

▶▶▶PART II / CASE STUDIES: FOCUS ON DIFFERENCE

Laura Mamo

5 / Fertility, Inc.

CONSUMPTION AND SUBJECTIFICATION IN U.S. LESBIAN REPRODUCTIVE PRACTICES

During the biotech bubble of the late 1990s, I was living in San Francisco and conducting research for my doctoral dissertation in medical sociology at UCSF. I was researching the lesbian baby boom that was under way. My analytic findings were straightforward enough: low-tech options including self-insemination were being joined with, if not displaced by, high-tech procedures. Lesbians, once marginalized as nonprocreative and doin' it (conception) themselves, were instead routinely labeled as "infertile" and undergoing all the medical technologies biomedicine had to offer. What was going on?

I too was being shaped by the shifts in late-twentieth-century biomedicine. Unlike today, it was the height of the hype, the beginning of the end of the dot.com era, and the beginning of the dawn of personalized medicine and other medical innovations resulting from the conjoining of computer informatics and biomedical sciences. I admit it: I was captured by it all. As I collected data by interviewing lesbians about their encounters with medicine, sperm bank personnel, and fertility specialists, I spent my evenings reading business news articles, surfing the latest biotech stock picks, and watching as UCSF planned a new biotech campus. Then one

day I used all my savings (\$400) to purchase stock in a start-up, an oncomouse medical research company called Abgenix. Donna Haraway had warned us, but she also pointed us in the right direction. Consider this my conflict-of-interest statement. It is the only one and, I am fairly certain, the last one I will ever make as a scholar of science, technology, and medicine.

My retelling of buying this stock is also my feminist engagement in a politics of technoscience: We are all part of the New World Order, Inc. (Haraway 1997). The commodity I invested in—a genetically modified, hybrid mouse produced for research purposes only—was brought to us by Dupont. Ethical issues aside, I was (mis)taken in. This fetishized commodity made my heart race and my imagination run wild. It was no longer simply a paper transaction, it was more than a living entity or research material—it had become the future, the future of biotech, my future as a science and technology scholar, my future earning potential, and even my future identity as someone who had made the right pick. The oncomouse and I were going places . . . or were we?¹

Making the Right Pick:

Technoscience and the Biomedical Imaginary

This chapter, part empirical case study and part rumination on biomedialization, represents my attempt to theorize choice and subjectivity in the new world order of U.S. biomedical technoscience. It is a cautionary tale of buying in to the hype, to interpreting options as “choices,” and to seeing everything as new and holding oh-so-much promise for the future. It is a rumination on imagining otherwise and being accountable. We were, are now, and will continue to be part of the (social science) machine constituted within the politico-economics of the U.S. New World Order, Inc.

Lesbian reproductive practices, as I argue in *Queering Reproduction* (Mamo 2007b), are pragmatic negotiations of biomedical institutions and practices punctuated by multiple constraints (economic, political, material, and cultural) as well as multiple enabling points. They are also exemplars of the uneven, stratified power of U.S. free-market technoscience. In the United States and increasingly elsewhere, commodified sperm offers recipients the chance to “pick a winner” (Schmidt and Moore 1998) and “choose” the right sperm (donor) to imagine and realize future sub-

jectivities as mothers, fathers, parents, or the social relationships I term *affinity-ties*.²

My analysis of this case complements central processes constitutive of biomedicalization theory: political-economic conditions of privatization, the rationalization and devolution of services, and the broader notion of a consumer society (Clarke et al. 2003) produce current biomedical social forms, subjectivities, and practices.³ My case, however, emphasizes the ways consumer processes call forward not only consumers' desires and pleasures but also their will to imagine the future: there is no choice but to exercise choice. Further, in medical discourse and practice there is no longer a prerequisite to pathologize the body to maintain medical authority and jurisdiction; instead biomedicalization extends its reach to include any and all issues concerning life itself, culminating in a moral imperative to be healthy. While cosmetic and other lifestyle issues are already part of U.S. consumer discourse, their place as objects of U.S. biomedicine is intensifying.

This case study illustrates the ways that consumer discourse—the promises and hopes embodied in the choice among fetishized commodities, and the imperative to exercise choice—saturates the infertility marketplace with its buying and selling of sperm, the practices of conception and getting-to-pregnant, the affective relations produced, and the subjectivities of the users of these services. Discipline through a medical diagnosis dissipates; subjects are made and regulated through processes of maximizing health, minimizing risk, and producing oneself anew. Subjectification processes continue to be produced through biomedicine, yet these no longer (only) rely on medical classification; instead I argue that these are cultural scripts inscribing bodies, identities, and ways of being.⁴ Subjectification processes are, at least partially, driven by an expanded jurisdiction of medicine from treating patients to meeting so-called market demands of consumers.

In what follows, I argue that lesbian reproductive practices are constitutive of U.S. neoliberalism and its discourses of self-reliance, self-enhancement, and individual responsibility in the context of privatization, free-market regulation, and the devolution of public state services. Using the empirical case of the interactions of lesbian consumers with sperm bank services, I illustrate the ways in which consumer subjects are shaped by neoliberal discourse yet also push back, reflecting yet variously taking on such discourse. Theorizing neoliberalism along with subjectification

allows a theoretical extension of what I see as an underdeveloped area in the sociology of health and illness — the relationship between biomedicalization, consumption, and subjectivities. In the United States, biomedicine, within a consumer-healthcare delivery system, brings forward consumers and offers putative choices. These are not without political consequences, nor are they driven by a neutral set of economic and social forces.

U.S. CONSUMER SOCIETY AND NEOLIBERAL DISCOURSE

Lisa Duggan, in her groundbreaking book *The Twilight of Equality* (2003), defines neoliberalism as a morphing of the original vision of free markets and limited government purported by classical liberalisms upheld in the United States in the form of New Deal social welfare programs and politics of the 1930s to the 1960s.⁵ Neoliberalism, in contrast, gradually emerged out of “conservative” activism from the 1950s to the 1970s and emphasized a pro-business ethic over welfare state politics. Its effects include the social distribution of wealth upward with its associated downsizing of democracy, attacks on redistributive social movements, a pro-business ethic based on global competition, domestically focused culture wars that rhetorically ensure the false separation of culture from economic issues, and an emergent U.S. multicultural equality politics that efface economic inequality. Neoliberalism as a discourse and ideology emphasizes ideals of ownership, competitiveness, investment, and individual responsibility.

