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Queering the Fertility Clinic

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Abstract A sociologist examines contemporary engagements of queer bodies and identities with fertility biomedicine. Drawing on social science, media culture, and the author's own empirical research, three questions frame the analysis: 1. In what ways have queers on the gendered margins moved into the center and become implicated or central users of biomedicine's fertility offerings? 2. In what ways is Fertility Inc. transformed by its own incorporation of various gendered and queered bodies and identities? And 3. What are the biosocial and bioethical implications of expanded queer engagements and possibilities with Fertility Inc.? The author argues that "patient" activism through web 2.0 coupled with a largely unregulated free-market of assisted reproduction has included various queer identities as "parents-in-waiting." Such inclusions raise a set of ethical tensions regarding how to be accountable to the many people implicated in this supply and demand industry.

Keywords Sociology of Medicine · Biomedicalization · Assisted Reproduction · LGBT Health · Queer Studies

> Not all bodies have sperm, some do… Not all bodies have eggs, some do… And not all bodies have a uterus, some do… Who helped bring together the sperm and egg that made you?
>
> —Cory Silverberg, 2012

It was in the summer of 2008 that the first pregnant man was introduced to the world (Beatie 2008). Thomas Beale's gender identification as a man coupled with his pregnant female body became an immediate cultural frenzy. Was it his masculinity, his gender nonconformity, his reproductive transgression or something else that ignited such fascination? Media described Beale as the first legal transgender man to become pregnant implying that

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his legal designation plus pregnancy, not his pregnant masculinity, was marked as a historical first.[1] [2] In her qualitative research on women who partner with transgender and transsexual men, the sociologist Carla Pfeffer (2012) argues that the social forms of these families and relationships do not fit neatly within dominant structures of same-sex or opposite sex constellation; instead, social contradictions, paradoxes, and transformation potentials emerge in these lived experiences.

This article is not about Thomas Beale, trans parents, or trans family forms specifically; instead, it is about how these lived experiences of pregnancy and family formation inform and constitute a queering of the fertility clinic. More specifically, this article is about the intersections of gender, sexuality and reproductive biomedicine for those who "choose" clinical biomedicine to achieve their pregnancy goals and the fertility clinics they encounter along the way.

In 2007 when I published *Queering Reproduction* based on U.S. lesbians and their quests for pregnancy, I argued that lesbian insemination – and thus lesbian pregnancies, had transformed from a lay social movement exemplified by low-tech, do-it-yourself processes into elaborate events requiring the assistance of multiple actors, institutions, materials, technologies, new information sources, and new forms of social relations (2007, 2010). The social intimacies found among my respondents were nuanced and varied: parents-in-waiting were couples, singles, four parents; they were mostly, but not all born female, they self-identified as butches, femmes, leather dykes, gender queers and other positions - familiar and less so - in the gender and sexual order. What all shared, however, was an engagement with fertility biomedicine, referred to as Fertility Inc. (Kolata 2002).

A set of questions emerged as I completed that book that only tangentially made it into the concluding pages. These questions have developed since and provide the basis for this article:

1. In what ways have queers on the gendered margins moved into the center and become implicated or central users of biomedicine's fertility offerings? What are the implications as those previously outside reproductive medicine's ideal users join the ranks of Fertility Inc.?
2. In what ways is Fertility Inc. transformed by its own incorporation of various gendered and queered bodies and identities in its bounds?
3. Finally, what are the biosocial and bioethical implications of expanded queer engagements and possibilities with Fertility Inc.?

At the heart of these questions lie new social forms of gender, sexuality and family that continue to queer reproduction. Various degrees of masculinity and femininity align around the categories of mother, father, parent: as dykes, fags, transmen and transwomen, and gender queers seek pregnancies as well as the social networks, information, gametes, and fertility medical services employed to achieve some form of bio-relatedness. In many ways,

[1] Since the attention emerged, Thomas Beale published his own book, authored a blog, and in 2011 following the birth of his and his partners' third child, media attention focused again on Beale and his body to report his "returned" muscular physique as he lost the pregnancy pounds.

[2] This same period, Patrick Califia - a queer cultural icon, wrote about his new family in "Family Values: Two Dads with a Difference, Neither of us were born male" published in the New York City, *Village Voice*. In this article, Patrick explains that my boyfriend is my baby's mother, referring to his partner Matt Rice who became pregnant with a friend's sperm and insemination (Califia 2009). Here, gender fluidity marks the story with a deliberate identification and gender position of men as mothers. What do these lived experiences tell us about gender, sexuality, and reproduction in the twenty-first century? Specifically, in what ways do these intersect with contemporary biomedical practices and considerations?

especially in the U.S., queer bodies and subjectivities take on biomedical interventions for their own pragmatic purposes as queer users avail themselves of the large-scale consumer markets for eggs, sperm, and surrogacy services as well as technologies of in vitro fertilization, testicular sperm extraction, egg extraction, and other assisted reproductive technologies. As a result, these users are, in many ways, normalized as "patient consumers" of Fertility Inc., yet their contours are diverse and require theorization.[3]

