar as FP technologies are intended to maintain future reproductive options and these FP interventions occur at multiple stages, FP decision-making is quite different from other healthcare decisions. First, at stage 1 FP the goal of these technologies is to keep open the option of future genetic reproduction. In some sense, keeping this reproductive option open can promote women's reproductive autonomy, so long as having this reproductive option is valuable to women. So, in this very minimal sense, FP technologies can promote women's reproductive autonomy. Another way that FP decision-making is unique is that it occurs over an extended period of time and at multiple stages. This can mean that each individual FP decision made by a particular individual can be more or less autonomous than other FP decisions she makes. For example, a woman might non-autonomously choose to undergo stage 1 FP, but later autonomously decide not to make use of her cryopreserved reproductive material. This is worth highlighting when we assess whether FP technologies promote women's autonomy because the various stages of FP can yield different answers. The multiple stages of FP also point to the need to make support, such as counselling or support groups, available to women in between the two stages of FP. During this time women can develop the appropriate self-referring attitudes or strengthen their abilities for normative competency, which are both necessary aspects of autonomous decision-making.

Third, the moral permissibility of FP technologies will depend on whether women benefit from these technologies. Incurring the risks associated with FP technologies is problematic if there is little to no chance that women can benefit from these technologies. Part of this benefit will be determined by the success rates mentioned above. This benefit is measured by whether a healthy genetically-related child results from the use of FP technologies. For women who desire to parent their own genetically-related child(ren), FP technologies can benefit them by fulfilling this desire. On the other hand, there is the harm that women incur within a patriarchal context when they cannot satisfy this desire.

Within a pronatalist and biologicistic social context, women who fail to bear their own genetically-related child can be harmed by the social stigmatization and stereotypes that accompany infertility. Avoiding this harm gives reason to think that FP technologies can benefit individual women. As FP technologies improve, the chances that individual women will benefit from their use should increase.

However, within a patriarchal context, satisfying women's desires for genetically-related offspring might inadvertently contribute to women's own oppression within patriarchy. The fourth consideration for the moral permissibility of FP technologies involves whether the availability of these technologies can harm or benefit women as a group. Similar to how social context can affect individual women's decisions, the personal decisions made by individual women can also have an impact on women as a group. Feminists agree, for the most part, that individual women's choices can have an impact on women as a group ("the personal is political"), but feminists disagree about what exactly this relationship between individuals and the group might be. The tension between individual liberties and public policies has long been recognized as a challenge for feminist theorists. How to strike a balance between potentially competing interests is unclear. FP technologies can give individual women a sense of reproductive control or secure their option for genetic reproduction if natural conception fails, but these technologies also reinforce and perpetuate the very same oppressive pronatalist and biologicistic norms that can harm all women. Also, individual choices can culminate in such a way as to influence the options that are available to all women. For example, as FP technologies become normalized, especially for age-related reasons, more women might feel pressured to use these technologies to fulfil the mandates of biologism.

Feminist analyses of social contexts can highlight ways to alleviate the tensions between individual women who benefit from using FP and the group of women who can be harmed from the culmination of individual women's decisions in favour of FP technologies. A feminist analysis of oppressive social contexts shows that the barriers, norms and ideologies that harm women as a group can be structural in nature. A number

of feminists have discussed this problem. Harwood (2009), for example, argues that egg freezing as a guard against age-related infertility is just a 'quick fix' to balancing the opportunities available to men and women and leaves the problems rooted in gender inequalities largely untouched. So, even though the choices about whether or not to use FP technologies may seem like a personal choice, it is embedded in a complicated network of social structures and ideologies. Feminist theorists generally recognize that alleviating personal suffering (such as the case of infertility for many women) is insufficient if such measures are not accompanied by social and structural changes. However, some feminists have fallen into the trap of believing that FP technologies are morally permissible in the absence of a critical evaluation of the oppressive social structures that create the 'need' for FP in the first place (Morgan & Taylor, 2013).

Indeed, FP technologies could do more harm than good and ultimately threaten women's reproductive freedom by ignoring the social structures that can make it difficult for women to have a biological family and a successful career. Goold and Savulescu recognize these social and structural inequalities, but suggest that egg freezing can be a beneficial tool in the short term, to benefit women. Improving the social context of FP decision making for women as a group requires real, meaningful structural changes that are informed by feminist insights. So, FP technologies, such as egg freezing are not a substitute for improving the education, employment and other social structures, such as affordable childcare, that make earlier childbearing and childrearing so difficult for women. At the same time that we offer age-related and disease-related egg freezing, we should introduce measures to try to fix the larger problems related to gender inequalities.

Finally, the availability of FP technologies will have implications for society in general. Some of the relevant considerations should include the impact on healthcare provisions, especially if FP is publicly funded. One might also consider the effect that satisfying individual desires for genetically-related offspring will have on the national birth rate or adoption services. Furthermore, normalizing FP technologies will in effect, normalize delayed parenting. FP technologies will allow more individuals to have children at an

older age. This shift in childbearing age could affect social structures such as childcare services, employment structures, and healthcare.

The five general considerations that I have outlined above should serve as a starting point for examining the moral permissibility of FP technologies within patriarchy. Admittedly, the list of conditions is incomplete. Furthermore, these conditions might not all be afforded equal moral weight in determining whether access to a particular FP technology is permissible. However, when examined as a whole, the conditions listed above sketch a general picture of what ethical access to FP might look like. Determining whether FP technologies are permissible will require a weighing and balancing of these various concerns. On the whole, I suggest that FP technologies are morally permissible if the benefits to women (as individuals and as a group) outweigh the harms associated with FP technologies.

At present, FP technologies are being marketed as ways of ‘gaining reproductive control’ and ‘having it all’. These descriptions of FP are problematic because they can be misleading and encourage some women to use FP, who might not otherwise do so. FP is also morally problematic because of the serious risks associated with these technologies and the fact that FP decision-making does not usually happen in the context of informed choice (or in an informed consent process that is grounded on the insights of feminist relational autonomy). So, it is reasonable to worry about whether many women’s FP choices (for either age-related or disease-related reasons) are sufficiently autonomous. In addition, little is being done (in the North American context, at least) to address the structural inequalities that underlie women’s reproductive choices. Part of the necessary structural changes might include an increased funding for alternative family building options, such as adoption, improvements to educational institutions or employment, and affordable daycare services. For the moral permissibility of FP technologies to be conclusively established, more of these things need to be addressed.

Since FP technologies are currently available, I am not advocating for restrictions to women’s access. However, I do believe that FP researchers, service providers and

governing bodies are morally obligated to work towards alleviating some of the concerns I describe above. As it stands, there is room to improve the provision of FP technologies. So, given my discussion in this chapter, there are good reasons to offer both disease-related and age-related FP in the context of patriarchy. Provided that FP is offered in the context of informed choice and broader social and institutional structures are improved, the availability of FP can be morally permissible within patriarchy.

4.6 Concluding Remarks

In this chapter I have shown that differences between disease-related and age-related FP do not warrant a large moral distinction. I have also suggested that some choices in favour of FP can be morally permissible within a patriarchal context. Arguably, policies concerning FP should also advocate initiatives that challenge the systemic or structural barriers to women's reproductive autonomy. Most certainly, until the sexist social structures that shape and confine women's reproductive choices change, many women may continue to find their lives unfolding in ways that result in delayed motherhood. Insofar as the trends in delayed motherhood continue, there is a growing need to examine the limitations or boundaries on FP uses. In the next chapter I consider specifically whether there should be upper age limits on women's access to Stage 2 FP.

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Chapter 5

5 Ageism and the Moral (Im)Permissibility of Advanced Maternal Age

In recent years there has been a sharp rise in the number and age of women over the age of 40 years who are using assisted reproductive technologies to bear children. It is generally believed that the age of a woman's eggs, and not the age of her uterus, is the single most important factor in determining a woman's chances of conceiving through IVF (The Society of Obstetricians and Gynaecologists of Canada, 2011). Accordingly, some theorists seem to suggest that 'healthy'⁵⁸ women, of any age, could achieve pregnancy through IVF and donor oocytes (Abdalla, Wren, Thomas & Korea 1997). Together, IVF and donor oocytes have effectively extended (some) women's reproductive lifespan to beyond 60 years of age. To date, the oldest women to bear children through IVF and donor oocytes were each 70 years of age.⁵⁹ It is unclear how far reproductive technologies can (or should) push the biological limits of childbearing. The use of assisted reproduction by older women raises the following questions: *How old is too old reproduce? Should there be upper age limits on women's (or men's) access to assisted reproduction?*⁶⁰

The majority of fertility clinics in North America impose some upper age limit on women's access to assisted reproduction.⁶¹ For women who require IVF and donor

⁵⁸ Of course, what one considers 'healthy' (and how one's health is measured) in the context of assisted reproduction is debatable.

⁵⁹ Rajo Devi Lohan and Omkari Panwar each conceived using IVF and donor oocytes that the age of 70 years in 2008. Woman in India 'has twins at 70'. BBC News. July 5, 2008. Available at http://news.bbc.co.uk/go/pr/fr/-/2/hi/south_asia/7491782.stm. Accessed September 27, 2009.

⁶⁰ In this chapter I focus primarily on the moral permissibility of older women's access to assisted reproductive technologies, but some of my analysis is also applicable to the moral permissibility of older men's access to assisted reproductive technologies.

⁶¹ See: Advanced Fertility Center of Chicago. Fertility after 40- IVF in the 40s.(2013). <http://www.advancedfertility.com/fertility-after-age-40-ivf.htm>. Also see: McGill Reproductive Centre in

oocytes the upper age limit imposed on women by individual fertility clinics is usually around 49 years of age, but some clinics will accept patients up to the age of 55 years. Upper age limits, however, have been controversial and raised questions about the moral permissibility of upper age limits on assisted reproduction and disagreement about when one is too ‘old’ to use assisted reproductive technologies (Banh, Havemann, & Phelps, 2010).⁶² Navigating disagreements about upper age limits on assisted reproduction can be difficult because theorists often use ambiguous terminology or pick out different referent groups when determining which woman (if any) are too ‘old’ to access reproductive technologies.⁶³ Furthermore, the terminology used to describe the practice of childbearing at an ‘older’ age can be misleading.

In this chapter, I shall use the term “advanced maternal age”,⁶⁴ or AMA for short, to describe the phenomenon of childbearing (and the subsequent rearing) by women over the age of 45⁶⁵ years who use assisted reproductive technologies.⁶⁶ The term ‘AMA’ is preferable to other terms that appear in the bioethics literature, such as “postmenopausal

Montreal, for a Canadian example of an upper age limit to IVF treatment with donor eggs. The McGill upper age limit is 49 years of age. <http://www.mcgillivf.com/e/McGillIVF.asp>

⁶² See for example, the http://www.huffingtonpost.ca/marni-soupcoff/fertility-treatment-age-limit_b_3001399.html Soupcoff, M. (2013). Change My Mind: Should There Be an Age limit for Fertility Treatments?” *The Huffington Post Canada*. April 3, 2013.

⁶³ Such disagreements also extend to other terminology in reproductive medicine, which can be “confusing”. See Davies, deLacey & Norman, 2005.

⁶⁴ In the medical literature, the term “advanced maternal age” is usually used to describe pregnancy in women over the age of 35 years (Best Start, 2007). However, some theorists use this term, or the terms “advanced maternal age” and “very advanced maternal age”) to describe pregnancies in women over the age of 45 years. (Carolan, 2013; Yogev N. Melamed, R. Bardin, K. tenenbaum-Gavish, G. Ben-Shitrit & Ben-Haroush, A. 2010).