Accompanying neoliberalist discourse and policies is a “social surge of individualization” (Beck 1992); citizens are self-responsible for the quality, shape, and direction of their own lives, and the role of welfare states and social communities diminishes. Do-it-yourself projects emerge that often require and rely on cultural, social, and economic capital to achieve. Citizens must be self-enterprising and engage in constant self-monitoring and self-projects. The neoliberal mantra, to use the words of Anthony Giddens (1991), becomes “We are, not what we are, but what we make of ourselves.” Consumption serves as the means to “make ourselves,” to achieve a status, an appearance, an identity — a self.

Fertility biomedicine is constitutive of neoliberal discourse and shares ideological space with its technologies and services: pharmaceuticals and other medical technologies and procedures that, like consumer products more generally, promise subjective ideals. Ideals of ownership and individualism punctuate reproductive practices and services as reproduction

becomes another do-it-yourself project enabling us to transform our selves, identities, and social lives through consumption. Fertility biomedicine produces new subjectivities: lesbian mothers, gay fathers, and new family arrangements brought into being through consumption. For many lesbians, buying sperm, and all that sperm embodies, becomes a route not only to achieving parenthood but also to realizing their imagined sense of self, their hope for the future, and a way to communicate their shared affect with others.

CONSUMPTION AND SUBJECTIFICATION

As a neoliberal consumer practice, lesbian reproduction follows similar principles of choice, desire, and what Marx long ago described as the fetishization of commodities—in this case, the fetishization of the biomaterial sperm.⁶ Fertility biomedicine commodifies sperm, transforming it into an object that holds monetary and symbolic value. As Scheper-Hughes (2004) so eloquently and horrifically illustrates with the case of the traffic in kidneys, with global capitalism comes the emergence of fetishized biomaterials, and with them the complicity of medical professions and professionals in processes of commodifying bodies and our biomaterials.

This resonates with reproductive medicine. The meanings of commodities become matter-of-fact things in themselves. As Baudrillard (1996) argues, the individual consumer takes on a group identity with each purchase, merely fulfilling the needs of the productive system under the illusion that he is servicing his private wants.⁷ Baudrillard's critique resonates with the long-standing sociological question of whether we, our agency, or something external to us—social structure—dominates the shaping of our social lives.⁸ In technoscience studies this has been converted into a question of whether users matter. Do free markets generate any agencies in their valuing of individual choice, autonomy, and economic exchange? While we may agree that commodities are often fetishes of human desire, they are processes of meaning beyond their material realities as things. While this evokes the science and technology studies (STS) point that technologies have embedded scripts and meanings built in, it also raises the issue of whether people, as users, consumers, patients, and so on, are able to modify or subvert a technology's intended meaning or ideal use (Moore 1997), thus subverting the expectations and scripts of the developers and marketers of the technologies (Cockburn and Furst-Dilic 1994).

Fertility, Inc.: Commodity Culture and Assisted Reproduction

Fertility, Inc., is a \$4 billion dollar a year business in the United States. It comprises free-standing fertility clinics, mostly private sperm banks, a medical specialty, and a growing population of patients seeking services. Given the big business of fertility, strong competition exists for patients among doctors, clinics, and sperm banks. Yet the consumer base of sperm banks, while slightly varied and increasing, has not been elastic. To increase profits, these services need to offer additional services, increase unit costs, or establish new markets. This is especially the case as heterosexual couples increasingly shift from recipients of donor sperm to users of advanced reproductive services such as in vitro fertilization (IVF) with intracytoplasmic sperm injection (ICSI) to maximize their chances of biological relatedness (Becker 2000a).⁹ Services are expanded with offerings of in-depth donor profiles, computerized matching, donor photographs with handwritten responses to interview questions, and video-recorded interviews. Fees often include additional unit costs for sperm washing, storage, freezing, and shipping, as well as container rentals and other services. And niche marketing to single women and lesbians can be found as ways to expand a consumer base.

The histories of this industry make this clear (see Daniels and Golden 2004). The sperm bank industry in the United States shifted from a physician-dominated model (from the 1920s to the 1960s) to a consumer-dominated model (from the 1960s to today). Donors once selected by physicians are today marketed and sold directly to the consumer. By the early 1970s, sperm banking in the United States was primarily a commercial enterprise emphasizing economic logics over social ones, and in the 1980s, with neoliberalism, a biotechnology boom with its concomitant global commerce in eggs and sperm began. The Scandinavian Cryobank, for example, operated as a multinational corporation with offices on Wall Street and in Scandinavia. Its main offering included "Viking" and "Nordic" semen marketed to women in the United States and elsewhere.

With innovations in computer technologies and the Internet, donor sperm purchasing and selection in the United States has largely become an online trade as recipients surf the Web to choose the "right" donor for the job. Assisted reproduction and sperm banks' selection practices are expanding economies of exchange steeped in a rhetoric of neoliberal-

ism, market competition, and individual choice (see Waldby and Mitchell 2006).¹⁰

In contrast, outside the United States assisted reproduction is largely based on a “gift” model, with assumed voluntary donation and distribution based on need. The selling of human tissues, including sperm, for example, is prohibited in Great Britain, China, Israel, Denmark, Canada, and some countries that follow the Shi’a branch of Islam. The countries that oppose the commodification of gametes do so for a variety of reasons.¹¹ Significant, and worth further research, are the ways the forms of state regulation enacted shape how sexuality intersects with gender and race and ethnicity. For example, in the Danish case, a policy forbids doctor-assisted artificial insemination for either lesbians or single women. Family and reproductive policies are constitutive of sexuality norms and regulations, even in nations proud of their same-sex policies.¹²

In the United States, where my fieldwork took place, lesbian reproduction (and all reproduction) is driven not by a diagnosis of pathology but by a desire to have a child. Health (or everyday wellness, in the language of normalization), not pathology, is the object of intervention. Health is the commodity and process through which to achieve (new) technoscientific identities. The emphasis is less on places of consumption (the clinic is diffuse) than on shifting imperatives, from curing and treating illness to a moral imperative to improve one’s health, one’s life, one’s future. While medicine has a long history of pathologizing childlessness and constituting the childless woman (and her male partner) as the object of disciplining through the application of technoscientific tools designed to “cure” this presumably unwanted state, this work is no longer necessary. In a culture of biomedicalization, with its emphasis on commodification and *health*, biomedicine as institutional practices, culture, and knowledge becomes a key means for transforming oneself from child-free to with-child. No biophysiological “problem” need exist.

