

Redefining Motherhood

How reproductive technologies change the way we think about motherhood

This paper examines some of the discourse surrounding notions of motherhood, which, though considered a universal term, is defined by a specific set of characteristics. Traditionally, motherhood is culturally and legally established through genetic kinship claims based on a nuclear family structure, at least in developed countries. Today, however, reproductive technology, such as in vitro fertilization and surrogacy, offers greater opportunities to have a child not only to infertile couples but also to same-sex couples, single parents, or women past childbearing age. These technologies have allowed for a new legitimization of motherhood, fostering an emerging kind of parenthood, and thereby widening the scope of motherhood to include a wide range of possibilities that no longer rest on simple biological claims and the traditional nuclear family model. This paper therefore challenges what motherhood encompasses and examines how this definition has shifted away from simple genetic ties to more varied and complex structures. Indeed, while the new parents themselves continue to value genetic links, society as a whole must review its conception of the normalcy of “natural” reproduction through the nuclear family structure and embrace motherhood in the only universal definition possible, that of its commitment to raising a child.

Keywords: childbirth, IVF, motherhood, reproductive technologies, surrogacy

Traditionally, in most societies, a man and a woman marry and procreate with the approval of society, raising their children in a structure known as a nuclear family. Thus, motherhood has been defined as a “natural” process: giving birth to and raising a child in the context of a heterosexual and state-legalized union. Couples who were unable to have children because one of the partners was either unable to provide the genetic material needed to create an embryo or unable to carry a child either remained childless or adopted. However, recent technologies, such as *in vitro* fertilization (IVF) and surrogacy, have not only made it possible for these couples to

How Reproductive Technologies Change the Way We Think About Motherhood

have children, but have also benefited non-traditional families, such as same-sex couples or single adults, or older women. Since conception occurs in a clinic and surrogacy means that any woman may carry another's child, a variety of combinations are possible to achieve the desired outcome—a baby—and these technologies have recourse to a variety of willing contributors. While some might be genetically related, motivated by kinship, and continue to be involved after the birth, others are strangers whose active role is temporary and often remunerated. This challenges the normative family model and destabilizes societal understandings of motherhood because the “mother” may involve an egg donor or a surrogate, or be two fathers or a grandmother, or involve more participants than the intended parent. It is evident, therefore, that motherhood may no longer be defined solely by having birthing rights over the child. Rather, it can be felt as the embodiment of an idea: a willingness to take on the legal, physical, and emotional rearing of a baby, regardless of how the child came to be. Society, therefore, must revisit its narrow definition of motherhood to include models outside of the traditional heterosexual and genetic kinship claims and adapt to these new claims.

Motherhood, in its traditional acceptance, is understood in two ways: first, as a woman creating a child from her body's ovum fertilized with her husband's sperm, in her own womb, and thus sharing all genetic, biological, and blood relations with the child, and secondly, as the act of raising that child. Reproductive technologies, however, have divided the two meanings. Those involved in the creation of the child may not be those for whom it has been created, and the child may not be genetically related to its intended parents. Thus, the nature of this kinship is called into question by assisted reproductive technologies, as they destabilize the “natural” process—now done clinically through the assistance of technologies and third parties—and the biological relationship understood in motherhood (Inhorn & Birenbaum-Carmeli, 2008, p. 182).

Emerging biotechnologies have indeed provided more options for heterosexual infertile couples and women to try to bear a child. According to the U.S. Centers for Disease Control and Prevention, the estimate of the prevalence of infertility in North American couples is 15%, with causes ranging from blocked or damaged fallopian tubes, endometriosis, and failure of ovulation, fibroids, and hostile cervical mucus in women, to failure of sperm production, low sperm mobility, and production of antibodies to spermatozooids in men, all of which make fertilization through the blending of gametes impossible (Health Quality Ontario, 2006, pp. 13-14). Gametes are the reproductive cells of both men and women, i.e. the women's eggs and the men's sperm. Many people of both sexes are unable to produce gametes to help in the creation of an embryo, and so they look to donation. Sperm banks have been in existence for some time and have been most commonly used for artificial insemination and for IVF for women with male partners who are unable to produce

How Reproductive Technologies Change the Way We Think About Motherhood

sufficient sperm to fertilize the egg (Norris, 2006, p. 1). Egg donation is also possible, but is not as common an occurrence as sperm donation.

IVF is a method in which the egg is fertilized outside of the woman's body and then reintroduced. It was first elaborated for the treatment of bilateral tubal obstruction when other treatments had not worked. The medical procedure of IVF involves four steps: retrieval of the egg from the ovaries by placing a needle into the ovarian follicle and removing the fluid that contains the egg; exposure of the egg to the sperm outside of the body where the fertilization then takes place.; culturing the egg for a period of three to five days; and transfer of the embryos into the female's uterus through the cervix using a catheter (Health Quality Ontario, 2006, p. 18).