⁶⁵ I have chosen the age of 45 because the majority of information on childbearing risks and success rates lumps women “over the age of 45” into a single group.

⁶⁶ Some theorists use the phrase “postmenopausal” motherhood (or pregnancy) to describe the practice of childbearing by older women who use IVF (Parks, 1999, Landau 2004; Watkins 2007; Smajdor 2008). The term “postmenopausal” is generally used to pick out childbearing by women over the age of 50, which is the average age at which most women enter menopause. I suggest that the term “postmenopausal” is problematic for a few reasons. First, not all women at or over the age of 50 are postmenopausal and second not all women who are postmenopausal are over the age of 50. Many cancer survivors suffer premature menopause due to their cancer or cancer therapies. In addition, the point of concern among critics is usually not menopause, per se, but rather the age of women when childbearing and rearing occur.

motherhood”⁶⁷ because it emphasizes the fact that the practice in question is controversial because of a woman’s *age* not because of one’s chances of natural or unassisted conception.

Critics of AMA generally argue that older women are psychologically and physically poor candidates for bearing and raising children (Caplan & Patrizio, 2010; Kortman & Macklon, 2008; Porter, Peddie & Bhattacharya, 2007). The media often portrays women who bear children at an older age as selfish, delusional and bad mothers (Shawa & Gilesb, 2009; Wall, 1997). In contrast, those who defend older women’s access to assisted reproduction suggest that bearing and rearing children at an older age is advantageous for both mother and child (Mills & Lavender, 2010; Recker, 2007; Smajdor, 2008) and they defend women’s reproductive autonomy. Others still, defend women’s access to assisted reproductive technologies because they argue that arguments against AMA are arbitrary, sexist or ageist (Parks, 1999; Smajdor, 2008).

Jennifer Parks (1999) considers the merit of arguments against AMA. Parks argues that popular objections to what she calls “post-menopausal” women’s access to IVF and donor oocytes are ultimately arbitrary and ageist. In other words, she believes that arguments against AMA discriminate against women because of their age (alone), when age is irrelevant to the moral permissibility of access to assisted reproductive technologies. Parks concludes that upper age restrictions on women’s access to assisted reproductive technologies are not morally justified.

Differences in opinion concerning AMA boil down to ethical disagreements about whether (and how) maternal age (or parental age, more generally) is morally relevant to reproduction. Moreover, disagreements about AMA concern whether age restrictions on

⁶⁷ Insofar as AMA picks out a large (and arguably) diverse set of age groups, further demarcations within the group of older women who have children at an advanced maternal age may be warranted. For example, it might be useful to think of AMA between the ages of 45-50 years, AMA between the ages of 50-60 years and AMA between the ages of 60-65 years, and so forth. Arguably, more nuanced definitions of AMA are important for clarifying both the medical and the ethical issues concerning AMA.

women's access to assisted reproduction can evade the charges of sexism, arbitrariness or ageism. Determining if age is morally relevant to reproduction and whether an upper age limit can be morally justified are important tasks for the ethical provision of FP technologies. In the previous chapter, I considered the moral differences between disease-related and age-related FP and argued that both of these practices can be morally permissible within a patriarchal context. Insofar as FP technologies, especially those used for age-related reasons, are designed to extend women's reproductive life spans, by combating age-related infertility, some women may not choose to use stage 2 FP until they are over the age of 45. Thus, the foreseeable normalization of FP technologies reinforces the need to consider whether maternal (or paternal) age is morally relevant to the use of stage 2 FP. So, an ethical analysis of assisted reproductive technologies must determine whether upper age limits on access to stage 2 FP and other reproductive technologies are morally permissible.

In this chapter I consider how *age can be morally relevant to assisted reproduction* and how an upper age limit is *not* (necessarily) *ageist*. I begin by describing five arguments, including non-feminist and feminist arguments, against AMA, which are discussed by Parks. I also explain how FP can complicate discussions surrounding AMA in general and describe how each of the five arguments against older women's uses of assisted reproduction relates to stage 2 FP, and thus warrants further concern. I then describe each of Parks' responses to these arguments against AMA and I explain her charge of ageism. In response to Parks, I suggest that objections to AMA, if taken as a whole, illustrate how some women's choices in favour of AMA can be morally problematic and harmful to these individual women who choose AMA, the resulting children and society, especially other women, more generally. I suggest that age can serve as a proxy for certain physical, psychological and social differences among persons that can have an impact on the moral permissibility of AMA in light of non-feminist and feminist concerns. I maintain that as a woman's age increases, the chances of AMA harming the woman, resulting offspring, and others in society, especially other women, also increases. In other words, I maintain that the moral permissibility of AMA is likely to decrease as the age at which a woman

bears a child increases. In addition, I distinguish between two aspects of ageism, *ageist discrimination by exclusion* and *ageist discrimination by inclusion* and use this distinction to help explain why an upper age limit on assisted reproduction is morally appropriate. In sum, I argue that age is morally relevant to assisted reproduction, and thus some upper age limits on reproductive technologies, such as FP, are non-ageist and morally permissible.

5.1 Arguments Against AMA

Parks describes five common arguments against AMA, namely: the scarcity of resources; fairness arguments; the inappropriateness of older mothers; the concern for orphaned children; and the feminist autonomy argument. To date, these arguments continue to play a part in academic and popular media discussions concerning AMA and upper age limits on women's access to assisted reproduction. Parks describes the first four arguments against AMA as "non-feminist" arguments and the fifth argument as "feminist".

Although feminists might argue against AMA for any of these reasons, the fifth argument is explicitly feminist because it is committed to the ideas that women are oppressed within patriarchy and that oppression can impede women's reproductive autonomy and well-being (Parks, 1999, p. 92-3, footnote 1). The non-feminist arguments need not be committed to these feminist insights. I shall explain each of these five arguments against AMA in more detail.

a) Scarcity of Resources Argument

First, Parks considers the scarcity of resources argument (1999, p. 79). This argument is premised on the idea that donor oocytes are a limited (i.e. *scarce*) resource. Most cases of AMA involve donor oocytes. Donor eggs are in high demand, but can be very difficult to obtain. This is especially true in places such as Canada, where the sale of reproductive material is prohibited. As such, the demand for donor eggs exceeds the supply. Some individuals and governing bodies appeal to the fact that donor eggs are a scarce resource in order to justify restrictions on older women's access to donor oocytes (Parks, 1999, p. 79-80). For example, Parks cites the Canadian Royal Commission (1993), which

maintains that the use by IVF and donor oocytes by older women is an “inappropriate use of resources” (1999, p. 79). So, some critics of AMA argue that donor oocytes should be given to younger women, as opposed to older women, because they assume that these oocytes will be used most efficiently and/ or successfully by younger women. These critics maintain that IVF is safer for younger women, than for older women. Furthermore, they claim that younger women have a better chance of pregnancy and live birth than do older women. Here, the ‘effective use of resources’ is measured by both safety and the chances of achieving a successful pregnancy. The scarcity of resources argument maintains that older women should be denied access to IVF and donor oocytes because these ‘valuable’ resources will be ‘wasted’ on (old) women who are not likely to achieve pregnancy and birth.

b) Fairness Arguments

The second argument considered by Parks is the argument from fairness (Parks, 1999, p. 80- 81). This argument stems from a type of fair-innings argument, which is invoked to justify the restriction of some healthcare resources to older adults, more generally. Fair-innings arguments hold that older individuals have already had their fair chance or “fair innings” to access healthcare services (Williams & Evans, 1997, p. 822). The fairness argument concerning AMA holds that older women have already had their chance to be mothers, so a concern for fairness dictates that donor eggs (or other scarce or expensive resources, such as IVF) should be allocated to younger women who have not yet had this opportunity. The argument from fairness assumes that there is a limited (and appropriate) window of opportunity for women to become mothers. Critics maintain that it is unfair to deny younger women priority access because they have not yet had their chance to become mothers. Older women who choose to delay motherhood are effectively out of luck if they miss the (appropriate) reproductive window.

c) The Inappropriateness of Older Mothers

The third argument against AMA concerns the inappropriateness of older mothers. According to Parks, arguments against advanced maternal age that appeal to the ‘inappropriateness’ of postmenopausal motherhood argue that older women do not make good mothers because they have less energy and are less able to deal with toddlers or troublesome teenagers (Parks, 1999, p. 82-83). This type of argument rests on the premise that children have a “right” (or at least a strong interest) to a “normal childhood” (Parks, 1999, p. 81). Arguably, this type of argument is deeply rooted in cultural norms concerning ideals of parenthood and parental responsibilities. AMA has also been described as ‘unnatural’ by some critics who believe that a woman’s body is not meant to bear children after menopause (Blickstein, 2003). It is believed that the cessation of the menses supports this claim. As such, IVF use for younger women is generally seen as a way to restore younger women to ‘normalcy’ because most young women are fertile. In contrast, IVF use by older women is viewed as going ‘against nature’ because postmenopausal women (and many perimenopausal women) are incapable of achieving an unassisted pregnancy. According to this view, infertility is statistically normal for older women and therefore it should not be viewed as a disease that requires medical intervention in older women.

d) Concern for Orphaned Children

The fourth argument against AMA involves a concern for orphaned children (Parks, 1999, p. 84-5). This argument is premised on the following claims: first, that older women are more likely to die sooner than younger women; and second, children have a “right” to have a mother (or parents, more generally) who can care for them through to adulthood. Older women who are unlikely to survive long enough to raise their children into adulthood will not be able to fulfil their parental responsibilities. So, older women who use assisted reproductive technologies, can increase the likelihood that their resulting children will become orphans (or a partial orphan) before these children reach adulthood. The concern for orphaned children is often a central concern for critics of AMA.

e) Feminist Argument

The final argument against AMA that Parks describes rests on the feminist autonomy debate (Parks, 1999, p. 85-88). According to some feminists, most older women's choices concerning IVF and donor oocytes fail to be autonomous, so allowing them access to reproductive technologies is morally problematic. These feminist critics maintain, as most feminists do, that within patriarchy, women can internalize pronatalist ideologies (Morgan, 1989). As I describe in chapter one of this dissertation, patriarchal pronatalism ties women's identities, *qua* women, to the ability to bear children. Within a patriarchal society, some women may internalize oppressive social norms around reproduction and come to uncritically adopt pronatalist values. As such, the reproductive autonomy of women at *any age* can be impeded by pronatalism. However, ageism is a social bias that can also coerce some women's reproductive decisions within patriarchy. This bias involves the systematic social valuing of youth and the devaluing of old age. Ageism, like pronatalism, is an oppressive social bias that can impede autonomous choices, actions and desires.

In the context of reproduction, 'youth' is marked by a woman's ability to bear a child. IVF (with donor oocytes) can be used by older women to regain or retain their 'youth', while also fulfilling the pronatalist mandate to bear children. The problem, according to feminist critics of AMA is that (most) older women's reproductive decision making will fail to be autonomous, because older women are coerced by *both* pronatalism and ageism. Feminist critics of AMA worry that when pronatalism is coupled with ageism, or the valuing of youth, older women can suffer from "double oppression" (Parks, 1999, p. 85-6). These feminists construe (most) older women who use IVF technologies as mere "dupes of patriarchy", who fall victim to both pronatalist and ageist social ideologies (Parks, 1999, p. 91). Younger women do not suffer from ageist oppression. So, according to this feminist argument against AMA, it is morally permissible to deny older women access to assisted reproductive technologies because their reproductive decisions will likely be less autonomous than the reproductive decisions of their younger counterparts.