Driving forces guiding consumer choice are success rates, range of technologies rendered, and the variety and availability of sperm and egg donors offered. Such biomedical choices are part of consumer culture—the expansion, and at times displacement, of commodity production in the last century and the subsequent shift to commodity consumption. This shift, encompassing advertising and the mass media, has taken on major symbolic and cultural centrality. Direct-to-consumer (DTC) advertising of pre-

scription drugs and other medical products stands as a fundamental case in point of this shift. Advertisements for pharmaceutical drugs are everywhere: magazines, television and radio, billboards, Internet pop-ups, and e-mail spam. DTC advertisements have been described as a “wonder drug” for the drug industry itself because of their ability to influence patient demand—and in turn to influence doctors’ behaviors (Jenkins 1999). These advertisements ask consumers to exercise individual choice, express desires, imagine futures, and become that which we are not now. In doing so, drug companies not only bring information directly to the consumer and generate demand for their particular therapies, but also produce consumers and their imaginary futures.

Processes of subjectification, the making of particular forms of being, knowing, and identifying, are constituted within and through assisted reproduction. But we are not yet at the place where advertisers declare, “Ask your doctor about lesbian insemination,” solicit you to “find out which semen donor is right for you,” and provide a link to <http://www.spermbanksofamerica.com>. Or are we?

As another do-it-yourself project, assisted reproduction requires self-enterprising individuals with cultural, social, and economic capital to become “what we make of ourselves” (Giddens 1991). Consumption is a means to transform ourselves, to achieve an appearance, an identity, a self, and a degree of physical control—an efficient performance of the self. Fertility biomedicine calls lesbians forward as consumers and appeals to their free will: with economic resources and insurance coverage in hand, choices are offered. What kind of child, future, subjectivity, are you seeking?

Such imaginings have been depicted vividly in popular and academic texts showcasing assisted reproduction. Lee Silver (1997), a molecular biologist at Princeton University, presented a futuristic (circa 2009 and beyond) account of a world divided into two social classes, the genetically enhanced, gene-enriched “GenRich,” and the “Naturals” who are unable to financially afford genetic enhancement. Not only does Silver’s account assume that all who can, will use genetic technologies, but he overtly argues that many lesbians will come to occupy a subset of the GenRich class.

Such predictions of a highly technologized first world populated by white, tall, rich people continually enhancing their progeny must be read against what we know about the demography of same-sex, cohabitating couples and their children. The 2000 U.S. Census, for example, found that

children raised by same-sex couples in the United States reflect a greater racial and ethnic diversity than the population as a whole.¹³ Compared to different-sex couples with children, same-sex couples with children have fewer economic resources to care for their children: they have lower household incomes (\$12,000 lower per year), a 15 percent lower home ownership rate, and lower levels of education than different-sex parents, indicating that the economic benefits provided by legal marriage would be helpful to these families. Finally, lesbian and gay parents are raising a higher percentage of adopted children than same-sex couples (Sears, Gates, and Rubenstein 2005). This picture is not only far from the popular misconception that gay people are predominantly male, affluent, urban, white, and childless; it is also far from the misconception among some queer communities that gay and lesbian families are mere replications of heteronormativity, instances of "homonormativity" (Duggan 2003).¹⁴ Yet what we know is also a product of power.

While the desire to procreate may or may not be accompanied by a desire to genetically or otherwise enhance the next generation, consumer rhetoric and an increasingly narrow (though at once seemingly vast) array of choices shape lesbian reproduction. Perhaps fulfilling Silver's prediction, in *Buying Dad: One Woman's Search for the Perfect Sperm Donor*, Harlyn Aizley (2003) describes her and her partner's adventure in alternative family planning and sperm donor selection. If the title isn't revealing enough, an early chapter is titled "Shop, Shop, Shop 'Til You Drop," in which she likens buying sperm to cruising down the aisles of Sam's Club or Costco with a "genetic shopping list" for height, weight, and engineering and math skills. But what are Aizley and her partner Faith really buying? Are they buying a dad for the baby-to-be? Or are they buying a means of becoming a new identity—a mother, an imagined husband, a genetic profile, cultural legitimacy, or something else? *Buying Dad* reveals a curious imagining of the future, the future human, the future family, and a future of relatedness brought to us through free-market commodity culture with its emphasis on choice and seeking a perfect life. *Buying Dad* also highlights the ways the body, in this case the material-semiotic body part, semen, figures as a central actant in processes of meaning making.

Questions remain, however, about what kinds of subjects are self-made and being-made when lesbians enter Fertility, Inc. In what ways is Fertility, Inc., changing them and what they believe in ways that they see and don't

see? How is it changing their notions of self, family, body, future? How are processes of subjectification occurring? With what stratifications and consequences?

Managing Risk, Maintaining Security: The Self-Project(s) of Assisted Reproduction

Lesbian reproductive practices reflect a heightened concern with security and the rhetoric of risk management that has saturated much of public discourse. These practices are inseparable from neoliberal emphases on ownership, individual responsibility and choice, and consumption as means to fulfill one's desires, identities, and life goals. A goal of biomedical technoscience, its knowledges, and its technical application lies no longer in delaying, curing, or treating one's illness but in calculating and minimizing risk; achieving, maintaining, and enhancing health; and driving consumers to buy into the services and dreams offered.