Surrogacy is an option, often used in combination with IVF, that responds to various situations in which natural insemination is not viable. The most typical form is called traditional surrogacy, which consists of the surrogate mother being artificially inseminated with the intended father's sperm, thus using the surrogate's egg to create an embryo. The next most common form is gestational surrogacy, in which an embryo is created via IVF using the intended mother's egg and the intended father's sperm, making the baby genetically related to both the mother and the father (Norris, 2006, p. 4). The surrogate is seen to have provided no genetic contribution, just the womb in which to grow the baby.

Surrogacy can be commercial or non-commercial. Non-commercial surrogacy means that a friend or family member offers to be the surrogate mother, typically with no contract or financial compensation required. The surrogate mother may or may not be involved in the rearing of the child. Commercial surrogacy means that a couple would contact an established business and develop a contract with a surrogate mother, which would include a monetary payment for her service, often in developing countries. Indeed, some researchers argue that surrogacy can be seen as an important form of reproductive labour for women in these countries. For some poor Indian women, for example, surrogacy has become a form of employment and a survival strategy for themselves and their families (Grebeldinger, 2013).

The financial realities of assisted reproductive technologies make accessing them prohibitive for all but the wealthy. The average cost of one cycle of IVF in the United States in 2003 was approximately \$12,400 USD, and, as a result, only about 36% of infertile women there sought medical assistance, and only about 1% sought help from some form of assisted reproductive technologies (Inhorn & Birenbaum-Carmeli, 2008, p. 179). These examples represent statistics from a wealthy country; the numbers in the developing world would be even lower. Ironically, then, poor women donate their eggs or become surrogates to earn money, but poor infertile women cannot access these technologies.

While living in a technologically enhanced society gives a woman an increasing number of options and choices for having a child that she can socially or legally claim as her own, regardless of the degree of biological ties, it greatly unsettles our

How Reproductive Technologies Change the Way We Think About Motherhood

understanding of what procreation means (Hostiuc, 2013, p. 67). As Marcia Inhorn and Daphna Birenbaum-Carmeli (2008) state, the ramifications are profound because “assisted reproduction has diversified, globalized, and denaturalized the taken-for-granted binaries of, inter alia, sex/procreation, nature/culture, gift/commodity, informal/formal labor, biology/sociality, heterosexuality/homosexuality, local/global, secular/sacred, and human/nonhuman” (p. 178).

Charis Thompson explores what constitutes the claim to motherhood, given the many ways in which a child may be created, in an essay provokingly entitled “Quit Sniveling, Cryo-baby, We’ll Work Out Which One’s Your Mama.” To illustrate some of the basis of that claim, Thompson interviews several women who are using reproductive technologies, such as IVF and surrogacy, as a means to have a child, and considers three major areas as defining the legitimacy of a mother: the social, biological, and legal. Each of these possesses characteristics that allow these women to define themselves as mother (2007, p. 638). Interestingly, in every case, genetic relatedness is still central. Each woman interviewed has expressed the need to feel that she has some sort of genetic claim to the child for it to be her own. Some mothers, she finds, put more emphasis on the idea of genetic contribution because they wish their child to inherit desirable characteristics that are designated as familial and socially valuable but would be missing in the case of donor gametes. At the same time, however, characteristics that are deemed culturally “undesirable,” which might put the child at a social disadvantage, are not inherited in the case of donor gametes (Harrington, 2008, p. 405).

In one of these case studies, a woman named Ute, who used both egg donation and surrogacy, defined her rights as a mother in several ways: she was biologically related to the baby through her daughter’s donor gametes, which were similar enough to stand in for her own genetic contribution; she was married to the person who provided the sperm; and she had signed a legal contract that stipulated that the surrogate would play the role of nothing more than a temporary caring environment for the fetus (Thompson, 2007, p. 637). Thus, Ute had redefined motherhood in compliance with her situation; she defined herself as the mother through biological claim (through her daughter’s eggs), through legal and social claims (being the wife of the sperm donor), and through legal power (the contract with the surrogate mother). New technologies have allowed Ute to define her claim as a mother through her own parameters. Not only has she staked her claim to motherhood through biological, social, and legal claims of kinship, but her willingness to resort to these expensive and sophisticated technologies speak to her desire for the child, and her commitment to caring for it.

Similarly, a woman named Flora used her daughter’s donated ova, which were fertilized *in vitro* with the sperm of Flora’s husband (her daughter’s step-father), but the embryo was implanted in Flora’s uterus instead of in a surrogate’s (Thompson, 2007, p. 632). Thus, Flora’s claim to be the mother also rested on genetic, legal, and

How Reproductive Technologies Change the Way We Think About Motherhood

social legitimacy, but she felt that the pregnancy was primordial: she believed that because the baby was growing in her own womb, she had kinship rights because she was using her own body to nourish and to grow the child until birth, a gestational relation. Moreover, she intended to raise the child herself, as did Ute (p. 633).