Each of the five arguments against AMA, described above, aims to show that older women's uses of assisted reproductive technologies are *more* morally problematic than younger women's uses of these technologies. In the next section I describe how FP can complicate discussions concerning the moral permissibility of AMA and upper age limits on access to assisted reproductive technologies.

5.2 FP Technologies and AMA

To date, little has been said about the influence of FP practices on AMA. A critical evaluation of the impact of FP on older women's uses of assisted reproductive technologies is important because a growing number of women are choosing to use FP technologies. Understanding the unique ethical issues surrounding FP, especially stage 2 FP, is a necessary part of discussions concerning the moral permissibility of older women's access to assisted reproductive technologies. In this section I review some of the features that make FP different from other reproductive technologies and I then consider how these differences relate to the AMA controversy.

FP technologies have some characteristics that set them apart from other assisted reproductive technologies. First, FP is marketed as a way of *extending* a person's reproductive lifespan with the use of one's *own* genetic material. The use of FP also involves payments for cryopreservation storage fees over a span of several years or possibly even decades. So, FP involves a degree of reproductive planning, storage of reproductive materials that one 'owns' (in at least some minimal sense) and a monetary investment over an extended time-period.

Second, cryopreserved reproductive materials may be stored for many years. There are some concerns regarding the viability of cryopreserved material in long-term storage. Limited data exists regarding the effects of the duration of storage on oocyte cryopreservation survival and pregnancy (ASRM, 2012). There is also little information available concerning the viability or safety of cryopreserved ovaries, ovarian tissues and eggs matured using IVM prior to freezing. Many theorists and governing bodies suggest a cautious approach to the use of reproductive materials that have been frozen for long

periods of time (Advisory Committee on Assisted Reproductive Technology 2008; Auroux, 2000 p. 556; Bredkjaer & Grudzinskas, 2001). Some FP protocols recommend a maximum of 10 years storage time for oocytes (Human Fertilization and Embryology Authority, 2012). AMA using stage 2 FP with reproductive material that has been stored for a long time might be morally impermissible because of the potential problems and uncertainties associated with extended cryopreservation.

Third, FP technologies allow for different methods for achieving genetic reproduction. As I discussed in chapter one, different FP technologies have a unique set of risks and success rates. Because of this, certain FP technologies might be more risky than other methods of achieving pregnancy at an AMA. For example, some FP technologies can add the additional risk of reintroducing cancer into a woman's body. Other FP technologies might decrease some of the risks associated with AMA. For example, stage 2 FP, which involves the re-implantation of ovarian tissues into the abdomen (near the ovaries) in hopes of reactivating a woman's ovarian function (Silber, 2012), can allow the woman using stage 2 FP to avoid the risks associated with IVF. The use of ovarian tissue cryopreservation can also (appear to) be a more 'natural' reproductive method since conception occurs *in vivo*.

Stage 2 FP also allows women to hire contract pregnant women to gestate a child using cryopreserved oocytes (and IVF). In such cases, the intending mother does not give birth to her child, so she is able to avoid (or transfer) the risks associated with pregnancy. Older women who use stage 2 FP could have a younger contract pregnant woman gestate a child with their own frozen-thawed oocytes. This option might be especially attractive to older women who face increased risks in pregnancy.

Fourth, the separations of gestation and genetic (or intending) motherhood can also influence AMA discussions. This is because this separation highlights the need to pinpoint what exactly critics of AMA find controversial and what defenders of AMA consider to be worth the associated risks. In my introduction I mentioned the need to clarify the terms of the AMA debate and I chose to use "AMA" to pick out the social

phenomenon of childbearing *and* childrearing by older women (over the age of 45 years). FP technologies allow for a separation of gestation and rearing. So, if one only objects to pregnancy in older women, they may not necessarily object to third-party uses of stage 2 FP. Similarly, if childrearing is the point of contention among critics, then the use of stored reproductive materials by older women could be morally permissible provided that these women are not primary caregivers for their children. Indeed, FP technologies, like other assisted reproductive technologies, have the potential to fracture or complicate the various components of motherhood. So, understanding the nature of women's choices about AMA requires a consideration of which aspects of motherhood are most contentious (or most acceptable) for older women to perform.

Finally, the chances of producing a genetically-related child from FP technologies will also have an influence on the debates about AMA. If some stage 2 FP technologies can promise higher success rates than other assisted reproductive methods, FP might be more attractive to women who 'choose' to delay childbearing. Next, I shall consider how the aforementioned aspects of FP relate to each of the five objections to AMA described in the previous section.

The scarcity of resources argument for donor oocytes does not apply to stage 2 FP because individuals use their own stored materials instead of oocytes from third-party donors. However, a different version of the scarcity argument could be relevant to stage 2 FP. The scarcity of resources argument could argue that IVF services (or other reproductive services, for that matter) are 'scarce' resources. This argument is most relevant in contexts where IVF is publicly funded, as it is in Quebec and Israel. In these contexts the demand for IVF technologies could exceed the availability of IVF (or IVF funding). As such, IVF would be a scarce resource in these jurisdictions. The same would be true in cases where other aspects of FP are publicly funded; laboratory time need for IVM, storage space or FP providers could all be construed as limited resources that require effective allocation. If the effective allocation of resources means giving access to the women (or groups) with the best chances of success and the lowest chances of being

harmed, then advancements in FP technologies might show comparable differences among different age groups, or they might find that there are large differences in the efficiency of stage 2 FP for different aged women. Obviously, this information about stage 2 FP is not yet available, but when it does become available, these numbers will factor into how the scarcity of resources arguments against AMA pan out.

The fairness argument is also affected by FP. In particular, the length of storage time for cryopreserved reproductive materials can influence how one understands what counts as ‘fair’ concerning women’s access to stage 2 FP resources. One might argue that the longer a woman has stored her reproductive materials, the more claim she should have to using these materials. So, an argument from fairness about AMA might show that older women, and not younger women, should have priority access to stage 2 FP because they have invested more time and resources into the storage of their reproductive materials. Furthermore, some women may have to wait longer than other women before they can use their stored reproductive materials in stage 2 FP because of personal circumstances, such as illness or needing time to save money for stage 2 FP services or not being able to find a suitable partner at a younger age. Of course, not all women use stage 1 FP at the same age, so using storage time as a measure for priority access might not map on perfectly to groups of older and younger women. Nevertheless, storage time can add an extra dimension to fairness arguments.

FP technologies can also influence arguments concerning the inappropriateness (or unnaturalness) of AMA by challenging what counts as normal or appropriate. The growing popularity of FP technologies and the trend of delayed childbearing could have the effect of normalizing FP technologies because the number of older women who use stage 2 FP will increase. Parks makes this point (Parks, 1999, p. 83). In addition, some FP uses may require less (or more) medical interventions that affect the social perceptions of the degree to which stage 2 FP might count as ‘natural’. FP technologies can challenge what we think is ‘natural’ or ‘appropriate’ for older women. A further point worth considering has to do with how the use of *one’s own* gametes will affect social

conceptions of naturalness and appropriateness of stage 2 FP by older women. It is possible that strong biologicistic ideologies will make stage 2 FP less problematic than AMA through IVF and donor oocytes. Some critics who take the concern for children seriously in the AMA debate might think that it is in the best interest of children to have *genetically-related* parents. So, those critics who hold biologist ideologies might think that stage 2 FP is more preferable from the standpoint of the interests of future children, than the use of IVF with donor oocytes by older women.

As for the orphaned children argument, FP technologies do little to ensure that children born from older women who use stage 2 FP will not be orphaned. Indeed, some women who use disease-related FP might be more likely to die before their children reach adulthood than their counterparts of the same age who use age-related FP. This is because some cancer survivors are at an increased risk of having their cancer reoccur or developing a new cancer (American Cancer Society, 2011). In such circumstances, some uses of stage 2 FP might be more likely to result in orphaned children.

Lastly, I shall consider the feminist argument from autonomy against AMA. FP technologies complicate the feminist autonomy debate by adding an *additional* dimension of oppression, namely biologism. As I argued in chapter two, both pronatalism and biologism can coerce some women into choosing FP technologies. As such, older women who use stage 2 FP technologies might suffer from ‘triple-oppression’, that is oppression from pronatalism, ageism *and* biologism. These oppressive social norms can seriously impede some older women’s autonomous decision-making about stage 2 FP.

FP technologies add to AMA discussions by complicating the number of risks and benefits associated with older women’s uses of assisted reproduction. In addition, FP forces both critics and defenders of AMA to specify, more clearly, their points of disagreement concerning concepts invoked and their particular meanings. Next, I describe Parks’ responses to arguments against AMA.

5.3 Park's Responses to Criticisms of AMA and the Charge of Ageism

According to Parks, arguments against AMA fail because they are all ageist, to some extent. Parks maintains that the non-feminist arguments against AMA are ageist because they treat older women as psychologically and physically risky mothers, but fail to acknowledge that younger women can also be risky mothers. Although she thinks that the feminist argument against AMA is most compelling, she argues that feminist arguments are also ageist, to some degree. This is because autonomy concerns apply to all women who use assisted reproduction, not just older women. Arguments against AMA are ageist because they assume that a moral distinction between older and younger women on the basis of age when age is (supposedly) not relevant to assisted reproduction. Thus, upper age limits on women's access to assisted reproduction are arbitrary and unjust, according to Parks. In this section I review Parks' objections in more detail and offer some preliminary replies to her arguments. I also explain her charge of ageism.

First, Parks responds to the scarcity of resources argument. She rejects the claim that IVF and donor oocytes are most effective in younger women. Parks argues that claims concerning the impact of age on the success rates and risks of IVF with donor eggs are simply false (1999, p. 79).⁶⁸ According to Parks, IVF is no less successful in older woman than in younger woman.⁶⁹ Nor is it any riskier for older women (Parks, 1999, p. 79-80). Since the success rates and risks are comparable according to the evidence Parks cites, she concludes that the success rates and safety of IVF in postmenopausal women cannot justify an upper age limit on access to IVF. In sum, she believes that scarcity of resources arguments are appealing to an irrelevant factor, namely, *age*, when arguing for

⁶⁸ In the next section I will offer some more recent data on pregnancy risks and rates in older women that were not available to Parks at the time of writing her article.

⁶⁹ This is because, at the time of writing her paper, the success rates for all IVF procedures were quite low. However, IVF technologies have improved in recent years, so it is no longer the case that women, especially younger ones, have very low chances of success.

upper age restrictions on IVF and donor oocytes. For these reasons, Parks claims that scarcity of resources arguments against AMA are ageist.

However, one might argue that as more information becomes available about the risks and success rates associated with childbearing at an older age, it is not clear that there will be no differences in the best or most efficient use of scarce resources, such as donor eggs. It may turn out that either the success rates or risks are not comparable for women in different older age categories. I suggest that the concerns which ground the scarcity of resources argument (namely safety and efficacy) require reconsideration as more information about AMA becomes available.