In today's biopolitical times, power is no longer organized around death but is "carefully supplanted by the administration of bodies and the calculated management of life" (Foucault 1980, 139). Individuals must exercise freedoms and responsibilities through self-governance and risk management (Novas and Rose 2000). Subjects are made; identification and disidentification are produced through strategies of self-governance. Such processes take place in and through assisted reproduction. Here individuals are embarking on forms of risk management. They are configuring not only their self-identifications but also their (potential) children's risk, health, and the meaning and substance of future relationships. Such a future project is produced by and through the technological choices offered up in the industry that Gina Kolata (2001) termed "Fertility, Inc." Lesbian reproductive practices, and all assisted-reproductive practices, demonstrate the production of consumer subjectivities as Fertility, Inc., calls its consumers forward, appeals to their free will, and asks them to engage in body projects including risk management. We can surf the Internet for sperm donors, egg donors, and surrogates who will carry out the gestational arrangements; we can direct search engines to sort large databases of donors to match our preferences for eye color, hair color, education, health history, risk profile, race and ethnicity, occupation, and other desired attributes of those supplying such services and biomaterials. We can bank biomaterials, buy in bulk, and own the rights to future sales. The choice is (y)ours: what kind

of child, future, subjectivity, are you seeking? The technological practices of insemination, in vitro fertilization, and hormonal therapies do much of the same: What practices do you choose to enact en route to your future self and social connections? What responsibilities do you assume for your health and the future health of your offspring?

While sperm banks offer a range of electronic and print donor catalogs for consumer ease in choosing a sperm donor, it is the ability to surf the Internet that has come to dominate selection processes. Search and sort components allow inputs to become outputs with speed and accuracy. As consumers list desired characteristics and combinations (i.e., of a donor's race or ethnicity, height, weight, eyes, hair, body build, complexion, health history, hobbies, interests, and educational attainment), matches are generated via calculation. These allow and encourage recipients not only to compare across donors but to imagine and produce desired combinations. A lack of sperm transforms from a problem to an opportunity. From a reproductive politics perspective, however, the question remains: an opportunity for what?

As Cynthia Daniels (2006) found in her research, sperm donors are usually taller, leaner, and healthier than "average" men and usually possess interests and hobbies associated with masculinity such as golf, baseball, and other sports. Thus the winner usually represents the "ideal," not the average, man in the United States. Such ideals not only shape the donor output but extend to ideals about consumption, social relations, and family forms. Consumer choice is shaped by hegemonic notions of beauty (Bordo 1993), and race is increasingly a matter of style, moving from a biological category to an aesthetic one (Lury 1996). Picking a winner has sociopolitical consequences.

Becoming a sperm-donor recipient is a process of becoming a consumer of sperm and all that sperm embodies. As one of my respondents, Dana, stated, "It's odd to go shopping for a donor." Another respondent, Esther, said, "It feels really weird to walk in off the street and pick up a bottle of sperm and pay for it. . . . It is a whole market." While both women expressed hesitancy about the consumer-driven market in sperm, they continued to describe how they made their picks: Dana by looking for donors who were similar to her partner, and Esther by looking for Jewish donors with interests and hobbies similar to her own.

For both women, and the others I interviewed, making meaning of and managing risk also emerged as central to their choices. Managing and

minimizing risk emerged through women's perceptions of the promise of technoscientific advances in sperm testing, washing, and storage and through selecting sperm with the right genetics. Carla said: "Even before we look through the list of donors, we know they have screened out anyone who isn't extremely fit, smart, and healthy." Yet even with such pre-screening techniques, when choosing donor sperm from a sperm bank, consumers are encouraged to enhance the next generation by reducing not only the risk of potential illnesses but also the risk of perceived cultural liabilities such as shortness, acne, lack of academic, athletic, or musical abilities, or having a certain skin color, eye color, or ancestral background. In other words, these users are averting not only disease risk but also the risks of social mediocrity. As a result, minimizing physical risks is part of maximizing social fitness. In becoming users of Fertility, Inc., lesbians who can financially afford such choices are shaping themselves and their futures through their choices.

Sperm banks construct discourses of reproductive risk, capitalizing on consumer concerns about hazards to one's health, risks of birth defects, and increased time to conception. "Technosemen" is used as a means to overcome sperm limitations such as "uncleanliness," poor mobility, low velocity, and unpredictability (Schmidt and Moore 1998). To promote technosemen, sperm banks highlight screening procedures both to ensure trust in the integrity of the sperm and to attest to the selectivity of men invited to participate in reproduction. Specifically, such procedures include testing for sperm count and motility; infectious disease screening (i.e., HIV-1 and 2, HTLV-1 and 2, syphilis, hepatitis B and C, CMV, chlamydia, gonorrhea, etc.); a six-month semen quarantine for retesting; semen "washing" (a procedure to remove seminal plasma and nonsperm cellular material, thereby reducing the risk of uterine cramping and infection); and semen analysis to measure parameters such as liquefaction, volume, viscosity, pH, motile sperm concentration, total sperm concentration, percent motility, progression, percent abnormal morphology, and white blood cell concentration. Together such manipulation builds trust in a supernatural commodity and promotes a real (and perceived) sense of selectivity.

In selecting donor characteristics, nature is not only "enterprised-up" (Strathern 1992, 30) through selecting positive characteristics but also enabled by minimizing potential disease risk through a careful selection of health histories. Such processes highlight the ways in which biomedicalization includes new regimens of risk classification and practices designed to

minimize, manage, and, in the case of breast cancer prevention, treat risk (Fosket 2004). Risk management entered as women constructed probability assessments for future health and illness of potential children based on their own and the donor's health histories. Embedded in practices of sperm selection are late-twentieth-century discourses of geneticization that are central to the ways women imagine future connections by re-materializing donors as objects through which genetics flow. Part of today's heightened scrutiny of genes as presumed causal factors in one's health, sperm banks rely deeply on genetic discourse and knowledge in their services. Most sperm banks provide health histories of donors going back at least one, and often up to five, generations. In selecting donors, women engage in processes of understanding their own health and family health history in relation to the donors' family narrative. Their decisions become a way of reducing risk for the potential child: if breast cancer is present in a bio-mom's family, a donor would be chosen with no cancer in his family.

