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ADVANCES IN GENDER RESEARCH VOLUME 12

# ADVANCING GENDER RESEARCH FROM THE NINETEENTH TO THE TWENTY-FIRST CENTURIES

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- Simonds, W., Rothman, B. K., & Norman, B. M. (2007). Laboring on: Birth in transition in the United States. New York: Routledge.
- Solinger, R. (1998). Poisonous choice. In: M. Ladd-Taylor & L. Umansky (Eds), "Bad" mothers: The politics of blame in twentieth-century America (pp. 381-402). New York: New York University Press.
- Solinger, R. (2001). Beggars and choosers: How the politics of choice shapes adoption, abortion, and welfare in the United States. New York: Hill and Wang.
- Wertz, R. W., & Wertz, D. C. (1977). Lying-in: A history of childbirth in America. New Haven, CT: Yale University Press.
- Woods, N. F. (1999). Midlife women's health: Conflicting perspectives of healthcare providers and midlife women and consequences for health. In: A. Clarke & V. Olesen (Eds), Revisioning women, health and healing: Feminist, cultural, and technological perspectives (pp. 343-354). New York: Routledge.
- Zadoroznyj, M. (1999). Social class, social selves and social control in childbirth. Sociology of Health and Illness, 21(3), 267–289.
- Zita, J. (1997). The premenstrual syndrome: "Dis-easing" the female cycle. In: N. Tuana (Ed.), Feminism and science (pp. 188–210). Bloomington, IN: Indiana University Press.

# REDEFINING "REPRODUCTIVE RIGHTS": AN ECOFEMINIST PERSPECTIVE ON IN VITRO FERTILIZATION, EGG MARKETS AND SURROGATE MOTHERHOOD

Laura Corradi

### **ABSTRACT**

Is medically assisted fertilization (with the use of in vitro technology) about "reproductive rights" or about white women's privileges? What is "choice" for white and rich women seems to become a further commodification of the body for women of color and economically disadvantaged women.

Several feminists define reproductive rights by demanding social justice and a type of support for the mothers that does not include expensive technologies, which have a problematic outcome, that of generating a divide between women in the north and women in the south of the world. Some authors also talk about a "division of labor" in reproduction.

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The first part of my chapter offers an outline of the historical feminist debate over gender and technology, looking at different positions regarding biotechnologies, and reproductive technologies in a specific way. The second part presents an investigation around the (often racialized) international market of eggs and surrogate mothers in the United States, India and Eastern Europe.

The third part consists of an analysis of few recent studies about the health of women who undergo ovarian hyper-stimulation in order to give eggs as "donation" (under payment); women who offer themselves as surrogate mothers and the children who have been conceived with in vitro fertilization, specifically with heterologue forms (egg donation or surrogate motherhood).

### INTRODUCTION

New frontiers in biotechnology are achieved under the flag of scientific freedom. These range from animal cloning, hybridization and the manufacturing of humanized animals for xeno-transplant of organs, to human cloning trials, genetically modified embryos and ectogenesis – the possibility of constructing an artificial womb. Scientific advancements in assisted reproduction and neonatal medicine may one day lead to the development of a fetus outside the woman's body. This is rejected as uneconomical and unreasonable by several feminists. Elaine Denny was one of the pioneers of such a position, stating that the possibility of ectogenesis itself relies on a faulty postulate:

it assumes that men actually want to rid the world of women, women who carry out most of the world's farming, childbearing and rearing, who service men so that they can function in the public sphere. All this is done at little or no cost, so why replace it with expensive technology? (Denny, 1994, p. 62)

Other feminists are not reassured by this argument fearing the intention of capitalism is to manufacture the perfect child – the perfect worker, the perfect soldier. What is undisputable is the fact that science is systematically violating the biological limits of nature, which gave women the power to reproduce the human species (Mies & Shiva, 1993).

Another contested arena among feminists relates to costs and benefits of these technologies: Is medically assisted fertilization (with the use of in vitro technology) about "reproductive rights" or about white women's privileges?

What appears to be freedom of "choice" for white and rich women seems to translate into further commodification of the body for women of color and economically disadvantaged women.