Second, Parks responds to fairness arguments against postmenopausal motherhood. She claims that a concern for fairness dictates that *older* women, *not younger* women should have priority access to IVF and donor oocytes. Critics who claim that older women have ‘had their chance’ to become mothers grossly misrepresent the deep social and structural inequalities that hinder women’s abilities to bear children at a younger age (Parks, 1999, p. 81). Moreover, Parks highlights the fact that IVF technologies and donor oocytes were not readily available to many older women when they were younger. Many older women may have suffered from infertility at a younger age, but IVF was not yet available, so they did not ‘have their chance’ to become mothers at a younger age. An argument from fairness, Parks thinks, would require that postmenopausal women “should not be discounted as worthy recipients of IVF” because some older women suffered social injustices that could not be alleviated through IVF until these technologies became available (Ibid). So, fair innings arguments fail to recognize some of the reproductive hardships faced by older women. These arguments are ageist because they hold that one’s age measures the amount of reproductive opportunities that women have had, but age (alone) cannot discern which women have had fewer chances to become mothers.

Parks’ response to the fair innings argument mirrors my earlier response to criticisms of age-related FP from chapter four. I believe that Parks is correct to point out that some older woman may not have had the option of bearing children at a younger age because

of their infertility and the absence of IVF. But, assisted reproductive technologies are becoming more readily available and FP technologies are expanding women's reproductive options. The changes surrounding women's reproductive choices could have an influence on the degree of reproductive choice that can appropriately be attributed to women. If older women do have more reproductive choices than younger women, then the fair innings argument warrants further consideration.

Third, Parks responds to the inappropriateness-of-older-mothers argument. She argues that such arguments uncritically assume the moral unsuitability of older women for parenting (Parks, 1999, p. 82). The view that postmenopausal motherhood is 'inappropriate' stems from a particular culturally specific perspective on motherhood. She compares the restriction of IVF to older women with IVF restrictions imposed upon single women, poor women, disabled women and lesbians (Parks, 1999, p. 83). These restrictions, she claims, are all problematic because they are grounded in oppressive normative ideologies surrounding motherhood and womanhood. Parks maintains that social norms should not dictate what is morally appropriate because 'normalcy' is subjective and apt to change. Parks says that what we consider to be 'normal' is often informed by stereotypes and prejudices. Those things or practices which count as "normal" are influenced by social stereotypes and prejudices. So, our conception of 'normalcy' alone, is not an acceptable foundation for law or policies (Ibid).

Furthermore, Parks suggests that critics who cite the inappropriateness of older mothers hold contradictory beliefs. Parks suggest that these critics of AMA suggest that older women are appropriate gestational carriers for their daughters but they do not trust these older women with the moral responsibility of raising young children (1999, p. 85). According to Parks, this is insulting to older women and ignores the fact that older women, especially grandmothers, are often caregivers for young children. She suggests that there is no empirical data supporting the claim that children are harmed by having older mothers or older parents and compares these worries about older mothers to the claims that have been made about the so-called "harm" done to children who are raised

by same-sex parents. Concerns about older parents are grounded in stereotypes and prejudices about old age. Age restrictions that appeal to the inappropriateness or unnaturalness of advanced maternal age suffer from ageism because they systematically appeal to stereotypes and prejudices to exclude persons based on age alone.

One might reply to Parks by showing that some conceptions of ‘normalcy’ can be appropriate guides for laws and policies. Indeed, not all social norms contribute to oppression. Some social norms pick out neutral or positive social values. For example, norms concerning the inappropriateness of public nudity are not *necessarily* linked to oppression. As such, these norms could act as appropriate foundations for laws concerning nudity. Also, the fact that critics of AMA hold some contradictory beliefs is not a reason to believe that their beliefs about the inappropriateness of AMA are false. Restrictions on AMA need not be a slippery slope to restrictions on reproduction by other groups. In other words, there is little reason to think that we can allow one practice, such as parenting by same-sex couples, for example, but not restrict other practices, such as childbearing beyond a certain age.

Fourth, Parks responds to the concern for children. Parks denies that this right could be a perfect or absolute right (1999, p. 84). She suggests that a child’s right not to be an orphan does not (and should not) extend to the prohibition of certain dangerous jobs or lifestyles by parents. So, the concern for orphaned children argument, according to Parks, highlights tensions within the dominant social norms that shape women’s experiences of motherhood (Ibid). She claims that society is more inclined to fulfil the reproductive desires of women with “advanced diabetes or a woman dying of cancer” but not that of a single, lesbian or post-menopausal woman (Ibid). For example, pregnant women who are considered clinically dead due to brain death are sometimes used to gestate pregnancies until the fetus can survive independently. All of these practices, according to Parks, yield a very high chance that the children born will become orphans. However, Parks claims that society does not usually prevent such practices. Parks also argues that men who have children at an older age could also orphan children yet do not face the social taboos that

post-menopausal mothers do (Ibid). Parks suggests that AMA is no more problematic than other cases of assisted reproduction. So restricting older women's access to assisted reproductive technologies because of a concern for orphaned children is ageist and sexist.

I maintain that a concern for the interests of future children should play some role in the deliberations about AMA or about parenting choices, more generally. Insofar as children have a strong interest in having (social) parents, there are reasons to think that persons who choose to create children have a moral obligation to fulfil this minimal parenting responsibility. Furthermore, the dangerous professions or lifestyles of younger parents should also be worrisome because they too might be unable to fulfil the basic parental responsibility to rear one's child through to adulthood.

Finally, Parks responds to feminist arguments against postmenopausal motherhood. Parks thinks that the feminist argument is most compelling, of all the arguments against AMA. However, it too is problematic because it rests on ageist assumptions about older women. Furthermore, the feminist argument from autonomy applies to all women who use assisted reproduction, not just older women. Parks concludes that restricting access to some women based on age alone is also ageist. She claims that if reproductive technologies remain available, they should be available to women of all ages. Parks contends that all uses of assisted reproduction (in women of any age) are morally problematic. However, insofar as we allow younger women to use assisted reproductive technologies, then we ought to also allow older women to access assisted reproductive technologies. This is because moral distinctions between childbearing by younger and by older women are unfounded.

In response to Parks' concerns with the feminist argument from autonomy, the fact that all women are at risk for being coerced into childbearing by oppressive social norms fails to show that some groups of women are not more at risk. As I shall later explain, securing autonomy is more important when one's choices result in actions that can be risky, as in the case of reproduction at an older age. It may be the case that some persons in certain

social groups face a higher risk of oppressive coercion with respect to particular domains, than individuals in other social groups. I will return to these points in the next section.

To summarize, according to Parks, any upper age limit on women's access to assisted reproduction is arbitrary and unjust. She concludes that age (alone) is not morally relevant to the use of assisted reproduction and upper age limits on assisted reproduction are ageist. I shall now explain Parks' charge of ageism in more detail.

According to Parks, ageist social norms are a part of deeply embedded social customs and ideologies which value 'youth' and perpetuate a fear of ageing and the devaluation of older people. For feminists, ageism is similar to sexism, racism, ableism, classism and other axes of oppression insofar as it is systemic in nature and prescribes and reinforces a social hierarchy. Older adults are stereotyped as dependent, less able to adapt to changes and slow in both body and mind. Within patriarchy, women's value is tied to sexist and ageist ideals of youth and the stereotypes against older women are especially forceful.

Ageism, as Parks uses the term, is intended to pick out *a set of social norms, which systemically discriminate against older persons because of their age* (when age is not relevant). In an ageist society, persons in older social groups are denied access to services or institutions on the basis of their age alone. For example, the mandatory age of retirement is set at 65 years for some professions, such as airline pilots. Mandatory retirement forces employees to stop working at a certain age (in this case 65 years), so that younger people can enter the profession. In addition, upper age limits for (certain types of) employment are used as markers for the age at which a company can exclude from employment any persons who are no longer 'fit' or able to perform the duties associated with their profession. A mandatory age of retirement may seem unjust because there appear to be few physical or cognitive differences between persons who are 64 years old and persons who are 65 years old, so the age of 65 seems arbitrary. Furthermore, some persons over the age 65 may be more capable than some younger persons of doing a particular job. Such concerns relating to arbitrariness and unjust age

limits are central to Parks' discussion of ageism in arguments against older women's access to assisted reproductive technologies.

In the context of reproduction, stereotypes and prejudices around age construe younger women as healthy and appropriate candidates for motherhood, while older women are perceived as less healthy and inappropriate candidates for motherhood. Older women are excluded from having access to reproductive technologies because stereotypes around older women's bodies mark older women as poor candidates for reproduction and parenthood. Older women are also excluded from social status that accompanies motherhood within patriarchal societies. Denying some older women access to reproductive technologies seems unjustified because some older women may be healthy and appropriate candidates for motherhood. In the case of upper age limits to assisted reproduction, there may also appear to be few relevant differences between a 49 year old woman and a 50 year old women (assuming 49 years of age is set as the upper age limit for assisted reproduction). Furthermore, some women over the age of 50 years might be healthier (and thus more appropriate candidates) for IVF and donor eggs, than some women under the age of 49. Again, as with the case of upper age limits on employment, upper age limits in the context of assisted reproduction appear to be arbitrary and unjust.

In general, the systematic exclusion of older people often works to privilege younger adults. The systematic privileging of younger persons and harm to older persons makes ageism an oppressive social bias. Again, according to Parks, upper age limits on assisted reproduction are unjust because age limits are arbitrary and based on social prejudices and stereotypes about older women, and a woman's age is not morally relevant to her use of assisted reproduction. In this chapter, I shall refer to the type of discrimination against older persons, which is picked out by Parks' depiction of ageism as *discrimination by exclusion*.

The charge of ageism cannot be taken lightly, especially from a feminist ethical approach that is committed to the eradication of oppression. To some extent, I agree with Parks' concerns about arguments against AMA. It seems that she is correct to point out that each

argument, alone, fails to show a moral difference between the moral permissibility of older and younger women's uses of assisted reproduction. It is likely that a number of stereotypes and prejudices about older women can be found in criticisms of AMA.

However, I disagree about whether arguments against AMA can overcome the charges of ageism. I maintain that *some* generalizations about ageing bodies and how these bodies are socially situated can be morally justified. In other words, I think that age can be morally relevant. To show how this might be the case, I shall consider the costs and benefits associated with the practice of AMA, as a whole. In the next section I explore some ways that a person's age can be morally relevant to the use of assisted reproduction.

5.4 Response to Parks: The Moral Relevance of (Maternal) Age

Although the meaning of age and the appropriate measure of age are both controversial within medicine and bioethics (Bytheway 2005; Bytheway & Johnson 1985), gerontologists agree that ageing is a real, normal and (at present) inevitable process. The ageing process begins at birth, and is marked by the "gradual decline of functional and reserve capacities in individuals" (Tinterow, 1993, p. 244). In other words, on average, as people age their energy levels, mobility, health and life expectancy (among other things) continuously decrease. I think it is uncontroversial to admit that there are some stark differences between 40 year old bodies and 70 year old bodies, on average. These differences will be ones of physiological function, cognitive health or psychological functioning, longevity and social positioning (among other things). These differences between differently aged bodies might be able to account for differences in the moral permissibility of AMA as a woman's age increases. My goal in this section is to show how women's access to assisted reproductive technologies can become more problematic as women age. In other words, I aim to show how maternal age can be morally relevant to assisted reproduction. Many arguments given in this section can also apply to the moral relevance of *paternal* age on reproduction. If parental age is relevant to assisted reproduction, then the charge of ageism can be dismissed.