Dominant cultural discourses about genetics, heredity, and health were often transparent to the women I interviewed. Joyce said, "My family and I were calling it genetic engineering." All respondents thought they knew that some aspects of health are inheritable and identified certain illnesses as proof. Tina said, "It did feel like genetic engineering, though. How tall would we like him? Do we prefer a graduate student or an athlete? What about physique, intelligence, and health? Is there a history of cancer?" Raquel, Paula, and Esther indicated knowledge about what is and is not inheritable. While Raquel emphasized cancer and schizophrenia as genetically determined risks, Paula raised her concern about alcoholism as a genetic risk, and Esther perceived good eyesight as genetically inheritable.

RAQUEL: We wanted to pick someone who, even though we trusted that [the sperm bank] probably wouldn't have in their catalog someone who had a huge amount of schizophrenia in the close relatives or something like that. We wanted to stay clear of people with even an appearance of some kind of cancer.

PAULA: A really big issue for me was people who had alcoholics in their family. I don't know that there's hard conclusive evidence, but there's a lot of [studies] that have shown that there is an inheritance of alcoholism. And I guess because I've seen situations of families who've adopted kids whose

parents were alcoholics and what's happened to their child. . . . And there isn't any alcoholism in my family.

ESTHER: My really big issues are health and then eyesight. I've really gotten stuck on eyesight lately. I want to give him a chance and figure if the donor has 20/20 vision, then I figure they've got a shot, you know.

In all, these comments exemplify self-management strategies used to maximize current and future physical and social well-being. Genetics have emerged as key means through which life is understood and by which disease will be cured. As the mapping of the human genome has uncovered several gene markers for disease joining BRCA1 and 2 breast cancer genes, and as the media purports the discovery of genes for Down syndrome, Alzheimer's disease, prostate cancer, and others, cultural understandings of health and illness are increasingly geneticized (Lippman 1992).

Sperm, as commercial sperm banks tell us, can be sick or healthy. Socially and physically dominant donors were selected assuming that their sperm would help create socially dominant offspring. At times donors were also selected to enhance familial qualities (i.e., choosing a tall donor if one is short). In addition, social health (such as education, hobbies, and interests) also emerged as important qualities in donors. In both cases, selection decisions mirrored dominant U.S. cultural understandings of physical and social power. Key indicators of ideal physical and social power include health, as well as height, weight, body build, sports, occupation, grade point average, and years of college. As Schmidt and Moore (1998) argued, these are social indicators of one's ability to be physically and socially dominant. June described the importance of maximizing health and her belief that health is genetically inherited:

We were looking for someone with remarkable health that extended out to maternal, paternal grandparents and aunts and uncles too; someone healthy without a cancer history or Alzheimer's or other things that seemed genetic. My mother said, "You know more about this donor than I ever knew about your father when we started having kids." But we figured, as long as we have a choice, we might as well try to go for the most remarkable health stuff.

Similarly, Judith linked the commodification of sperm with the ability to "buy" health:

What really affects me is how much I have to pay to get healthy sperm that can survive freezing. Sperm that has been quarantined and tested for all the diseases. I know a lot about this person in terms of health. I know what he's not carrying. If I met him at a bar or he was my best friend who didn't tell me a few things, I wouldn't know. I think it's important to know these things. . . . It's a matter of health. It's a matter of viruses. It's a matter of self.

Women are making these choices "because they can," understanding the commodification of sperm, health, and genetic inheritance. This raises the questions: What are screened sperm worth? What are good genes worth? What opportunities for the future are offered? Sara describes the variety of qualities that came into play as she made her selections:

Health was first and then music. Intelligence wasn't really an issue because the people they recruit, at least among the Asian donors, are very intelligent already. They all had over 1,400 on their SAT scores and were in graduate school or they were undergraduates and had amazing grade point averages. They all seemed really intelligent already. If you can pick, we figured we definitely wanted someone that can do what they'd like in life, whatever they'd like to make them happy. Handwriting and creativity were also important issues. I guess it extended to include general creativity and what they seemed like, their personality. Part of this was what they thought of the women in their lives. They write opinions of their relatives and siblings, and what they said gave us an idea of their personality. What is their mother like. We asked ourselves, "Do they feel really positively towards the women in their life?"

Asking themselves what they wanted, what they preferred was a matter of considering the promises and pitfalls held by the choices offered. Cultural ideas concerning genetics and heredity were mobilized as inheritable. Qualities such as a health condition were knowable, selected, and mapped through blood ties. Sara said: "We know how biological all this is," and "I think my primary concern was genetics." Throughout, she emphasized what she believes we "know" and "don't know" about heredity. Somewhat discounting environmental explanations, she eliminated donors with any history of mental illness and substance use in their ancestral lineage. Health histories—almost regardless of the weight of the evidence as to the heritability of different disease conditions—were used to enhance poten-

tial offspring and reduce risk. Further, social characteristics such as musical abilities, intelligence, not being a misogynist, being creative, flexible, and possessing strong coping skills emerge as possible hereditary attributes although they are more commonly construed as acquired rather than hereditary characteristics.

Finally, risk was reduced and security maintained by navigating legal policies. Maintaining security is evidenced through women's access to medical-based and legal-based services. Each is enabled by access to, and ability to pay for, the legal advice and services necessary to protect one's parental rights. Under the law in California, where my research took place, a known sperm donor is legally considered the father of the child except "where sperm is provided to a licensed physician and surgeon for purposes of insemination in a woman not his wife."¹⁵ Risk is not only a technoscientific construction and identification; it is also a perceived threat to one's future family. In this research, one way to minimize the risk of custody battles, and therefore losing a child to a legally defined father, was to use sperm bank services protected under the medical umbrella with its associated definitions and regulations. Although the language "licensed physician and surgeon" eliminates from protection most family practitioners and internists who are not surgeons, as well as all nurse practitioners, sperm banks as medical clinics under the supervision of an MD are included in such protections. Recipients who used sperm banks were highly aware of this added security in their insemination practices.