In what follows, this article takes account of, and reflects on, the current formation of Fertility Inc., examining in what ways fertility biomedicine is queered and not queered, and what social and bioethical implications arise as Fertility Inc. continues its expansion. These questions are situated in the context of "biomedicalization" to capture biomedical, institutional, and knowledge-making processes that include shifts from illness toward health as the object of biomedical intervention (Clarke et al. 2003). Biomedicalization is a concept my colleagues and I developed to capture the many shifts affected by the second transformation in American medicine–technoscientific innovations, including advances in computer information technologies and new knowledge forms captured by social and online media as well as new social movements (Clarke et al. 2003, 2010). Fertility Biomedicine is one of the institutional forms that comprise Fertility Inc., the multi-billion dollar a year business in the U.S. and globally comprised of free-standing and medical center fertility clinics: mostly private sperm and egg banks, surrogate broker services, medical specialties, "donors" selling their eggs and sperm, and a growing population of consumers seeking services. Given the big-business of fertility, strong competition exists for consumers among doctors, clinics, and gamete banks. Yet, the consumer base, while slightly varied and increasing, has not been very elastic. To increase profits, these services need to offer additional services, increase "unit" costs, or establish new markets. Such expansions are well underway, and queer users constitute a part of this market.

Through this conceptual frame, I analyze the queering of reproduction in three acts that together constitute both a queering of the fertility clinic and the bioethical tensions produced as a result. Act I briefly looks back to my earlier work and my analysis of the "lesbian baby boom;" Act II and III, in contrast, take stock of subsequent developments and scholarship that have forced me to rethink some of my earlier assertions and to attend to both new queerings and new bioethical dilemmas.

Queering the Fertility Clinic in Three Acts

Act I: Theorizing the Lesbian Baby Boom

The emergence of lesbian reproduction was enabled through the meeting of assisted reproductive technologies with vibrant women's and lesbian health movements organized around issues of reproductive rights. Advanced, high-tech biomedical options were becoming routine, standard practices when I conducted my research for what became *Queering Reproduction*. These options were constructed as not only the "best" option but as the only valid approach (Becker 2000) with a new grounding assumption, "If you *can* achieve pregnancy, you *must* procreate." I argued that the social designations and identities of LGB or T had been transformed into a fertility "risk" factor, a biomedical classification,

[3] Gender and sexuality are understood as interactional, dynamic practices that occur within social relations of power. While identifications consolidate around gender and sexual categories, these are understood as 'built-up' through social interactions and social structures.

and a source for biomedical intervention. Identities were not relevant medically, but they were highly relevant legally, social-culturally, and in everyday practices that structured possibilities and pathways. "Risk" factors turned people to biomedicine and transformed them from parents-in-waiting to enterprising health consumers of the fertility clinic - writ large as including sperm banks, egg brokers, endocrinologists, hormone therapies, and fertility specialists.

Another central finding posed in *Queering Reproduction* was the emergence of compulsory reproduction for LGBT lives as they sought inclusions in normativity, demanding sexual citizenship. For many, buying sperm and eggs—and all that these embody—had become routes not only to achieving parenthood but also to realizing their imagined and desired sense of self and recognition in the social and cultural worlds in which they reside. Whether this was and continues to be a reinforcement of heteronormativity or a new "homonormativity" is left open for debate (see Duggan 2002; Eng, Munoz, and Halberstam 2005). What is less open, however, is the ways family formation, including children, has become a cultural expectations for many LGBT people. Yet, full legal, social, and biomedical inclusion remains constrained. Attaining inclusion via parenting and children was constrained by economic and cultural capital. As lay-health pathways declined, accessing biomedical services was available only for those with the "right" health insurance, contacts to health care providers, and ability to pay.

Finally, I joined other social scientists who during the early years of the expansion of Fertility Inc., documented the ways buying sperm and all that sperm embodies represented old and new configurations of gender, sexuality, and social relations (see for example Daniels 2006; Luce 2010; Schmidt and Moore 1998; Moore 2008; and Almeling 2011). For example, sociologist Lisa Moore (2008) argued in her book, *Sperm Counts,* that hegemonic ideals of masculinity are reinforced in sperm bank catalogues. Charlotte Kolkokke (2009) captured the mutual production and consumption of masculinity well in her analysis of donor sperm selection titled, "Click a Donor Viking." I argued that social ideas of race/ethnicity joined these reproductions of gender and sexuality as users imagined future children and created what I termed, affinity-ties.

As I completed the book much caught my attention: the fight for gay marriage was snowballing into a core political strategy for LGBT political organizations as well as communities. Gay men were launching their own baby-boom, and the new world order of assisted reproduction had fast burgeoned into a global, largely unregulated set of technoscientific practices with many groups, especially feminist social justice ones, calling for regulations. As a result, I concluded the book ruminating on the publication of an article in the *Washington Post* that highlighted one of the most visible new social forms of the first decade of the twenty-first century: the rise of the two-father family produced through egg donation, surrogacy, and adoption (Boodman 2005). I suggested that there was much to celebrate but some to caution.