To show how age can be morally relevant to assisted reproduction, I appeal to some of the insights from the arguments against AMA discussed earlier in this chapter. Although

no *single* argument against AMA is successful in showing that upper age limits are morally justifiable, I maintain that a more holistic examination of the concerns raised by these arguments show that as a woman's age increases, the chances of the harms of AMA outweighing its benefits also increases. I suggest that AMA has the potential for harming the individual woman who employs assisted reproductive technologies, the resulting child and society (in general), as well as women as a group (in particular). Below, I explain each of these concerns.

a) Harms to Women

First, age might matter *morally* to assisted reproduction because using assisted reproduction at an older age can be more harmful to older women than younger women. In general, increased risks related to assisted reproduction; a decrease in assisted reproduction success rates; a reduction in benefits incurred from AMA; and difficulties with autonomous choice about AMA, can make assisted reproduction at an older age harmful to these women. Let me explain each of these concerns in turn.

Although there remains a serious need for more and better information about pregnancy in women over the age of 45, many fertility specialists maintain that a woman's age is the primary factor in determining the risks associated with IVF (Heffner 2004; Howland & Kennedy, 2007, p. 157; Jahromi & Hussein, 2008). Women over the age of 40 have increased chances of experiencing each of the following pregnancy complications: gestational hypertension, preeclampsia, chronic hypertension, diabetes, preterm birth, placental abruption, caesarean delivery, low birth weight, macrosomia and intrauterine fetal death (Jahromi & Hussein, 2008, p. 320; Gleicher, Norbert, Weghofer, & Barad, 2007; Tower 2009). Women over the age of 40 years old are more than twice as likely to experience these pregnancy complications as women between the ages of 20-30 years. In addition, some researchers have found that these pregnancy-related risks dramatically increase in pregnancies by women over the age of 45 years (Bayrampour, Haeman, Duncan & Tough, 2012).

It makes sense that older women who undergo invasive surgeries associated with reproduction and the drastic bodily changes that are marked by pregnancy, would be more at risk than younger women who become pregnant through these technologies. This is because as we age, our health steadily declines and older bodies are more susceptible to illness and disability (Holliday 2010; Watters, Clancey, Moulton, Briere & Zhu, 1993; Young 1997). Some studies also suggest that recovery from abdominal surgery in older patients is considerably slower in older patients (Watters et al., 1993).⁷⁰ So, it is reasonable to believe that older women's recovery from pregnancy and the surgical interventions involved with assisted reproduction will also be slower. That the riskiness of assisted reproduction for an individual will increase with age, is not an unreasonable assumption. In other words, the risks for women who use assisted reproductive technologies increase with the age of the woman who uses these technologies.

The use of assisted reproduction by older women can also be less successful than assisted reproduction in younger women. Some studies have found that older women who use donor oocytes have comparable pregnancy success rates to younger women who use IVF with their own oocytes (Noci et al., 1995), but others insist that as women get older, the chances of a successful pregnancy, even with donor oocytes, decreases (Leader, 2006). The Center for Disease Control (CDC) 2010 found some evidence supporting differences in pregnancy rates (and risks) between women in different age groups (40s, 50s, and 60s). In particular, recent studies have found that the changes in ageing uteruses can have an effect on the success rates of older women's uses of assisted reproductive technologies (Lau, 2012). Given the role that the uterine lining plays in gestation and the changes that happen with age, it is possible that these age-related changes can help to determine whether the use of assisted reproductive technologies will result in successful pregnancies in older women. If older women have lower success rates than younger women, age can be relevant to the moral permissibility of older women's access to these technologies.

⁷⁰ The study compares patients under the age of 50 with patients age 70 years or older.

Admittedly, there are several serious challenges to discerning the risks and success rates associated with various assisted reproductive technologies. One challenge for determining the success rates and risks of AMA has to do with the relatively low number of pregnancies that have occurred (or are reported) in women over the age 60 years. It is nearly impossible to find reliable information on the number of women over 50 who have been unsuccessful in their attempts at achieving pregnancy through IVF and donor oocytes. Such information is lacking in part, because postmenopausal motherhood is a relatively new phenomenon made possible through advancements in reproductive technologies. Also, there are few reliable national databases for recording or processing information concerning assisted reproduction by older women.

Another thing that makes discerning the risks of postmenopausal pregnancy quite challenging is the fact that many studies simply lump older women together in one group (older women over 40 years of age, for example). So, there remains a serious need for further empirical research concerning the risks associated with pregnancies in older women of different ages. There also needs to be more information concerning the success rates of assisted reproductive procedures in older bodies of different ages.

Although assisted reproduction and pregnancy can be risky, these risks are assumed in the hopes of producing a child. For most people, the benefits or goods associated with parenting far outweigh any harm associated with assisted reproduction. According to Brighthouse and Swift (2006) some of the goods of parenting can occur only after a child is grown. For example, parents have a much different relationship with older children, or grown children than they do with infants or toddlers. As infants and toddlers, mothers and fathers give a significant amount of time and energy into rearing their children and might not fully see the benefits of their efforts until their children have grown. Parents can also have a very different and unique level of intimacy with their grown children that they cannot experience with their young children and vice versa.

However, as women (or men) age, it is less clear that they will experience sufficient benefits from reproduction as compared with the harms that can occur from pursuing

assisted reproduction at an advanced age. Some older women might not have sufficient opportunities to enjoy the goods of parenthood. This is especially true if assisted reproduction is risky and harmful for older women. If a woman bears a child at a very old age, she might not live long enough or long enough in good health to fully enjoy the benefits of parenthood. For example, Rajo Devi Lohan who gave birth at the age of 70 through IVF and donor oocytes, and fell ill soon after delivering her baby due to alleged complications from assisted reproductive technologies and pregnancy. Reportedly, only 18 months after delivering a child, Lohan was “on her death bed”,⁷¹ although there have not been any reports of her succumbing to her illness. In another case, of AMA, Susan Tollefsen, who conceived at the age of 57, later, at the age of 61, confessed that childbearing and rearing at an advanced age was much too difficult and worried about who would care for her child when she is gone. Tollefsen publicly advocated for an upper age limit for IVF treatment of 50 years of age.⁷² Insofar as the likelihood of illness and death increase as we age and the hardships that childbearing and childrearing can pose for women, it seems likely that most older women who become parents will have relatively little time to enjoy the benefits of parenting.

One might object, by claiming that some older women, even those who die when their child is still an infant, will get *some* benefit from reproducing. One way that women could benefit is through pregnancy. Arguably, pregnancy is a unique experience that can give a woman a sense of fulfilment or connection with her child. For some women, especially women in pronatalist societies, there can be social rewards that come along with pregnancy. Given the stigma around advanced maternal age, however, these social rewards may not be experienced by (much) older women. Nevertheless, for the individual woman, pregnancy itself might be a positive and valuable experience. Another way that

⁷¹ <http://www.dailymail.co.uk/news/article-1286412/Worlds-oldest-mother-Rajo-Devi-Lohan-reveals-dying.html>

⁷² <http://www.dailymail.co.uk/health/article-2058381/IVF-mum-Susan-Tollefsen-61-I-WAS-old-I-baby.html>

women can benefit is through parenting an infant or toddler. There is usually a strong bond between mothers and very young children that is unlike relationships they have with older or adult children. Older women who are unable to enjoy the goods of parenting older children (because of death or illness) can still enjoy some of the goods associated with parenting an infant or toddler. These benefits might be greater for women who are first-time mothers, as opposed to women who have had previous children.

However, the amount of value placed on either pregnancy or parenting a very young child might be outweighed by the risks associated with AMA. Further research is necessary for understanding both the physical risks associated with advanced maternal age and the perceived or actual benefits with pregnancy and childrearing at older ages. So, insofar as some (very) old women may not experience the full benefits of parenting, allowing them to access very risky assisted reproductive technologies is morally problematic.

A final way that age can be morally relevant to the harms incurred by women, has to do with the feminist concerns about autonomy. Like Parks, I think this feminist concern is among the most compelling arguments against AMA. However, unlike Parks, I think that feminist concerns about autonomy are more pressing in cases of AMA, on average, than in most other cases of decision-making about assisted reproduction. In chapter 3 of this dissertation I argued that an ethical process of informed choice can help to secure patient autonomy with respect to FP decision-making. One reason for this is because the process of informed choice is well-suited for identifying the barriers (such as pronatalism and biologism), that can impede autonomous reproductive choices. However, AMA raises some concern over whether older women's choices to use assisted reproduction can be autonomous. Insofar as women in increasingly older age groups are more likely to incur harms from assisted reproduction, one might wonder why they choose to employ these reproductive technologies. Some older women's choices in favour of (very) risky assisted reproductive technologies warrant a deeper investigation into whether these choices can be autonomous; especially when the risks seem to be outweighed by the benefits.

As I mentioned earlier, FP technologies are influenced by pronatalist and biologicistic norms. In the case of older women, there is also the threat of ageist oppression. Parks says that the autonomy debate is problematic for all women. It is true that oppressive ideologies might threaten the autonomy of woman at any age, but threats to older women's autonomy warrant special concern. This is because threats to autonomy are more worrisome when they result in a considerable amount of harm to the agent. For example, a non-autonomous choice to undergo a risky surgery is much more worrisome than a non-autonomous choice about how to cut one's hair. In the case of AMA, if women in older age categories (like 60-70 years of age) have much higher chances of being harmed from assisted reproduction than women in younger age categories (like 40-50 years of age), then age can matter to whether decisions concerning AMA are autonomous.

One might worry that many older women who choose in favour of AMA, despite the risks are less autonomous with respect to reproduction. This could be because older women have had a (longer) lifetime to internalize oppressive social norms around reproduction. Perhaps an ethical process of informed choice with feminist counselling would fail to meet the conditions for autonomy that I discussed in chapter 3. Some older women who have deeply (and unauthentically) internalized oppressive social norms might struggle to perform the kind of normative evaluation required by informed choice. Furthermore, it is possible that over time, inappropriate self-referring attitudes (that can also hinder autonomous choice), will become more difficult for an individual to change. Indeed, if we are conditioned to think about ourselves in a negative way for a very long period of time, we may be unable to fully adopt appropriate self-referring attitudes.

These worries about the strong influence of pronatalism and ageism on older women's reproductive choices are evident in some older women's narratives about AMA. For example, in explaining why she chose to use IVF at aged 60, Frieda Birnbaum says "I had children for my husband... call me stupid. I did it because he said 'try it'". (Whitelocks, 2012). Rajo Devi Lohan of India claimed, "I dreamed about having a child

all my life. It does not matter to me that I am ill, because at least I lived long enough to become a mother” (Furness, 2012). I am not including these narratives from Birnbaum and Lohan in order to *show* that their decisions to use IVF and donor oocytes were not autonomous. Rather, I want to point out that the reasons that they give *could* be indicative of oppressive socialization. In the case of Birnbaum, she may have lacked the appropriate self-referring attitudes, like self-trust or self-worth, needed to choose autonomously or going against her husband’s wishes for another child. In the case of Lohan, she may have internalized pronatalist social norms (which are especially pervasive in India) concerning women’s life purpose to bear children. Older women who use IVF and donor oocytes are often cited as saying that they use IVF in order to please their husband or fulfil their deep desires to bear a child. For some older women, the choice to use assisted reproduction may be autonomous, but with increasing age these choices become riskier and potentially more harmful for women. Arguably, one’s ability to choose autonomously about AMA is central to the moral permissibility of older women’s access to assisted reproduction. Given the likelihood and seriousness of personal risk and the coercive social forces that can cause some women to have deformed desires and inappropriate self-referring attitudes, with respect to reproduction, there is reason to think that beyond a certain level of risk, decisions in favour of AMA will not be autonomous. Furthermore, even if one could assume a maximal amount of personal risk (where the result could be death), such risky decisions are problematic when the consequences such risky behaviour can have harmful effects on others. In what follows, I consider how risky decisions in favour of AMA can impact children and others, more generally.

b) Harms to Children

The second way that a woman’s age can be morally relevant to her use of assisted reproduction has to do with the impact that her age will have on the resulting child. Although some defenders of AMA argue that the interests of the potential child are hardly ever a reason for withholding IVF treatment (Hope et al. 1995), I think this view is mistaken. In the case of FP technologies, as I have already mentioned, the long-term

storage of reproductive materials involved in AMA may pose risks for future offspring (Allen & Reardon, 2005; McEvoy, Sinclair, Young, Wilmut & Robinson, 2000). These risks alone may be sufficient to impose upper age limits (and storage limits) on stage 2 FP. However, I will focus on a child's interest in having a certain kind of life that is compromised by some cases of AMA.