If a sperm bank was not used, however, as was the case for Diana and her partner, then the significance of the physician took on added importance. Diane stated: "The donor and his partner came over, they produced. And my other friend, she's obviously a doctor, came over and handed it to me. Then we [she and her partner] went and put it in using a needleless syringe. The four of us went out to dinner. You know, it was really nice." In this insemination story, the pass-off of semen to a physician to give to the user ensures that legal risks are "managed." Thus Diane not only understands California law (i.e., a known semen donor is considered the father of the child except "where sperm is provided to a licensed physician and surgeon for purposes of insemination in a woman not his wife") but has actively negotiated its parameters to maximize future security. Thus, while consumers are being agential, self-enterprising consumers, they are doing so within the structural design of not only how the technologies were in-

tended to be used but also by whom and for the production of what kinds of families.

Final Ruminations: From Reproductive Choice to Justice

This is my past-present-future rumination on the power of technoscience. It's been almost a decade since I left the San Francisco Bay Area and since the dot.com bubble burst, and three years since the publication of my book. Things look very different from over here. What seemed like normativity in San Francisco appears as a far more nuanced queering in Washington. Yet this queering also seems to be a rallying cry for inclusion. From the point of view of my previous situation in a largely nontraditional urban landscape, having families seemed to be the most traditional thing one could do. My current situatedness in a more tradition-bound area allows me to see the diversity of lesbian and gay family forms and the self-enterprising means required to achieve these family forms as queering the boundaries of normalcy. As a result, my analysis is more subtle today than it was then and there. Yet at the same time, I hear the even louder calls for inclusion as marriage and family become central to the LGBT politics.

The thrust of the story remains the same: Lesbian reproduction is quickly moving from a do-it-yourself alternative practice to complex engagements with, and consumption of, a panoply of biomedical services. The importance of economic and cultural capital plays a larger role in the story. Accessing these biomedical services is produced by health insurance status and the ability to pay. While lesbians seeking pregnancies can look for sperm donors among friends, pick sperm from a catalog, or have the fertilized egg of one partner implanted in the other, each pathway not only entails compromises about cost, safety, control, and legal relationships but varies and is driven by cost and ability to pay. Economics stratify reproduction. Fertility, Inc., shapes lesbian subjects as flexible citizens ready and willing to participate in the self-projects offered by consumer culture (see Davis-Floyd 1992; Strathern 1992; Edwards et al. 1993). Yet the more these "free choices" are expected, the less choice remains. With a vast array of choices (IVF, egg donor, sperm donor, home insemination, IUI, etc), the choice is the same: biological reproduction.

In sum, lesbian practices speak to a consumer society marked by ideals of ownership, presumed individual choice, and consumption as means

to fulfill one's desires, identities, and life goals. Consumption infuses all aspects of our lives, including our reproductive lives. Healthcare has extended in ways that emphasize consumer processes of pleasure and transformation: there is no choice but to exercise choice. Healthcare's object encompasses any and all issues concerning health and lifestyle with a goal of meeting assumed market demands. The respondents describe interactions that are pragmatic negotiations taken as they reach toward an end goal or desire: to become pregnant and attain motherhood. For many, buying sperm—and all that sperm embodies—becomes a route not only to achieving parenthood but also to realizing their imagined sense of self, their hope for their own future, and the future health of their children.¹⁶ While it may not be enhancement, lesbians are managing cultural norms as they make their selections: what height, color, eye shape, and hobbies will we choose? Such selections are fetishized as each choice becomes an opportunity for the future.¹⁷

The contours of who is constrained from such choices are effaced, yet everywhere all too apparent. In my interviews, for example, those who stopped trying to become pregnant faced economic barriers they either could not or were unwilling to overcome. Some, however, negotiated this constraint by using alternative insemination methods (for example, Diane and her partner her engaged the [free] services of a physician friend).

As I debate the degrees of queering, it cannot be argued that at the center of such subjectification is the production of one of the most durable identities in the United States and elsewhere: mother. The practices I analyzed were in the service of achieving a long-range self as a parent. Further, it is through technological means that parents are made. While old stratifications continue in the form of discrimination against lesbians, access to reproductive technologies, legal regulations defining family, and an embedded heterosexual script in the technologies and services themselves, these actors largely were able to secure their own future. Absent here are those who choose not to reproduce and those who do not align with Liberal ideals of family embraced by U.S. mainstream LGBT politics. As a result, a more leftist analysis of inclusion and choice is missing from this paper as well.

I have argued that for many lesbians, buying sperm, and all that sperm embodies, becomes a route not only to achieving parenthood but also to realizing their imagined sense of self and their hope for the future. It is also a means of communicating their shared affect with others and thus, a legiti-

macy in a social order that legally and social privileges heteronormativity. Finally, buying sperm is shaped by and through stratified biomedicalization and cultures of consumption, risk, and a will to health. The meeting of bodies with technological and scientific practices is part of culture and power; they do not exist outside culture and power. Bodies—and subjectivities—are conceived, technologized, and debated within politically and socially meaningful contexts by people who face different and multiple situations of power. Judith Butler, for example, argues that it is politically crucial that we lay claim to intelligibility and recognizability while simultaneously maintaining a critical and transformative relation to the norms that govern what will and will not count as an intelligible and recognizable alliance and kinship (Butler 2002, 28). My concern with whether or not a queering is taking place is reworked as a question about what price producing recognizable and legitimate subjectivities brings.

The implications of neoliberalism and its emphasis on free-market regulation have not been fully theorized in the context of assisted reproduction and consumption, nor has the question of whether or not fertility services should be regulated at all. There are many good reasons for this. Most notable is the history of forced sterilization; equally important is the agenda item of some feminist health organizations to include reproduction as a human right: that all women should have control over not only if and when they reproduce (through the availability of contraceptives and abortion services) but also their choice to reproduce (through assisted reproductive services).