First, I had argued that lesbian reproduction as well as the expansion of Fertility Inc. contributes to racialized, stratified possibilities of childbearing and motherhood. Access is restricted by who can pay; by classificatory categories such as the ASRM, ICD, and WHO category of "infertility;" by legal structures; and by continued forms of pronatalist, heterosexist, racist, and neoliberal exclusions. Second, I proposed that two-father family forms share ideological space with what is now the more domesticated lesbian mother. I advised against the domestication and displacement of lesbian mothers in favor of only seeing the radical in gay men parenting or a fetishization of masculine pregnancy and parenting. Why not see both the radical in all queer family forms as these traverse the fertility clinic (or choose not to and seek adoptions, foster parenting, and other family formations) and theorize

how these at once queer and also perpetuate normativity. The practices, ideological continuities, stratifications, controversies and possibilities offered by these emergent social forms overlap and hold there own distinctiveness, yet these forms require the same attention and analysis I paid to lesbian reproduction.

Further, I was struck by the rapid changes in on-line media and the ways these aligned with neoliberal rhetoric, and the multiple and profound structural inequalities that neoliberal policies produce and maintain. I argued that seeking fertility services constituted new subjectivities: lesbian mothers, gay fathers, and queer families. I asserted that through the construction of "affinity-ties," lesbians were using web 2.0 to form relatedness. Reproduction had become another "do-it-yourself" self-project—a way to transform oneself and one's identity: "We are, not what we are, but what we make of ourselves" (Giddens 1991, 75). Institutions, including Fertility, Inc., served as mediators structuring possibilities, intimate and otherwise. "Choice" was constrained by medical labels, insurance codes, costs, institutional heteronorms, everyday homophobia, and transphobia. These constraints continue to be obfuscated by a message that individuals with agency can overcome them with the right attitude, knowledge, and now Web 2.0 savvy. Lesbians' responded to these structured intimacies by modifying and/or subverted technology's intended meaning or ideal use (Moore 1997), including strategically embracing its objectification.

Many social developments as well as scholarship have emerged from which to consider queer expansions: Ellen Lewin's (2009) book, *Gay Fatherhood*, is an eloquent ethnography of the lived experience of gay fathers; the clinical psychologist, Brad Larsen's (2011) qualitative research on "seeking fatherhood" among gay men; the sociologist Carla Pfeffer's (2012) research with women and transgender men; the sociologist Mignon Moore's (2011) book on the intersections of race and class with sexuality in the lives of black gay women and their families; and the anthropologist Tom Boellstorff's (2005) research on the intersections of nation, belonging, subjectivity and desire in the context of globalization. Each, in different ways, has compelled my reflection and rethinking of my analysis briefly depicted here as "Act I" and have shaped ideas found in "Acts II and III."[4]

Act II: Parents-in Waiting, Queer Intimacies in Web 2.0

Parents-in-waiting constitute a larger slice of queer intimacies in the 21st century. And, similar to lesbian motherhood, the emergence of gay and trans fatherhood and motherhood are produced through expansions in information technologies, fertility biomedicine, and recent social movements around queer rights (i.e., AIDS activism, transgender rights) and gay and lesbian inclusions in social benefits (i.e., marriage and DP benefits), including access to individual liberty to achieve families (through surrogacy and adoption rights). Although these intimacies are likewise constituted through the meeting of sex without reproduction and reproduction without sex, their distinctiveness requires research and theorization that engages technoscience: assisted reproductive technologies, markets in eggs and sperm, on-line information communities, and the fast-paced cultures of biomedicine.

[4] While these have each contributed to my reflection on and reconsideration of my earlier research, they are neither systematically reviewed nor comprehensive of research at the intersection of queer lives and intimacies in the 21st century. There are many scholars who research and write in the field of assisted reproduction have also been instrumental in my rethinking and reflection (see especially Marcia Inhorn, 2006; there are too many others to name here).

The stories of new queer family forms have continued to capture the media's attention: "Ultra Modern Family: The inside story of two dads, one egg donor, a surrogate and baby triplets;" "The word of brave new Families;" and "Gay Men's Baby Boom" are just a few examples of headlines running in mainstream news outlets. Each media story begins with a nod to the world-wide-web: "Primarily using the Web, they found an egg donor service and, based on donor profiles, selected and purchased donor eggs (at a cost of several thousand dollars)…" These are stories of multiple collaborators: sellers, buyers, parents-in-waiting, donators, brokers, reproductive clinics, etc.

By 2010, buying sperm had predominantly become an "online trade" (Mamo 2010, 178) and buying eggs has followed similar routes produced by the world-wide-web. The web-based commodification of sperm and eggs aligns with neoliberal consumer tendencies towards "…a consumer society marked by ideals of ownership, presumed individual choice, and consumption as means to fulfill one's desires, identities, and life goals" (Mamo 2010,189–190). But more than buying and selling, the internet is today producing and expanding the possibilities for the queer intimacies that consolidate into new family forms. That is, it is producing social relationships that may not have existed materially (although, relations so exist in imaginaries). A powerful example of expanded social relations through web 2.0 are the "donor families" and "donor sibling" connecting virtually and in real time as a result of The Donor Sibling Registry (DSR) developed in 2000 by Wendy Kramer and her son, Ryan. In research based on the DSR, Rosanna Hertz and Jane Mattes (2011) note that sperm banks would have never imagined their users connecting in the ways that they do today via the Internet. In their cyberethnography of reproductive commercial spaces, sociologists Lisa Moore and Mariane Grady (unpublished manuscript) found that sperm banks follow the strategies of all of commercial websites striving to keep users logged-on to their website for as much time as possible and adopting branding strategies, such as links to Facebook pages, twitter feeds, and Youtube testimonials that create linked on-line worlds.