The interests of (one's) potential children should be considered when deciding about whether or not one should use assisted reproduction (at any age). But, children who are born to older woman can be harmed by becoming a (partial) orphan or a caregiver at a very young age. As many objections to AMA suppose, maternal (or paternal) age can be morally relevant to the interests of children. In Canada, for example, the average life is 83 years of age for women (and 79 years of age for men) (Statistics Canada, 2009).⁷³ Reproductive practices that permit or encourage older adults over the age of 65, for example, to have children run the serious and heightened risk of creating children that will be orphaned before these children reach adulthood. In Ontario, many children who enter foster care or become Crown wards of the state are not adopted. For example, in 2008, only 9% of children who were Crown wards were adopted (Raising Expectations 2009, p. 5). The emotional cost on children who grow up as Crown wards is also great. Crown wards are "less likely to finish high school and more likely to rely on social assistance and live in homeless shelters" (Ibid). Thus, children have a strong interest in having parents that can take care of them through to adulthood. Cases of AMA by women over the age of 60 have the potential to harm children because parental age can be a proxy for a person's expected or estimated longevity.

Also, children whose older parents do not die before they reach adulthood might be harmed if their parent becomes ill and as a young child, they are forced to assume caregiving responsibilities. Many adults are burdened with the responsibility of caring for

⁷³ Although the average life expectancy in Canada is approximately 81 years of age, those adults who make it to age 65, on average, will live to a few years beyond the age of 81. However, it is important to note that living to a certain age does not guarantee that one will be without illness and disability in their final years of life.

an aged family member, but such burdens should not fall on children. If women who bear children at an older age become ill and have little or no family (or social) support, their child may end up assuming some caregiving responsibilities. A child's education, career or prospects for building a family might suffer if they are burdened with the responsibility of caring for aged parents. So, young persons who bear the burden of caring for a sick or aged parent are deprived of time, energy and resources that could be allocated to other parts of their lives. Furthermore, because women assume care-taking responsibilities within patriarchy, more often than men do, the burdens will more likely fall to female children. This in turn may force these female children into delaying their own attempts at childbearing and in effect perpetuate the cycle of advanced maternal age. Again, the worry about burdening children rests on the idea that children have a right to a particular kind of life. Children who have older parents might be deprived of this kind of life.

One might argue that a particular child who results from AMA could not have been harmed from being brought into existence, so long as her life is worth living. This is because the only alternative for a particular individual, who was born to older parents, is not to have been born at all. These insights capture what has been called the Non-identity Problem (Parfit, 1971). So, if one thinks that having a life worth living is better than never having existed, one might also believe that a restriction on older women's access to assisted reproduction cannot be grounded on a concern for future children. However, some theorists have argued against the Non-identity problem by arguing that certain acts can be bad for future persons (McMahan, 1981) and certain actions may be violations of a future person's right against being brought into a certain kind of existence (Velleman, 2008). Dealing with the Non-identity problem is beyond the scope of this chapter, but for my purposes it suffices to say that the philosophical puzzle raised by the Non-identity problem is not sufficient to show that children do not have a strong interest in having parents who can give them adequate care through to adulthood.

I maintain that taking children's interests seriously means that (intending) parents should consider whether they will be able to fulfil their parental responsibilities to care for their children. Individuals considering assisted reproduction should acknowledge the biological limitations of ageing bodies. The fact is, most of us will not live long past the age of 80. Also, there is a good chance that we will require some form of assistance in the latter part of our lives. Some older bodies might not be able to fulfil the minimum parental responsibilities to meet the needs of children.

c) Harms to Society and Women as a Group

Third, age can also be morally relevant if AMA causes some harm to society or women as a group. AMA can be problematic for society (in general) for two reasons. The first has to do with increases in healthcare costs that might arise from caring for older women who become ill from the use of assisted reproduction. If only a small number of older women bear children through assisted reproduction, then any associated healthcare costs would be insignificant. However, if the trend in AMA continues to rise, along with the age at which many women use these technologies, then one might worry about the impact that this social trend will have on a publicly funded healthcare system.

Another concern from a social perspective has to do with the transfer of parental responsibilities for young children who are orphaned by older parents. If for example, one chooses to bear a child at the age of 70, for example, there is a good chance that she will not be able to fulfil her parental rearing responsibilities. If this happens, someone else will have to assume responsibility for her child. Some women might have a surviving partner, but this is not always the case. In addition, if her partner is older than she is, the problem of being orphaned at a young age might just be delayed until their other parent dies. If there is no partner, parental responsibilities will be transferred to extended family members, social parents or the State. If the State assumes care for the orphaned child, society will bear the cost. In Canada, for example, it costs the State approximately \$32 000 per year to care for a single Crown ward. (Raising Expectations, 2009, p. 9). From a policy level, allowing unlimited access to assisted reproduction on the

basis of age is problematic if such practices will be costly or burdensome on social resources or institutions. Obviously, such financial considerations cannot bear the weight of arguments against AMA, but I believe that such broader social implications of reproduction policies need to be taken into consideration.

Finally, there are other feminist reasons to think that a woman's age is morally relevant to assisted reproduction. These reasons have to do with the effect that AMA can have on *women as a group*. Individual women's reproductive choices can have an impact on other women's reproductive choices because the 'personal is political'.

One way that choices in favour of AMA harm women as a group is by reinforcing certain sexist, ageist, pronatalist and biologicistic norms around reproduction. Abby Lippman (1995) argues that reproductive technologies are part of a larger socio-political ideology that promotes sexist and ageist attitudes in our culture. These technologies, she claims, aim to adapt women's biology (or bodies) to the male norm and reinforce negative stereotypes about ageing women (Lippman, 1995, p. 877). Lippman's claim is not that older women's decisions to use IVF are non-autonomous, but rather that older women's access to reproductive technologies perpetuates ageist and sexist norms around reproduction that harm women as a group. Similarly, Ruth Landau (2004) suggests that post-menopausal pregnancies give women the illusion of control, while exposing them to the financial and health risks associated with the fertility treadmill. Ultimately, reproductive technologies give women "no respite from the pressure to fulfil their presumed role as women and denies them other paths to self-fulfilment" (Landau, 2004, p. 65).

Another way that AMA can harm women as a group is by making a (risky) option available to them than they might not have otherwise chosen. Some women might not wish to bear children at an older age if this option were not made available to them. In other words, having the option to bear children at an older age might, in some women, create the desire to bear children at an older age. Likewise, having the option to delay childbearing (or guard oneself against infertility) by using FP technologies might cause

some women to choose to become a mother at an older age when they might not have done so if the technologies were not available or if there was an upper age limit on access to reproductive technologies. This line of argument is similar to an argument that has been raised in response to euthanasia, although one might think that the moral evaluation of the cases in question are quite different. David Velleman (1992) suggest that having the options of euthanasia can harm people because it gives them an option, namely assisted suicide, which they might not otherwise have chosen). So, having an option on the table can be tempting to people and create a desire (or at least, it might reactivate a latent desire). The problem, of course, arises when one comes to desire something that is non-authentic and harmful to oneself and others.

For the reasons discussed above, maternal age can matter morally to reproduction. To summarize, age can be morally relevant to reproduction because 1) reproduction at (some) older ages can increase the harms to women who use assisted reproduction; 2) children who result from these technologies can be harmed; 3) the State must assume basic care-taking responsibilities that cannot be fulfilled by some older women; and 4) AMA has some problematic consequences for women as a group. I doubt that any *single* reason mentioned above is sufficient for supporting a blanket restriction on older women's access to assisted reproduction. However, when the above reasons are considered jointly, they provide some ways of discerning whether the harms associated with AMA will outweigh the benefits of AMA. I suggest that as the age at which a woman accesses assisted reproduction increases, the moral permissibility of AMA decreases. So, AMA may be less problematic for a 45 year old, than it will be for a 55 year old and AMA at the age of 60 will generally be more morally problematic than AMA at the age of 55.

It is important to note that many of the harms associated with AMA are connected to oppressive (or problematic) socio-structural aspects of patriarchy. So, some of these harms could be mitigated by improvements to social or structural conditions. This means that society, to some extent could have an effect on the conditions that make some cases

of advanced maternal age problematic. For example, older women who have very strong social support networks and share childrearing responsibilities might pose less risk to their children, than very old women who do not have such support structures. Also, AMA for women who have (much) younger partners might be less problematic than AMA by women who have older partners.

Furthermore, feminist-inspired changes to broader social structures such as education, childcare and employment can also reduce some of the harms associated with AMA. But, it is unclear as to whether bearing children at an older age would still be desirable for women if social and structural barriers to reproduction did not stand in their way to reproducing at an earlier age or foregoing reproduction all together. It is possible that some social improvements, as I describe here, could make some cases of AMA less problematic. However, social changes cannot eliminate all types of harms associated with AMA.

In this section I have argued that age *can* be morally relevant to women's access to assisted reproductive technologies. The problem with AMA is not only oppressive social ideologies and institutions surrounding reproduction and parenting are problematic, but also that ageing bodies are physiologically and functionally different from younger bodies. With respect to assisted reproduction, age can serve as a proxy for a number of conditions, such as physical and social that can pick out the degree to which AMA is likely to cause harm. In the next section I argue for an upper age limit on women's access to assisted reproduction and suggest what this upper age limit should be.

5.5 Ageism and Age Limits

My discussion thus far has shown that there are some good reasons to think that age can be morally relevant to assisted reproduction. Also, I have suggested that the moral permissibility of AMA should be achieved by considering the impact of increasing maternal age on the impact of the balance between the harms and benefits associated with AMA. In this section I shall show that a concern for justice can motivate upper age limits on women's access to assisted reproduction. I shall do so by distinguishing ageist

discrimination by exclusion from what I call ageist *discrimination by inclusion*.

Furthermore I suggest how a particular chronological age limit might answer the charge of arbitrariness. I also suggest an upper age limit on women's access to assisted reproduction.

In my discussion of Parks' charge of ageism, I suggested that she invokes a conception of ageism that picks out a type of discrimination by exclusion. Admittedly, most types of discrimination (or oppression) work by excluding persons on the basis of things such as, sex, race or sexual orientation. Ageism is not different. However, this is only one part of the story. Ageism and other axes of oppression can operate in another way, namely, *discrimination by inclusion*. While ageist discrimination by exclusion involves unjustly excluding persons on the basis of their age, discrimination by inclusion involves unjustly including persons on the basis of their age. Allow me to explain.