Sometimes, however, the genetic claim to a child is based on a much wider field. Belonging to the same culture is deemed sufficient in the case of one mother, Giovanna, who defined her genetic claim over the child because a friend who was of the same nationality as her donated the eggs (Thompson, 2007, pp. 625-26).

Different societies have different norms for defining the family unit and for raising their young. A woman named Paula, who was using donor egg IVF, expressed a strong preference for using a donor from her own community (Thompson, 2007, p. 627). She did not think that using a donor meant that she was any less the child's mother, as she believed that, in her community, it was not unusual for women to "mother" or "second-mother" their sisters', daughters', or friends' children (p. 627). Paula defines motherhood as a way of legitimizing socially shared motherhood, as she believes that it already exists within her own community and culture.

These technologies, then, have bent the rules of what may be traditionally considered as biological relation. By providing an egg for an embryo, or providing a womb for an embryo to grow in, women have legitimized their biological claims to motherhood in a way that traditionally would not have been possible. Thompson concludes that "from the heart of biomedicine they are changing and extending the reference of the word mother" (p. 628).

But technologies do not develop in a vacuum; they have been conceived for a receptive and sophisticated market, one that is constantly adapting and changing with its circumstances. Industrialized wealthy societies have become "postmodern" in recent years, in Nancy Levine's (2008) words, and this has led to a shift in domestic life, generated by diverse social and economic changes (p. 377). Some of the effects include the shift in the prototypical modern family, which ultimately created alternatives to this family type. Levine asserts that these new alternative families have come to include "families headed by never-married or divorced mothers, unmarried couples raising children, families with more gender-egalitarian roles, and gay and lesbian families" (377). Levine discusses the idea of motherhood in relation to the new postmodern idea of the family, and of the impact that new reproductive technologies have had on this family model. She observes that industrialized nations with access to new technologies have allowed for alternatives to the prototypical American family to surface.

It is evident that reproductive technologies have changed how we think about motherhood. Not only are these reproductive technologies enabling an evolution of the idea of motherhood, but they also allow for an emerging kind of parenthood to be accepted in society. Assistive technologies, for example, are displacing traditional notions of heterosexual parenthood through creating previously inconceivable

How Reproductive Technologies Change the Way We Think About Motherhood

offspring for single-sex and same-sex couples (Inhorn & Birenbaum-Carmeli, 2008, p. 183).

So how does one legally define motherhood? Malina Coleman (1996), in her article “Gestation, Intent, and the Seed: Defining Motherhood in the Era of Assisted Human Reproduction,” posits that there should be three areas that help to determine legal motherhood (focusing specifically on gestational surrogacy). These areas are determining intent, genetic contribution, and gestation (p. 505). Genetic contribution places some value on the idea of being biologically related, and gestation focuses on the pregnancy, but “intent” is the most important, though also the most abstract, factor in determining the legal mother. Coleman defined intent as the “preconception intentions of the two women who contribute a reproduction function” (p. 499). Thus, the woman who carried a child does not become its legal mother, even though she gives birth to it, as she was contracted to be the surrogate, while the woman who hired her or uses her services remains the legal mother. However, people who use these technologies are motivated by one factor: their wish to have a child. Their general intention, then, has a final and definite goal, and in itself legitimizes their claims to motherhood, regardless of gender, family structure, etc.

The challenge of accepting or rejecting societal norms can be felt throughout all cultures. Society places a value on defining motherhood and therefore pressures women with deeply embedded cultural expectations about biological reproduction. Because of emerging reproductive technologies, however, the definition of motherhood is being redefined to encompass all aspects of the idea. This paper demands that we rethink the notions that used to be taken for granted, from the most intimate, the examination of the self as progenitor, to its broadest impact on society. Gay Becker (2000) states that she did not “anticipate just how profound those changes would be or how deeply new reproductive technologies would affect the ways in which people think about fertility” (p. 5). What remains universal, however, is the love, attachment, and responsibility that one feels for the child. Elizabeth Butterfield (2010) explains, “I experienced a devastating loss of self. [...] But in the same moment, I also recognized that a profound commitment had taken root inside of me, and it was beautiful. I felt a duty that ran deeper than any I had known before” (p. 66). How one might become a mother has been transformed by technologies, and our social understanding of what constitutes a mother needs to be more inclusive, but the pillars of motherhood still stand strong: the desire for a child, and the willingness to do whatever is necessary, and to undergo profound change in oneself in order to nurture an offspring.

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