Through on-line exchange, patient/ consumer activism and social networking are produced, and biosocial identifications formed. From virtual spaces, parents-in-waiting let their fingers take them to real and imagined social possibilities. Connections are made and imagined, bricks and mortar fertility services are identified, and reproductive practices engaged allowing previously obfuscated intimate social possibilities to join visible ones.[5] "How-to" virtual spaces create parents-in-waiting identifications and social communities. Social connections, information and resource exchange, and personal reflections on one's own desires, experiences, and future imaginings are posted for comment. These "self-help spaces" - be they personal blogs, organizational websites, or interactive chat-rooms, participate in the production of both parent-in-waiting and queer communities. While gender and sexual norms have largely populated these on-line spaces, identifications previously marginalized occupy spaces that were once less visible to the mainstream. Parents-in-waiting sites such as "I want to be a (gay) Dad," and "It's conceivable," a site dedicated to providing

[5] The Donor Sibling Registry represents a central example of new social forms, "donor families" as recipients, children, reproductive collaborators meet in cyberspace. The DSR website (https://www.donorsiblingregistry.com) states that DSR was designed to provide a means "to assist individuals conceived as a result of sperm, egg or embryo donation who are seeking to make mutually desired contact with others with whom they share genetic ties." DSR's primary goal is "Educating, Connecting and Supporting Donor Families." A stated core value of the DSR is the " conviction that people have the fundamental right to information about their biological origins and identities" and "to acknowledge the humanity and rights of the donor-conceived." As a result, this on-line community begins with the offspring, children conceived and born with the gametes from a reproductive collaborator (someone who sold or donated their sperm or eggs for a third party's reproduction) and not the parents-in-waiting.

"clear, no frills, pregnancy and parenting information for the LGBT community" are easily found with a simple Google search. Other examples from the blogosphere on the queer families include: "Boy and baby: adventures in queer parenting," "Baby cakes, gender queer pregnancy and birth," "Transpregnancy" at Queereka.com, and many others. Gender non-conformity emerges in sites such as "Lesbian Dad: Butches + Babies," "Breaking into Blossom" and other gender queer parenting sites authored by parents who subvert traditional female titles (mom) and prefer male ones (dad).[6]

Such social forms are increasingly visible, shifting from the margins to spaces of belonging where expanded normalizations reside. Of course, LGB parents are not new, neither are T(ransgender) or Q(ueer) parents. Yet, advances in information and biomedical technologies coupled with social change around LGBT issues bring these social forms into cultural visibility with many of these social forms and identifications are part of mainstream knowledge and affirmed by people who take them on as their own. Books about lesbian mothers, gay fathers, two-fathers, two mothers and others have fast accumulated over the decades. A most recent addition by Cory Silverberg was launched through Web 2.0 using the social media fundraising campaign website, Kickstarter. This children's book asks: "What Makes a Baby," with a narrative reflective of reproduction options among various queer family forms (Silverberg 2012). In addition, any search on Google will produce Youtube videos by egg donors who provided eggs to gay men and lesbians, organizations proudly asserting their work with lesbian, gay, and transmen and women seeking egg and surrogacy services, and recent stories of US egg donors preferring to work with gay men to subvert the perceived shame so-called infertile heterosexual women often bring to the practice.

LGBT reproduction has almost fully moved from a do-it-yourself alternative practice to complex engagements with, and consumption of, a panoply of biomedical services that rely on third and fourth parties. "Choosing" clinical biomedical for reproductive purposes continues to be shaped by and through, structural intimacies (Mackenzie 2013). These intimate social forms continue to be structured by the legal gaps, discriminations, and resulting vulnerabilities whether or not queers turn to biomedicine to seek pregnancies. For example, the most recent guidelines of the World Professional Association for Transgender Health (WPATH, Version 7) includes in its first section on "Reproductive Health" acknowledgment that many transgender transsexual, and gender nonconforming people will want to have children and recommending appropriate health care practices and consumer information (WPATH 2011, 50). Yet, the turn to biomedicine continues to be a false "choice," as negotiating structural inequalities to ensure legal protection under the U.S. family law punctuates many of these practices. It is also a means of legitimacy driven by cultural assumptions of "recognizable" familial ties and how much kids "look like" and act like their parent(s). For those who seek pregnancy outside the clinical framework, they do so with legal vulnerability.

In the case of transmen and women coming to the fertility clinic, WPATH's health care guidelines follows others' who recommend early decisions about reproduction in light of the fertility-limiting affects of feminizing/masculinizing hormone therapy (Darney 2008; Zhang et al. 1999). WPATH cites evidence that some people who received hormone therapy and genital surgery later regretted their inability to parent genetically related children (De Sutter et al. 2002). As a result, imagining future reproduction and configuring a place in normativity is, today, part of a biomedical guideline. As a result, trans-men and women are transformed into parents-in-waiting, and the fertility clinic becomes an obligatory passage point on their route to the men and women they know they are. That is, sperm,

[6] These blogs are searchable by title and, therefore, citations are not provided.

egg or embryo freezing for later use with a partner and/or surrogate[7] prior to transition becomes part of transition practices. The technologies needed or selected will vary depending on the "users" needs. Similar to all of Fertility Inc., technologies and services are stratified: they are not always and everywhere available, they can be very costly, and given professional regulations, they can come with refusals or discriminations in the form of ignorant and health care providers.