Several transnational networks on women's health are questioning the use of invasive technologies, which threaten women's well-being. The South-African women's network Africa Loves Babies defines reproductive rights by demanding social justice and a type of support for the mothers that does not include expensive technologies. These technologies are doubly problematic as they generate a divide between women in the north and women in the south of the world. Some authors talk about a "division of labor" also in reproduction – between poor women who sell eggs or "rent" their uteruses and affluent women who pay for them – because of health problems, infertility, or the unwillingness to carry a baby.

The first part of my essay offers an outline of the historical feminist debate over gender and technology; the second part looks at different positions regarding biotechnologies and reproductive technologies in a specific way. The third part presents an exploratory investigation of the (often racialized) international market of eggs and surrogate mothers in the United States, India and Eastern Europe. It also offers an analysis of a few recent studies concerning the health of women who undergo ovarian hyperstimulation in order to give eggs as "donation" (under payment); women who offer themselves as surrogate mothers and the children who have been conceived with in vitro fertilization (IVF), specifically with heterologue forms through egg donation or surrogate motherhood.

### GENDER AND TECHNOLOGY

In the year 1526 a new lecturer – 33 years old, small and feminine-looking, who was to be remembered as the father of modern chemistry and the founder of modern medicine – was hired at the University of Basel. This person, whose very sex has been questioned, was Theophrastus von Hohenheim, better known as Paracelsus (1493–1541) and was reported to have peculiar ideas about how knowledge is constructed:

The universities do not teach all things so a doctor must seek out old wives, gypsies, sorcerers, wandering tribes, old robbers, and such outlaws and take lessons from them. A doctor must be a traveler because he must enquire of the world. Experiment is not sufficient. Experience must verify what can be accepted or not accepted. (as cited in Noble, 1992, p. 181)

Paracelsus also did not consider the existing form of masculinity as a perfect model for humanity, instead looked at masculinity as an incompleteness:

Man having become separated from the woman in him, lost his true light. He now seeks for the woman outside of his true self, and wanders about among shadows, being misled by the will of the wisps of external illusions. (p. 177)

At that time women were not allowed to pursue college education and were regarded as inferior beings. They were specifically forbidden to practice healing and to manufacture herbal remedies: such activities were considered witchcraft. Last decade, DNA testing on the remains in Paracelsus' grave in Switzerland gave as results that they belonged to a female, reopening the polemics about this controversial figure, and indicating it was probably Paracelsa the mother of medicine. Whatever it may be, the biological sex is not the most important point. What really count are his/her words, which may be considered as the starting point of the critique of patriarchal science and knowledge still dominant in contemporary times. A critical analysis of science fully bloomed four centuries later, during the feminist movement in the 1970s and it is still developing today; science and technology became subjects of feminist research at the academic level. The under-representation of women in scientific professions, the prejudice around women and technology underwent analytical scrutiny and women gained access to knowledge and invention, often making those changes in the social organization that enable women to participate better in scientific and technological progress. But how much have women been able to change the very culture which excluded them until yesterday? In Evelyn Fox Keller's words:

How is it that the scientific mind can be seen at one and the same time as both male and disembodied? How is it that thinking "objectively," that is thinking that is defined as self-detached, impersonal, and transcendent, is also understood as "thinking like a man"? (Keller, 1992, p. 19)

Several books written by feminists questioned *the use* of this science and technology. Is an *alternative use* of what has been constructed as the dominant form of knowledge by men possible? Let us say: is a more human use of the production line or a responsible use of nuclear power realistic? In his prison writings during the fascist period, Antonio Gramsci, Italian intellectual (1891–1937), raised considerations of this type: Can the oppressed classes use the knowledge that has been produced in an apparently neutral way? The answer was "no," since the science of capital embodies its dominance – and reproduces it; knowledge has been constructed in a way that is functional to the division of labor, that is, to

support the status quo in terms of economy, gender and race relations. The means chosen to achieve a goal, suggests Gramsci, do always affect the goal itself. So the oppressed have the historical task to reinvent the world of knowledge – not just to question standards, priorities and applications with respect to science. The master's tools cannot dismantle the master's house – and this is true in the political discursive practices around class and race hierarchies, as well for gender domination.