Ageist discrimination by inclusion falsely assumes that all bodies, young and old, are the same. The Ontario Human Rights Commission (OHRC) recognizes that society is often structured on the assumption that "everyone is young", by doing so, society fails to "respond appropriately to the real needs of older persons" (2007). The different needs of older persons can include different healthcare needs or housing needs, for example. Some needs depend upon physical and cognitive aspects of older bodies. In the healthcare context, old and very old persons can have very different healthcare needs than younger adults (Cohen, Bloom, Simpson, & Parsons, 1997). Other needs, such as the financial assistance in old age through a pension or the availability of affordable housing are socially generated ones.

Most generally, discrimination by inclusion posits the young body as the norm, and assumes that all bodies should fit this norm. The centrality of youth is evident, for example, in the social pressure for women to dye their hair and use anti-ageing creams and make-up. A parallel discrimination exists in sexist oppression, where male bodies are posited as the norm and women's bodies are expected to fit the 'ideal male' norm. This

sort of thinking is obviously problematic. Just as female bodies and male bodies can have different needs, so can younger bodies and older bodies.

So, the distinction between ageism by exclusion and ageism by inclusion requires one to consider whether and how age can be morally relevant to a particular context. I suggest that in the context of AMA the moral relevance of age gives us some reason to think that upper age limits on women's access to assisted reproduction can serve as a way for acknowledging and respecting the material differences between bodies of certain ages. Upper age limits on women's access to assisted reproductive technologies can be a way to show respect for older women's bodies and promote the valuing of old age, as *valuable in itself*. At present, the value of old age is usually measured as to how well older persons can continue to keep up with their younger selves. Valuing old age would require that we stop measuring the worth of older persons against the ideal 'young' body posited by social norms. A concern for justice requires one to take the material differences between differently aged bodies seriously. Doing so requires policies that discriminate on the basis of age, so long as age is morally relevant. In the context of assisted reproduction, upper age limits can acknowledge and promote the needs of differently aged bodies.

Parks' conclusions concerning AMA are *themselves* problematic because they reinforce ageist discrimination by inclusion. Since differently aged bodies respond differently to the use of assisted reproductive technologies, a blanket policy that denies important differences that accompany age is also ageist. A failure to recognize the various needs of differently aged bodies and lumping older women's bodies in with the expected needs and abilities of younger women's bodies is ageist to some degree.

The rejection of upper age limits can reinforce women's breeder and motherhood statuses within patriarchy. Furthermore, a lack of upper age limits makes it the case that childlessness or infertility is never a 'real' or 'valuable' option within patriarchy. No upper age limit on assisted reproduction makes it the case that infertility is at no point a real or acceptable option for women. Other feminists have made this point regarding IVF (Harwood, 2009; Morgan, 1989). Surely, FP technologies will magnify the feminist

concern mentioned here. If there are no age limits on reproductive technologies, such as stage 2 FP, then women might always be subject to the pressure or expectation to bear children, especially women who have not already done so. Again, if women internalize biologicistic ideologies, their deformed desires might appear especially strong and deep when coupled with other oppressive biases, such as ageism. Also, some unsatisfied desires, such as the desire for children, might grow stronger over time because of the stronger social pressures to seek means for satisfying these desires. If this is the case, then stage 2 FP technologies might (mistakenly) seem well worth the risk if they can satisfy one's desires for genetically-related children.

The lack of age limits on reproductive technologies can reinforce the social misperception that all bodies, even much older women's bodies can meet (and should meet) the ideals associated with younger fertile maternal bodies. If social perceptions and policies that encourage older motherhood harm older women by denying the salient differences in differently aged bodies and pressure them into using reproductive technologies, then age does matter morally.

Deciding at what age one should restrict access to assisted reproductive technologies is a more difficult question to answer. This is because one might worry that a chronological age limit is 'arbitrary'. The worry with arbitrariness is that for any given chronological age limit, one can usually find some persons who serve as exceptions to the rule. In the context of assisted reproduction, some women may be older than a recommended age limit for AMA, but more 'fit' to bear children than some younger women. Furthermore, it seems that there are no recognizable differences between bodies two days younger than a particular cut-off age and bodies that have surpassed the age limit by two days. The worry about arbitrariness of age limits, when age is relevant, is unfounded. Age limits, like deadlines can seem arbitrary when we scrutinize these restrictions down to the very minute or look at them from a microscopic perspective.

However, if we take a step back and consider the age limit or deadline from a macroscopic view, these limits no longer seem arbitrary. In the case of upper age limits

on AMA taking a macroscopic perspective allows one to recognize that a woman's age can serve as a general proxy for a number of physical, cognitive and social conditions about her body. This recognition helps to explain how the chances of an individual (or others) being harmed by AMA increase with age. The picture that emerges from this perspective, I think, is that AMA becomes less morally permissible as a woman ages.

I propose that the point at which one should draw the age limit for AMA is about at age 60. But this proposal is tentative and flexible based on findings from medical or social research concerning the unique needs of older bodies. This upper age limit is considerably higher than most other age limits imposed on reproduction. For example, the ASRM recently increased the recommended upper age limit on women's access to assisted reproductive technologies to 55 years of age (ASRM, 2013).

I have proposed an upper age limit of 60 years for a couple of reasons. First, it is approximately twenty years younger than the average person's life span. So, if older women make it to the average life span, they are likely to see their child through to adulthood. Other theorists have also recommended that the remaining life expectancies of both parents should "well exceed 18 years" (Banh et al., 2010, p. 365). Also, a maximum age of 60 years for access to assisted reproduction is appropriate because this age limit shows respect for women's reproductive autonomy (for those women who can make autonomous choices about AMA), while at the same time it is also symbolic of differences between bodies that are younger or older than age 60. Invoking upper age limits on women's access to assisted reproduction is a way to avoid ageism by inclusion. Furthermore, it gives women a symbolic (and real) end to their reproductive lifespan and the pressure to reproduce. In addition, upper age limits can act as a way of indirectly protecting older women from the harms (and others) associated with AMA. As Francoise Baylis points out, in the context of assisted reproduction, there is a serious risk that the "ability to pay becomes the only relevant access criterion" for assessing the moral permissibility of AMA (2009, p. 458). Insofar as deformed desires and inappropriate self-referring attitudes may compromise the autonomy of some women who choose in favour

of AMA, an upper age limit can serve as a measure for ensuring that some vulnerable persons are not encouraged to attempt AMA. Arguably, concerns for women, children, and others requires some upper age limit on assisted reproduction.

5.6 Concluding Remarks

In this chapter I have brought the debate concerning AMA into the context of stage 2 FP. I have also outlined the main arguments against advanced maternal age through the use of assisted reproductive technologies and shown how these arguments relate to FP. My summary of Parks and description of ageism show that her own conclusions suffer from a degree of ageism. I offered a more robust definition of ageism. I then argued that ageism is distinct from an appeal to the needs of persons in different age categories. Furthermore, I have shown that feminists can adequately answer the charge of ageism. I have also argued that a woman's age can matter morally, with respect to reproduction. As FP technologies gain popularity, there is a serious need to understand the impact of AMA on women, children and society. Finally, my arguments in this chapter have suggested some ways for thinking about the moral relevance of advanced parental age, more generally. In this next chapter I shall conclude my dissertation by summarizing my arguments in this chapter and the previous chapter and showing how my findings relate to FP policy and to avenues for future research.

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Chapter 6

6 Conclusion

My dissertation has shown that a feminist ethical analysis of women's choices concerning FP is important for the ethical provision of FP technologies. In this final chapter I review the central accomplishments of this thesis and suggest some topics for future research. To begin, I summarize the main arguments in the foregoing chapters and highlight, for each of them, my main contributions to the philosophical literature. Next, I recap how each of my chapters supports a feminist analysis of choices about FP technologies. I then summarize some FP policy recommendations suggested by the arguments in my dissertation. To conclude, I propose several research projects.

6.1 Project Summary

In chapter two of this dissertation, I provided conceptual analyses of both pronatalism and biologism. I distinguished these concepts from each other and separated feminist from non-feminist understandings of each concept. I argued that on feminist accounts of pronatalism and biologism these phenomena constitute, by definition, oppressive social ideologies. I defined the feminist conception of pronatalism as a coercive social bias, which grounds women's identities on their reproductive roles and mandates that women bear men's genetic children. By contrast, biologism is a coercive social bias that privileges genetic relationships within families over non-genetic relationships, and grounds familial and individual identity on genetic heritage. I suggested that an understanding of these biases is important for understanding both the availability of FP technologies and the social contexts of reproductive decision-making. Furthermore, I argued that biologism can help to explain why some patients pursue risky FP technologies despite the availability of other reproductive and family-building options.

My conceptual analyses of pronatalism and biologism make novel contributions to the feminist and philosophy literatures. Despite frequent mention of pronatalism in feminist literature, a conceptual analysis of this term does not yet exist in the literature. Similarly,

theoretical work on ‘biologism’ is still in its infancy and the concept is seldom recognized as a distinct social bias that can influence reproductive decision-making. My work in chapter two helps to bridge literatures on various forms of family-building, such as assisted reproduction and adoption, by showing that in both the adoption and assisted reproduction contexts, family-building options can be unduly influenced by biologicistic social ideologies. Also, biologism can coerce some people to choose assisted reproduction over adoption. For these reasons, I suggest that our understanding of moral issues concerning families and reproduction can be improved by connecting the adoption and assisted reproduction literatures. To date, there is relatively little work in the philosophy or bioethics literatures that draws explicit connections between assisted reproduction and adoption.⁷⁴

Having established that pronatalism and biologism can coerce some women into choosing FP technologies, I then consider how these biases can compromise women’s reproductive autonomy. In chapter three I engaged with Natalie Stoljar’s arguments, in which she argues that informed consent fails to promote patients’ relational autonomy. I evaluated Stoljar’s arguments against the idea that informed consent will secure autonomy and showed that amending the informed consent process to address the barriers to and requirements for autonomy is the most reasonable response to her concerns. I argued that informed consent should be re-conceptualized as a relational concept—what I called “informed choice”. Informed choice is better equipped than informed consent to secure patient autonomy in the FP decision-making context. In this chapter I also outlined an informed choice process for FP. Both my model of informed choice for FP decision-making and my account of how pronatalism and biologism hinder women’s reproductive autonomy offer important contributions to the philosophy and bioethics literatures.

Autonomous choices about FP are possible if FP decision-making occurs in the context of informed choice. However, the availability of FP to women outside of the cancer

⁷⁴ One exception to this is Baylis, F. and C. McLeod, eds. *Family-Making: Contemporary Ethical Challenges*. Oxford University Press, (2013).

context has been controversial. In chapter four I considered the moral differences between granting women access to FP for disease-related and age-related reasons. In this chapter I engaged with the work of Imogen Goold and Julian Savulescu (2009) who suggest that the timing and cause of women's infertility are the main differences between cases of disease-related and age-related FP uses. I suggested that Goold and Savulescu's analysis fails to capture what rests at the heart of criticisms against age-related FP. Critics of FP, I argued, believe that women who use FP to guard against age-related infertility have substantially more reproductive choice and control than women who use FP to guard against disease-related infertility. By showing that disagreements concerning FP uses outside of the cancer context rest on mistaken notions of women's reproductive choice and control within patriarchal contexts, I make an important contribution to the bioethics literature.