Act III: Fertility Travels: Bioethical Tensions and the "Wild West" of Fertility Inc

Regulation debates punctuate Act III: industry guidelines, not legal regulations, dictate the ethical boundaries of assisted reproduction leaving scientists, practitioners, clinics, and some "consumers/patients" to do whatever it takes to meet their profit, pregnancy, and industry needs (Spar 2006). Today, the U.S. fertility industry is often referred to as the "wild west" of assisted reproduction (Dresser 2000). Unlike most other industrialized countries, the U.S. relies on professional, voluntary guidelines to circumscribe its boundaries. Fertility Inc., an economic market, consists of a growing constellation of medical practices shaped within a context of a corporate, mostly for-profit, health care system expanding its technological offerings, geographical bounds, and promoting individual choice (Clarke et al. 2003). Fertility travels in what can seem to be an unregulated imperial expansion (Krolokke, Foss and Pant 2012) following the global capitalist imperative to constantly expand one's market and diversify services. As Francine Coeytaux, Marcy Darnovsky, and Susan Berke Fogel state (2011, 1), "While assisted reproductive technologies have increased parental options for those who can afford them, they pose numerous ethical challenges that the reproductive rights, health, and justice communities are only beginning to address."

Border crossing is frequent in this marketplace. Patients seek reproductive services in the U.S. that are not available elsewhere, and patients from the U.S. do the same. Lesbians, for example, from outside the U.S., buy sperm on-line to be over-night expressed to their own home, a local fertility clinic, or a fertility clinic in a country where services can be rendered legally. At the same time, "outsourcing" surrogate service has fast become big business with the world's most vulnerable filling this need.[8] Ideologies of normative gender, relatedness, and family organize the consumption intersections where buyers and sellers meet (Rudrappa 2010).

As we buy eggs, locate surrogates, and surf our way to locate and produce "donor families" (see Donor Sibling Registry website), the global economy is ever present. It is heterosexual couples who constitute the vast majority of users of this expanded offering of technosciences that push the bounds of reproductive possibilities. When considering the queering of reproduction today, while there is much to celebrate as users on the margins join the center, there is also much from which to raise concern: participation in normativity includes participation in the global trafficking in human sperm, eggs, and wombs. Who will provide the eggs and the wombs necessary to enable these family forms? From what towns, communities, and countries will the bio-materials be drawn? From whose gendered, raced,

[7] As described in the seventh edition of WPATH, studies of women with polycystic ovarian disease suggest that the ovary can recover in part from the effects of high testosterone levels (Hunter & Sterrett 2000). Stopping the testosterone briefly might allow for ovaries to recover enough to release eggs; success likely depends on the patient's age and duration of testosterone treatment. While not systematically studied, some FtM individuals are doing exactly that, and some have been able to become pregnant and deliver children (More 1998).

[8] See the documentary film *Made in India* for a thoughtful depiction of the lived experiences and ethical complexities of the global infertility marketplace (www.madeinindiamovie.com).

and classed bodies will they be drawn? Will these services follow capitalism from the west to the rest to secure the bodies and labor necessary to fulfill our American Dreams? How can we be accountable to these collaborative reproducers? In all, questions of how reproductive technologies should be developed, used, and by whom include questions of LGBT actors and queer reproductive practices. As calls for further regulation sound, where are queer practices, queer bodies in these debates?

As fertility biomedicine captures queer users from the margins, implications reverberate in multiple directions. It is neither a simple celebration of expanded rights nor a further exploitation of global inequality. Yet both co-exist. Such expansions are constitutive of a forty-year shift in American social life toward increased recognition of diverse gender and sexual lives. They reflect a queer formation, and they are assemblages of their own. They are produced through the next wave of the two social forces that shaped lesbian reproduction: gay and lesbian movements for equal rights and increased regenerative possibilities produced through "advances" in biomedical science. There is much to embrace here. Yet, expansions have been and continue to be uneven. Biomedicalization is stratified, bringing forward certain users and uses along familiar lines of economic, social, and cultural lines. As the most fortunate have their rights expanded, the least fortunate are often called forward to supply those rights. Gender, class, and race stratifications shape two-dad, trans-men and trans-women's families just as they do two-mom families.

Today's controversies appear to be most pronounced in areas of reprogenetics and transnational expansions.[9] Of course, controversies do appear in the more mundane practices as well such as when a professional practice denies services as was the case when Guadalupe Benitez and her partner, Joanne Clark, sought donor insemination services from their California medical group.[10] Such everyday forms of discrimination reveal continued cultural and social tensions about queer reproduction—that is, their potential for creating one-parent families, two same-sex parent families, gender queer parents, and other social forms that lie beyond the limits of heteronormativity.

In cases of reprogenetics, such as cloning techniques, these may soon permit same-sex biological parents.[11] Embryonic stem (ES) cell research and assisted reproduction research is a potential means of filling the static market in "donated" gametes, especially eggs, for research and procreation. Most agree that any shift to the genetic line is dangerous and must be regulated, Some advocates remain and do so under the banner of reproductive liberty. LGBT appeals are often used to advocate that queer communities support this line of research. Artificial gametes and cloning would not, however, do anything to help queer communities but would have negative effects on all future generations, physically and socially. Cloning, eugenic technologies, and other genetic reproductive technologies are part of the Wild West of reproductive medicine and many are demanding regulations (see Center

[9] Other important areas of debate continue such as the heath consequences of egg donations, issues of agency and exploitation of third part donors, payments, and other issues of regulation.