The emphasis of neoliberalism on the rights of individuals gave lesbians, gay men, and single people increased access to reproductive services under the name of privacy rights. Privacy rights have largely generated rights such as contraception information (the 1965 *Griswold v. Connecticut* decision to strike down a state law prohibiting the use of contraceptives by married couples), the right to choose to have an abortion (the 1973 *Roe v. Wade* decision), and more recently the right to engage in same-sex practices (the 2003 *Lawrence v. Texas* Supreme Court decision to appeal state laws criminalizing consensual sex between two adults of the same sex). While these have collectively expanded reproductive citizenship, they have also magnified the dividing practices between those who can afford such services and those who are unable to pay and are not covered by the state or private insurance. These rights, that is, are largely regulated by the free market. Charis Thompson (2005) has argued that cost is the main driver of bio-

medical citizenship in the reproductive arena. By becoming a major site for the unfolding of the practices of Fertility, Inc., lesbian and gay reproduction is constitutive of the production of consumer citizenship. Queers of all kinds, as consumers with identities and lifestyles expressed through purchase and acquisition, are being incorporated into consumer culture (Frietas 1998; Richardson 2001).

There is much to embrace here. Through consumption of biomedical knowledges, technologies, and services, lesbian mothers, mothers-to-be, relationships, and family forms are no longer abject; instead these actors are recognized as members of culture (even if not always legitimate ones). The social institutions of biomedical services (fertility specialists, sperm banks, assisted-reproductive technologies and practices) and the law (via marriage, domestic partnership, and adoption rights) are central avenues through which parenthood and ultimately equality, normality, and citizenship are secured. This turn to biomedicine and the law is indicative of a sexual citizenship and is, in part, constituted within a culture of consumption.

Several have critiqued these advances, including those who argue that these produce a potential reinforcement of heteronormativity or a new "homonormativity" (see Duggan 2002; see also the 2005 special edition of *Social Text* edited by David Eng, Jose Munoz, and Judith Halberstam). Of course, the critique is not about any individual action or choice but about the social and political forces shaping social lives. I argue that lesbians as consumer citizens are produced within and through the shift from lesbian, gay, and queer struggles for sexual liberations to battles to reproduce, marry, parent, and form familial relations in the same way as heterosexuals (Dominus 2004). While one may interpret the growing access to consumer-based reproduction, parenthood and even legal marriage among lesbians (and gay men and others) as inclusion, or a broadening of citizenship, such transformations pose fundamental problems concerning the production of difference and normalization within the social.

In thinking about free-market regulation, I close by returning to a statement we raised at the end of our ASR paper. In that conclusion, we call for the use of biomedicalization as a critical lens, as it allows for the mapping of momentary spaces of negotiation and the possibilities of democratic interventions (Clarke et al. 2003, 185). We advocated for justice and a feminist politics. The future is here. Forty-five million people in the United States have no medical insurance, and a billion people globally have no basic

healthcare. These numbers are on the rise. At the same time, healthcare is an increasingly commoditized, for-profit market, based in and driven by consumerism. Many biotech-based treatments as well as basic healthcare provisions are extremely expensive, thereby increasing health and other disparities.

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. As Lee Silver predicted almost ten years ago, this may create a biological basis for difference leading to inequalities based on such difference and a possible emergence of genetic castes.

Finally, I end this chapter by calling attention to an activist-academic alliance that produced a statement and emergent social movement titled *Beyond Marriage* (see <http://www.beyondmarriage.org>), a campaign that not only joins but is organized through *Queers for Economic Justice* (QEJ). My politics of technoscience are accountable to the coexisting, mutually shaping social forms variously addressing and producing social stratifications. I am accountable both to an organization such as QEJ, which asks us to imagine otherwise, to develop an agenda for queer rights that moves beyond (yet includes) reproductive and marriage rights, and to those lesbian subjects seeking some inclusion in normativity. Yet in researching lesbian reproduction, the QEJ broad agenda of coalition building with groups advocating for economic, racial, gender, immigration, and other justice concerns has remained in the shadow of queer politics. I yearn for my own and our collective politics of technoscience to hold all these forms of politics as possible futures. The issue items on the QEJ agenda, for example, include homeless shelter organizing, immigrant rights, welfare organizing, and others each is important to the family values. Their platform for LGBT communities seeks to move beyond marriage and reproduction as single-issue concerns and instead to maintain these issues and build on them. I'll let you surf your way to these and other possible futures.

Notes

- 1 Although my \$400 did magically become \$10,000 during the boom, alas, I forgot to sell. In 2006 Abgenix was purchased by Amgen for a cash payout of \$22.50 a share. My \$400 investment was redeposited in my account as \$2,250. While this was an incredible rate of return, the maximum return remained elusive.
- 2 In the United States, sperm is incorporated into the Tissue Guidelines as a biomaterial available for sale. It follows the same model and policies as the commodification of other therapeutic tissues. In contrast, the selling of human tissues (including sperm) is prohibited in most other developed countries, including Canada and the Netherlands (countries who pride themselves on liberal same-sex policies). The United States is unique in its treatment of the commercialization of this biomaterial.
- 3 I intentionally use the term "consumer" throughout the chapter to highlight the emphasis on commodification and the business mentality of U.S. Fertility, Inc.
- 4 Jennifer Fishman and I showed how the medical category of erectile dysfunction (ED) was replaced with everyday erection difficulties—part of being human (see Mamo and Fishman 2001). In *Queering Reproduction* (2007) I argue that lesbian reproduction (and all reproduction) is driven not by a diagnosis of pathology but by a desire to have a child: biomedicalization, with its emphasis on commodification and *health*, is a key site for transforming oneself from child-free to with-child. In a current project, Jennifer Fosket and I argue with the case of Seasonale and other emergent birth control pills that pregnancy prevention has been replaced with being and living free from menstruation (Mamo and Fosket, 2009). In all, the discursive shifts from sexual disorder to difficulties, from childless to achieving parenthood, and from pregnancy prevention to living menstruation free, produce new subjectivities.
- 5 The global economic collapse that began in 2007 with the housing bubble followed by the banking crises has produced a return to state programs. This, however, remains to be studied. Early signs indicate bailouts for industry, not social programs for publics. Nonetheless, free-market economics are in the process of their own demystification.
- 6 Ivan Illich (1992), drawing on Marx, argued that as an object of manipulation, the ultimate fetish is life itself.
- 7 In *The System of Objects*, Baudrillard (1996) offered a cultural critique of the commodity in consumer society, arguing that there is a psychological imperative to consumption. It is meaning, not use, that gets transferred through consumer objects. The body enters into this discourse as text, as a "material-corporeal" unit of exchange, and as a technological project. Biomaterials become semimagical and symbolic representations, heavy with social meanings and significations (Appadurai 1986; Scheper-Hughes 2004).
- 8 Biomedicalization processes, as meso-level institutional practices and new social forms, are ripe for analyzing questions concerning the degrees of agency and