In chapter four I also argued that critics of age-related FP ultimately fail to recognize the ways that patriarchy can unduly shape and constrain some women's reproductive lives. Because of these influences, there are no reasonable grounds to believe that all (or most) women who use age-related FP have significantly more reproductive control than women who use FP within the cancer context. I argued that if we allow disease-related FP, then we ought to also allow age-related FP. Furthermore, I suggested that FP technologies can be morally permissible within a patriarchal society, so long as these technologies are offered alongside social and structural improvements aimed at addressing some of the barriers faced by women within patriarchy.

The growing popularity of age-related FP raises pressing ethical concerns when it is coupled with the social phenomenon of delayed childbearing. In chapter five of my dissertation, I examined whether upper age limits on access to stage 2 FP are morally permissible. The main question addressed in this chapter was whether (and how) parental age is morally relevant to reproduction. In this chapter I engaged with Jennifer Parks' (1999) argument that both non-feminist and feminist cases against postmenopausal women's access to IVF and other assisted reproductive technologies suffer from varying

degrees of ageism. She concludes that upper age limits on women's access to assisted reproduction are unjust. In this chapter I first showed how FP technologies can complicate the discussions surrounding advanced maternal age. I then argued, in opposition to Parks, that upper age limits on people's access to assisted reproduction can be morally justified. To support this claim, I showed that age can be morally relevant to the use of assisted reproduction. Age is morally relevant insofar as it serves as a proxy for certain physical, psychological and social factors that determine the extent to which advanced maternal can be harmful to women, children and society. When considered together, some arguments against advanced maternal age offer good reasons to think that upper age limits are not ageist. In this chapter I also distinguished between ageism by exclusion and ageism by inclusion and suggested that a rejection of upper age limits on people's access to assisted reproduction may suffer from the latter type of ageism.

Although advanced maternal age is a current hot topic for debate, the suggestion that upper age limits may not be (merely) ageist has suffered limited consideration. My work in chapter five examined and refuted the charge of ageism with respect to upper age limits on advanced maternal age. As such, I make a significant contribution to the literature. My work also makes a novel contribution by offering a moral framework for evaluating the moral permissibility of advanced parental age more generally. Despite the growing trends in advanced maternal age and the marketing of FP technologies as a means to delaying childbearing, relatively little research addresses the moral permissibility of advanced maternal age. My framework for ethical analysis can apply equally well to cases of advanced paternal age and men's access to stage 2 FP.

To summarize, each of my chapters considered a different ethical question surrounding choice about FP technologies. These questions included: Which social ideologies can impede autonomous choices about FP? How can barriers to autonomy be overcome in an ethical informed choice process? Should the choice to use FP be extended to women outside of the disease-related context? And finally, should there be age restrictions on women's access to stage 2 FP? For each chapter, I showed how feminist insights about

the social nature of persons yields valuable information about the ethical challenges surrounding women's choices about FP. Together, my chapters show why a feminist perspective is essential for the creation and implementation of ethical policies concerning FP technologies.

6.2 Policy Recommendations

In what follows, I shall explore a few policy recommendations that follow from my conclusions in this dissertation. First, decision-making about FP should occur within an ethical process of informed choice. Second, healthcare providers should be aware of and sensitive to the pronatalist and biologicistic norms that can hinder women's autonomy. FP policy should include measures for generating awareness of these oppressive social barriers. Third, FP policies should require that ongoing feminist-inspired counseling is available to women throughout both stages of FP decision-making. Fourth, if FP technologies are available in the cancer context, then they should also be available for age-related reasons. Fifth, an upper age limit (of approximately 60 years of age) should be imposed on women's access to stage 2 FP. Sixth, FP technologies should be offered alongside other social or structural improvements that can alleviate some of the burdens on women who wish to bear children at an earlier age. For example, women's pay should increase to be on par with men's, affordable daycare should be provided and the standard full-time work-week should be amended to make it easier for both men and women to have children at an earlier age. Finally, and most importantly, there is a serious need to mandate further quantitative and qualitative research concerning various aspects of FP that I have discussed in this dissertation. Feminists can (and should) play an important role in helping to discern the goals and directions of empirical research related to FP and assisted reproduction, more generally.

I have listed just some of the feminist recommendations that can contribute to an ethical policy concerning FP technologies. The development and implementation of more specific policies about FP technologies will require the input of various feminist voices, along with the voices of women whose lives will be most affected by these technologies.

Fortunately, FP technologies are still in their infancy and going forward there will surely be opportunity for meaningful feminist participation in FP discussions.

6.3 Future Research

To conclude this chapter, I discuss some smaller research questions that relate to each chapter and I also propose one larger research project that I hope to undertake in the future. I shall consider each research proposal in turn.

First, I plan to extend my work in chapter two by investigating in more detail, the moral obligations for resistance that accompany biologicistic oppression within patriarchy. Anne Cudd suggests that within oppressive social conditions, the privileged non-oppressors are morally obligated to “resist and attempt to change oppressive institutions” and to “renounce their privilege when they are capable of doing so” (2006, p. 196). Work needs to be done in order to determine which social group constitutes the privileged non-oppressors with respect to reproductive practices and ideologies. In the context of pronatalism and biologism, there is a difficult question concerning the scope of moral responsibility for the privileged non-oppressors. Childbearing and the rearing of genetically related offspring can hold deep personal value for some privileged non-oppressed persons so it is unclear what sort of “resistance or attempts at change” or “renouncement of privilege” can be reasonably expected from this group.

Second, a follow-up project to my work in chapter three is to examine whether the standard views of autonomy and informed consent, espoused, for example, by Tom Beauchamp and James Childress, can address the concerns put forth by feminist relational autonomy theorists. To date, little work has been done to investigate whether amendments to Beauchamp and Childress’ most recent edition of *Principles of Biomedical Ethics* (2013) can accommodate the concerns from feminist relational autonomy. This investigation is important because of the central role that Beauchamp and Childress’ work has within medical and bioethical practices. Carolyn Ells (2001) argues that Beauchamp and Childress’ rejoinders to objections raised by feminist critiques are unsatisfactory from a feminist perspective. However, this evaluation of Beauchamp and

Childress was over a decade ago. It remains an open question as to whether the most influential theory in bioethics has adequately responded to feminist critiques concerning patient autonomy and informed consent.

A third topic for further research to come out of my work is suggested by a conclusion reached in chapter four, namely, that FP technologies might also be used for reasons other than those attached to the dangers associated with advanced age or disease. For example, FP technologies for women could be used to guard against infertility caused by environmental hazards associated with serving in the military. Sperm cryopreservation is often used by male military prior to deployment in order to guard against infertility or in the hopes of continuing their bloodline if they die during battle (Kouri, 2011). Recently, the gynecological and reproductive needs of female military personnel have gained some attention from governing bodies (The American College of Obstetricians and Gynecologists, 2012). The unique ethical issues that arise in the context of military-related FP warrant further investigation. Generally speaking, understanding the various reasons, consequences and meanings behind alternative FP is important as FP technologies become more readily available.

Fourth, my work in chapter five leaves open questions about whether lower age limits on access to FP technologies for age-related reasons are morally permissible. Fertility treatment guidelines released this year by Britain's National Institute for Health and Clinical Excellence suggest that there should be no lower age limit on cancer patients' access to fertility preservation. This policy leaves open the possibility that lower age limits may be imposed on women's access to FP outside of the cancer context. Indeed, lower age limits have sometimes been imposed on women's access to IVF (in publicly funded programs) (Brown & Laurance, 2012). A lower age limit of 21 years of age has also been recommended by the ASRM for egg donors in third-party assisted reproduction (ASRM, 2012). The ASRM claims that the rationale behind the lower age limit for egg donors is to "ensure that the donor is mature enough to provide true consent" (ASRM

2012, 5). Arguably, lower age limits might be viewed as paternalistic. A future research paper could investigate whether lower age limits are morally permissible.

Finally, my doctoral project paves the way for a larger research project concerning ethical issues that arise in the pediatric oncofertility context. I am especially interested in questions about the nature of FP decision-making for (or by) children and the relationship between FP decisions and children's well-being. In most cases, parents give proxy consent for their child's participation in oncofertility research. This is because many children, especially those who are very young, cannot give informed consent to treatment. Thus, parents are charged with the responsibility of deciding whether the use of FP technologies is in their child's best interest. Already difficult and complicated FP decisions are further complicated by having to decide what constitutes their child's best interest. The appropriate measure of a child's 'best interest' is unclear. Some advocates of pediatric oncofertility cite the importance of maintaining an open future for children (Galvin & Clayman, 2010). However, in light of the force of oppressive biologicistic social norms and the serious risks associated with FP procedures in the cancer context, there may be reason to believe that keeping the option of genetic reproduction open for children is not worthwhile. In other words, it is unclear when or whether pediatric FP is actually in the best interest of children.

Decision-making about FP for children is also complicated because some children can express their assent or dissent for treatments. The Canadian Paediatric Society (CPS) recognizes the importance of children and adolescent's roles in medical decision-making and advocate that children be involved in decisions "to take part in research as their developmental capacity dictates" and further, that "[c]hildren who have partial skills to make decisions should be recognized as having some authority over their own health care" (Harrison, 2004, p. 3). However, some guardians and health care providers have expressed their discomfort in discussing FP options with children. They worry that FP discussions can be harmful to young children because they can involve conversations about reproduction and sexuality that young children are not prepared to have (Cohen

2010). Some critics worry that FP technologies ‘sexualize’ young children because they involve discussions and practices centred around human reproduction (Fallat et al., 2008). Furthermore, some suggest that oncofertility discussions and procedures risk turning children into sexual beings at a very young age (Ibid). What this ‘risk of sexualizing’ children means in the oncofertility context entails warrants further investigation. I suspect that concerns around sexualizing children involve two things. First, some parents and physicians might be uncomfortable with viewing children as having sexuality. Second, discussion with children about FP can also involve imposing (or recognizing) a degree of reproductive agency in children.

The possibility of harming children by including them in FP discussions coupled with the influence of social norms around sexuality and reproduction can influence what (age appropriate) information is given to pediatric cancer patients and their families. As such, the use of FP technologies for children raises some interesting questions about how these technologies might undermine or promote children’s present well-being. My future research project concerning pediatric oncofertility patients will involve an analysis of children’s well-being in the context of FP decision-making. It will also investigate the moral requirements for a process of informed decision-making about FP for or by children. Such a project is essential as oncofertility discussions move towards becoming a routine part of cancer care.

As FP technologies continue to improve and become more widely available, feminism can (and should) play a central role in protecting and promoting women’s interests (both as individuals and as a group). I have argued, in this dissertation, that feminist insights are crucial for understanding the social nature of women’s choices surrounding FP technologies. A feminist analysis helps to identify both obstacles to autonomous choice about FP. It also helps to identify the foundational and remedial social supports that are required for reproductive autonomy in the context of FP. Understanding and promoting autonomous choice about FP is important because reproductive autonomy can be central to women’s well-being. Furthermore, a feminist analysis helps to identify the political

nature of individual FP choices. That is, within patriarchal social contexts, the FP choices of individuals can have an influence on the well-being of women as a group. My contributions in this dissertation help to pave the way for ethical policies on FP for women. Future philosophical investigation is sure to illuminate how feminist theory can also contribute to the ethical provision of FP for men and children. So, moving forward, feminist ethical analysis has a difficult, but important, role to play in the ethical provision of FP.

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