[10] The medical group denied services based on "personal religious beliefs about gay people." The California Medical Association (CMA) and the Christian Medical and Dental Associations (CMDA) filed friend-of-the-court briefs in support of the doctors. Fifteen civil rights, medical and community health organizations joined together supporting Benitez and opposing religiously motivated discrimination in health care (Lambda Legal Defense Fund, 2012). The case was settled in favor of Benitez.

[11] Examples include scenarios in which both members of a gay male couple procreate using their DNA and a woman surrogate and both members of a lesbian couple procreate using one partner as the birth mom and the other as the DNA donor. Such possibilities were announced in the first years of this century. The possibility of "two biological dads" (e.g., Kelly 2001); "babies without fathers" (Zonneveldt 2001); and human cells [not sperm][will fertilize a woman's eggs (Nationwide News Party Limited 2001).

for Genetics and Society). While these possibilities might seem to be the realm of science fiction, the knowledge needed to realize them is already in development. More so, they are part of a longer cultural imagination. That is, one can see ideological continuities found in shifts from eugenics to genetic medicine, from infertility to fertility problems, and from non-procreation as a product of unnatural gender to procreation for every woman and man.

Transnational expansions emerge with innovations in computer technologies and the Internet, donor sperm and increasingly donor eggs and surrogate services are commodified – purchased and selected via online trade as recipients surf the Web to choose the "right" donor for the job. Such practices and services are expanding economies of exchange and are steeped in a rhetoric of neoliberalism, market competition, and individual choice (Waldby and Mitchell 2006). Yet, national practices vary, forms of cross-border reproductive practices proliferate, and various states and professional organizations try to keep pace with this march forward and protect and or enable the means of doing so. In all, family and reproductive policies are constitutive of sexuality norms and regulations, even in nations proud of their same-sex policies. Gay men are part of this market elasticity as well as the cultural shifts of legal and cultural recognition of LGBT persons more broadly. Questions remain. Who will be deemed legitimate users of these technologies? Will these continue, transform, or reduce current forms of stratified reproduction? Will old variants of social control continue? Through what means will new variants of social control emerge and in what places?

The commercialization of the human exists as human beings are rendered perfectible through the market. Examples are numerous, including the rise of sex selection, the sale of organs from the poor to the rich, the boom in enhancement technologies such as cosmetic surgery, and gene doping for athletes. Furthermore, social issues are increasingly being defined as strictly genetic or biomedical problems, not social or environmental phenomena. These include disability, obesity, sexual orientation, gender variance, poverty, violence, breast cancer, osteoporosis, and rickets. In all, existing social divisions are exacerbated.

In the U.S., neoliberalism ideals of ownership and individualism punctuate reproductive practices and services, as reproduction becomes another do-it-yourself self-project enabling us to transform our selves, identities, and social lives through consumption. The subjectivities produced and intimacies enabled are products, in part, of consumption: lesbian mothers, gay fathers, and new family arrangements brought into being through consumption.

Conclusions: Bioethical Dilemmas and Queer Intimacies in the 21st Century

Pregnant men, butch pregnancies, and other gender queer embodiments are today active participants in the queering of reproduction. While often controversial on grounds of moral panics, ethical dilemmas, and other debates now understood as part of the "culture wars," Fertility Inc. shapes these engagements be it through the "choice" to participate, the stratifications that disallow and disavow doing so, and the many possibilities that lie between.

Much has changed in the last 40 years. While uneven and discontinuous, we are far from the first signs of a lesbian baby boom. Infertility clinics have firmly shifted to fertility clinics serving the everyday wellness of all women and some men. Surrogates, technoscientific practices, eggs, sperm, and the institutional forms organized to support their exchange are easily found via the world-wide-web. LGBTQ configurations, be they parallel to nuclear family forms or occupying spaces on the creative margins, are far more visible than once imagined. Generations of kids conceived by donated sperm, eggs, and surrogates are finding themselves part of "donor families" with "donor siblings" they may have previously had

little idea existed. All of these configurations provoke questions about how to understand and think about social changes underway around intimate spheres of social life: that is, who we live with; how we raise children; how we organize and handle our bodies; how we relate as gendered beings; and how we live as erotic persons (Plummer 1995). These questions arise within "arenas of intimacy" (Plummer 2001; Giddens 1991, 1992) that trouble contemporary constructions of citizenship and challenges cultural meanings of belonging and recognition.

In many ways these shifts in *queer intimacies* have consolidated around regenerative possibilities offered through technoscience. And these are part of LGBTQ challenges to and claims upon the entitlements and benefits of state-sanctioned marriage, adoption, and reproductive rights. While these provoke a rethinking of kinship markers, they also raise questions about belonging and recognition. How do we "know" and "recognize" to whom we belong and who belongs with us? Today's children are likely to live in various family forms with multiple parents, aunts, uncles, and grandparents. Children may live in a situation where they have more than one woman who operates as "mother," and/or more than one man who operates as "father," and/or no mother or father. Straight and gay families are often blended, and queer families emerge in nuclear and non-nuclear forms.