structure. I examine lesbian practices of achieving pregnancy as forged with many agencies; my argument is that despite the most idealistic vision, structural constraints are imposed and negotiated. I attend to the messy workings of power and culture in shaping these practices.

- 9 ICSI involves injecting a single sperm into an egg in the IVF lab. It is used in cases where the man has weak sperm or an extremely low sperm count. If the ICSI procedure is successful, the fertilized egg is transferred to the woman's uterus using normal IVF procedures. Recent statistics show that ICSI is used in about 47 percent of IVF procedures in the United States (Centers for Disease Control 2000).
- 10 In *Tissue Economies* (2006), Catherine Waldby and Robert Mitchell examine what they see as the rapidly expanding economies of exchange in human tissues. Their argument is marshaled using the cases of blood banks, stem cells, umbilical cord blood, the market in human organs, and others. In doing so, they argue that an emergent commercial market of human bodies, bodily processes, and biomaterials is constitutive of late capitalism. Waldby and Mitchell conclude that a blurring has taken place from what was once considered "donation" and a gift exchange to the more recent incursion of free-market values resulting in "tissue economies."
- 11 The U.S. market model that largely views gametes as commodities is not universally replicated in other countries. In China, in 2006, the Ministry of Health tightened regulations over sperm banks and banned the commercial donation and supply of human eggs (*China Daily*, April 13, 2006). In Great Britain in 2004, the Human Fertilization and Embryology Authority (HFEA) discouraged sperm banks and fertility clinics from using paid-donors, thereby promoting an ideal of altruistic donation. Israel, Denmark, and Canada similarly enacted policies to discourage the use of paid gamete donors. In Canada, the Assisted Human Reproduction Act of 2004 put into law a prohibition on the purchase of sperm or eggs. This move has fueled a transnational trafficking of egg and sperm to Canada, largely from the U.S. (Daniels et al. 2006; Reid, Ram, and Brown 2007). In Israel, third-party sperm donation is legal as a result of the conferral of Jewishness through the maternal line. It is also evident that the American consumer model of free-market reproductive medicine has not (yet) taken hold in Israel (Kahn 2000) or in the Middle East and Sunni-majority Muslim countries (e.g., Egypt), where artificial insemination with a husband's sperm is allowed, while sperm donation is not. This distinction upholds the belief that marital functions such as reproduction should not be interfered with by a third party. In Iran the boundaries around a heterosexual couple are not strongly upheld. The Shi'a Islam issued a fatwa permitting gamete donation. This fatwa is followed by many Shi'a, including leaders in Lebanon. Any child born by sperm donation will follow the name of the father, not the sperm donor. Yet regulations persist and any couple requiring and requesting assisted-reproductive services must come before Shi'ite religious courts who ultimately make decisions case by case.
- 12 While policies on donor reimbursement cross-nationally reflect the corresponding value of gift versus commodity, the gift-commodity dichotomy, as Waldby and

Mitchell (2006, 9) illustrate, is an "inadequate way to conceptualize the political economy of tissues in the modern world of global biotechnology." Debate over donation versus gift of biomaterials is not new; however, intervention by state governments into medical practices is.

- 13 The census data shed no light on how many single gay men and lesbians are raising children, given that sexual orientation and sexual behaviors are not asked on the census itself. Further, it is estimated that the number of gays and lesbians declaring their partnership status is an undercount given either an unwillingness to disclose their sexuality or a motivated decision not to declare until the "marriage" box is allowed by law.
- 14 Another way to read these practices is as a queering of family demography. Whether or not reproductive technologies and practices in general represent a queering is driven by one's definition of queering itself. If the benchmark is contesting dominant heteronormative assumptions and institutions, then lesbian and gay parent families may adhere to Lisa Duggan's (2003) analysis that these family forms are creating a "homonormativity." If queering is defined as subverting a norm, as I think it is, then these families can be read as producing social change.
- 15 California Family Code 7613 reads: "(a) If, under the supervision of a licensed physician and surgeon and with the consent of her husband, a wife is inseminated artificially with semen donated by a man not her husband, the husband is treated in law as if he were the natural father of a child thereby conceived. The husband's consent must be in writing and signed by him and his wife. The physician and surgeon shall certify their signatures and the date of the insemination, and retain the husband's consent as part of the medical record, where it shall be kept confidential and in a sealed file. However, the physician and surgeon's failure to do so does not affect the father and child relationship. All papers and records pertaining to the insemination, whether part of the permanent record of a court or of a file held by the supervising physician and surgeon or elsewhere, are subject to inspection only upon an order of the court for good cause shown."
- 16 The phrase "achieving parenthood" is borrowed from Ellen Lewin (1993) and Faye Ginsburg (1989).
- 17 Yet many of their practices reflect anxieties about social connection and belonging. Their actions take place in a culture in which healthcare services facilitate their reproduction while state policies simultaneously legally and politically contest their right to exist. In this context, lesbians are seeking to redefine and create family in ways that render them legible as full participants in the United States and in ways that might be used to gain legitimacy in a largely heterosexist culture. In doing so, the bounds between family and community are blurred as the field of procreators extends beyond traditional mothers and fathers.