Increasingly, they also raise bioethical dilemmas: how can we account for these scenarios and be accountable to the people involved? How can we be accountable to the third and fourth party "donators" of gametes, wombs, and services? How can we be accountable to our own critical engagements with the local and global fields of ARTs and Genetic Technologies? As LGBTQ voices push for inclusion and are brought into biomedical contexts, what are the many implications? What boundaries are drawn around inclusions and exclusions?

To conclude, I return to a central question posed at the beginning of the article: in what ways is Fertility Inc. queered? And with what social implications? As dykes, gays, fags, transmen and women,and queers of all kinds seek pregnancies and the information communities, gametes and technologies needed to do so; they are subverting legal vulnerability at the same time as normalizing bio-ties. That is, armored with medical innovations of sperm extraction, IVF, egg donation, and other biomedical materials and practices, male and queer bodies and their subjectivities are not only appropriate for biomedical intervention but are normalized as "patient consumers" of such innovations.

Internet technologies point the way enabling new forms of communication, information exchange, expression and visibilities that may not be new but of which the scope and scale of dissemination is vast. These are part of biomedical expansions with both enabling parents-in-waiting, poised to self-enterprise and become biomedical users of Fertility Inc. A result is a queering of the fertility clinic, for some, and for high costs to others either in exclusions or demands for their reproductive gametes and services.

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References

Almeling, Renee. 2011. *Sex Cells: The Medical Market for Eggs and Sperm*. Berkeley: University of California Press.

Beatie, Thomas. 2008. "Labor of Love: Is society ready for this pregnant husband?" *The Advocate*, April 8: 24.

Becker, Gay. 2000. *The Elusive Embryo: How Men and Women Approach New Reproductive Technologies.* Berkeley, CA: University of California Press.

Boellstorf, Tom. 2005. *The Gay Archipelago: Sexuality and Nation in Indonesia*. Princeton, N.J.: Princeton University Press.

Boodman, Sandra. 2005. "Fatherhood by a New Formula Using an Egg Donor And a Gestational Surrogate, Some Gay Men Are Becoming Dads – and Charting New Legal and Ethical Territory." *The Washington Post*, January 18: HE01.

Califia, Patrick. 2000. "Family Values: Two Dads With a Difference—Neither of Us Was Born Male.." *The Village Voice*, June 20. Accessed on April 6 2012.http://www.villagevoice.com/2000-06-20/news/family-values/.

Clarke, Adele E, Janet K. Shim, Laura Mamo, Jennifer R Fosket, and Jennifer R Fishman. 2010. "Biomedicalization: Theorizing Technoscientific Transformations of Health, Illness, and U.S. Biomedicine." *American Sociological Review* 68:161–194.

————. 2010. "Biomedicalization: A Theoretical and Substantive Introduction." In *Biomedicalization: Technoscience, Health, and Illness in the U.S*, edited by A.E. Clarke et al.,1-46. Duke University Press.

Coeytaux, Francine, Marcy Darnovsky and Susan Berke Fogel. 2011. "Assisted reproduction and choice in the biotech age: recommendations for a way forward." *Contraception* 83: 1–4.

Daniels, Cynthia R. 2006. *Exposing Men: The Science and Politics of Male Reproduction*. Oxford, U.K.: Oxford University Press, Inc..

Daniels, Cynthia R. and J. Golden. 2004. "Procreative Compounds: Popular Eugenics, Artificial Insemination and the Rise of the American Sperm Banking Industry." *Journal of Social History,* 38:5–27.

Darney, P. D. 2008. "Hormonal Contraception." In *Williams Textbook of Endocrinology*, 11th ed., edited by H. M. Kronenberg, S. Melmer, K. S. Polonsky & P. R. Larsen, 615–644. Philadelphia: Saunders.

De Sutter, P., Kira, K., Verschoor, A., & Hotimsky, A. 2002. "The desire to have children and the preservation of fertility in transsexual women: A survey." *International Journal of Transgenderism* 6(3).

Donor Sibling Registry Website. Accessed November 9, 2012. https://www.donorsiblingregistry.com/.

Dresser, R. 2000. "Regulating Assisted Reproduction." *Hastings Report* 30:26–27.

Duggan, Lisa. 2002. "The New Homonormativity: The Sexual Politics of Neoliberalism." In *Materializing Democracy*, edited by R. Castronovo and D. Nelson, 173–194. Durham, NC: Duke University Press.

————. 2003. *Twilight of Equality? Neoliberalism: Cultural Politics and the Attack on Democracy.* Boston, MA: Beacon.

Eng, David, Jose Munoz and Judith Halberstam, eds. 2005. "What's Queer About Queer Studies Now?" *Social Text,* Fall-Winter. Durham, NC: Duke University Press.

Finegold, Wilfred J. 1964 (1976). *Artificial Insemination,* 2nd ed. Springfield: Thomas.

Giddens, Anthony. 1991. *Modernity and Self Identity.* Oxford, U.K.: Polity Press.

Hertz, Rosanna and Jane Mattes. 2011. "Donor-Shared Siblings or Genetic Strangers: New Families, Clans, and the Internet." *Journal of Family Issues* 32 (9): 1–27.

Hunter, M. H., & Sterrett, J. J. 2000. "Polycystic ovary syndrome: It's not just infertility." *American Family Physician* 62 (5): 1079–1095.

Inhorn, Marcia C. 2006. "Making Muslim Babies: IVF and Gamete Donation in Sunni versus Shi'a Islam." *Culture, Medicine, and Psychiatry* 30 (4): 427–450.

Kelly, Jen. 2001. "Gay Men May Make Babies." *Herald Sun*, January 4: News 15.

Kolata, Gina. 2002 "Fertility Inc.: Clinics Race to Lure Clients." *New York Times*, January 1:D1, D7.

Krolokke, Charlotte. 2009. "Click a Donor: Viking Masculinity on the Line." *Journal of Consumer Culture* 9 (1): 7–30.

Krolokke, Charlotte, Karen A. Foss and Saumya Pant. 2012. "Fertility Travel: The Commodification of Human Reproduction." *Cultural Politics* 8 (2): 273–282.

Lambda Legal Defense Fund. 2012. Accessed November 9, 2012. http://www.lambdalegal.org/in-court/cases/benitez-v-north-coast-womens-care-medical-group.

Larsen, Brad. 2011. "The Phenomenological Experience of Gay Male Couples Pursuing Parenthood." Unpublished dissertation, New York University.

Lewin, Ellen. 2009. *Gay Fatherhood: Narratives of Family and Citizenship in America*. Chicago, IL: University of Chicago Press.

Luce, Jacqueline. 2010. *Beyond Expectation: Lesbian/Bi/Queer Women and Assisted Conception*. University of Toronto Press.

Mackenzie, Sonja. 2013. *Structural Intimacies: Sexual Stories in the Black AIDS Epidemic.* Livingston N.J.: Rutgers University Press.

Mamo, Laura. 2007. *Queering Reproduction*: *Achieving Pregnancy in the Age of Technoscience*. Durham, NC: Duke University Press.

————. 2010. "Fertility Inc.: Consumption and Subjectification in Lesbian Reproductive Practices." In *Biomedicalization: Technoscience, Health, and Illness in the U.S.* edited by A.E. Clarke et al., 82–98. Duke University Press.

Moore, Lisa J. 1997. "'It's Like You Use Pots and Pans to Cook, It's the Tool': The Technologies of Safer Sex." *Science, Technology and Human Values* 22 (4): 343–471.

————. 2008. *Sperm Counts: Overcome by Man's Most Precious Fluid*. New York, N.Y.: NYU Press.

Moore, Lisa and Mariane Grady. Forthcoming. "Putting 'daddy' in the cart: Ordering sperm Online." In *Reframing Reproduction,* edited by Meredith Nash. London: Palgrave .

Moore, Mignon. 2011. *Invisible Families: Gay Identities, Relationships, and Motherhood among Black Women*. University of California Press.'

Nationwide News Party Limited. 2011. "No-dad Babies Seen as Boon for Lesbians." *The Mercury, Hobart*, July 12.

Pfeffer, Carla. 2012. "Normative Resistance and Inventive Pragmatism: Negotiating Structure and Agency in Transgender Families." *Gender & Society* 26 (4): 574–602.

Pfeffer, Carla. Forthcoming. *Postmodern Partnerships: Women, Transgender Men, and Twenty-first Century Queer Families*. Oxford University Press.

Plummer, Ken. 1995. *Telling Sexual Stories: Power, Change, and Social Worlds*. New York and London: Routledge Press.

———. 2001. "The Square of Intimate Citizenship: Some Preliminary Proposals." *Citizenship Studies CISDFE* 5 (3): 237–253.

Rudrappa, Sharmila. 2010. "Making India the 'mother destination': Outsourcing labor to Indian. Surrogates." In *Gender and Sexuality in the Workplace (Research in the Sociology of Work, Volume 20)* edited by Christine L. Williams, Kirsten Dellinger, 253–285. Emerald Group Publishing Limited.

Schmidt, Matthew and Lisa J. Moore. 1998. "Constructing a 'Good Catch,' Picking a Winner: The Development of Technosemen and the Deconstruction of the Monolithic Male." In *Cyborg Babies: From Techno-Sex to Techno-Tots*, edited by R. Davis-Floyd and J.Dumit. 21–39. New York and London: Routledge.

Silverberg, Cory. 2012. *What Makes a Baby.* Self-published.

Spar, Debora. 2006. *The Baby Business: How Money, Science, and Politics Drive the Commerce of Conception*. Harvard Business Review Press.

Waldby, Catherine and Robert Mitchell. 2006. *Tissue Economies: Blood, Organs and Cell Lines in Late Capitalism*. Durham, NC: Duke University Press.

Weiss, Rick. 2003. "In Laboratory, Ordinary Cells Are Turned Into Eggs." *Washington Post*, May 2: A1.

World Professional Association for Transgender Health (WPATH). 2011. *Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People, Version* 7. Accessed November 11, 2012. http://www.wpath.org/

Zhang, G., Gu, Y., Wang, X., Cui, Y., & Bremner, W. J. 1999. "A clinical trial of injectable testosterone undecanoate as a potential male contraceptive in normal Chinese men." *Journal of Clinical Endocrinology & Metabolism* 84 (10): 3642–3647.

Zonneveldt, Mandi. 2011. "No-Dad Babies Uproar." *Herald Sun*, July 11: News 2.