In his manuscripts, Karl Marx (1844) maintained that the level of human development was reflected in the relations between men and women. Later on, in his un-translated ethnographic manuscripts, he tried to understand domestic modes of production and their non-exploitative social relations and anti-accumulation devices. He wrote that in order to find different forms of science we have to go into pre-capitalistic societies where knowledge is not alienated from the subjects and the community as a whole. Science and technologies are social relations that embody class inequalities as well as a gendered power structures – they are never neutral. As Bruno Latour used to say (paraphrasing Von Clausewitz), science is the continuation of politics with other means.

In books that can be considered milestones on the subject matter. The Science Question in Feminism (1986) and Whose Science? Whose Knowledge? Thinking from Women's Lives (1991), philosopher of science and radical feminist Sandra Harding had the merit of shifting the focus of the debate from a feminist critique asking the "woman question in science" to the more fundamental issue of "science question" in feminism. In the last two decades feminists around the world have been discussing the nature of science – and its attributes as a social construction. Science has been criticized at times as patriarchal, capitalist, colonial, Eurocentric and racist. It has been defined as having a dichotomous, hierarchical, anti-intuitive and destructive character. Rosemary Pringle (1988) wrote that new technology usually enhanced men's power and women's dependence. Cynthia Cockburn (1981. 1985), pointed out in her writings how capitalists as capitalists and men as men, both take initiatives over technology. We should add that technology also has a color, since it embodies race and ethnic relations as well: Western science, until now, contributed to guaranteeing white supremacy all over the world.

Among many contributions and authors, I will mostly rely on Maria Mies, Marxist sociologist from Germany and Vandana Shiva, physicist and ecologist in India. They co-authored the first book on eco-feminism, which contains a sharp critique of new technologies. Mies and Shiva challenged the self-proclaimed universality of western science: "Emerging from a

dominating and colonizing culture, modern knowledge systems are themselves colonizing" (Shiva, 1993, p. 9). She offers us the possibility of a new alliance between women and men of different ethnicities and cultures in building an alternative, self-sustained, community-based economy in opposition to global capitalism. This gives us a vision of an alternative technology, conceptualized from a perspective of subsistence economy. which implies commodified relationships being replaced with reciprocity, solidarity and respect for nature. A sustainable economy is incompatible with market economy (Mies & Shiva, 1993, p. 319). This may become a strong terrain for alliances all over the world, and for global forms of social change. The ecofeminist critique is also crucial to understanding new coalitions and conflicts among women and the growth of environmental movements dealing with health. For our purposes, Mies and Shiva are helpful for actively decoding the present tendency in the life sciences to work in isolation from society, and in keen contact with multinational corporations. As a scientist from Malaysia, Mae-Wan Ho (1998, 2003) pointed out, laboratories have never been so intertwined with the business world, as in the present era of globalization.

# THE DEBATE OVER REPRODUCTIVE TECHNOLOGIES

How can we define reproductive technologies? They are:

the medical capability to remove human eggs and sperm from one set of bodies, perform operations on them, and return them to the same female body, place them in another female body, or cryo-preserve them. In addition to removing fertilization from the interior of women's bodies and transferring it to the laboratory, reproductive technologies also remove male ejaculation from it's endpoint in the female body, reducing it to masturbation in clinic bathrooms. (Farquhar, 1995)

Laws about reproductive technologies display a wide range of possibilities – from total liberalism to complete prohibition – and allow for mixed forms and ambivalent interpretation. In 2004, the European Commission – which allowed "egg donation" – had to face a scandal around cases of economic abuse of eastern women as egg producers. A clinic in Bucarest, Romania, named Global Arts and some laboratories in the United Kingdom were proven to be involved in traffic of eggs. Poor and uneducated women were paid \$250 for every "donation" (a worker's salary in Romania is around \$100 per month) and were not informed about health risk. They

were asked to sign an illegal contract in order to protect the clinic from consequences. The whole issue was known because of journalists' enquires about women who had severe health problems after "donating" to Global Arts. A resolution was taken by the European Parliament against the traffic of human ova. Eggs were re-defined as body parts, and the ban on commercialization of organs was approved (Doc.: B6-0199/2005) voted by 307 deputees; 199 contrary; 25 abstained. Yet, heterologue forms of fertilization are still possible by using forms of compensation masked as expense reimbursements. The European Commission was also divided on a provision relating to the recognition of surrogate motherhood. The deputees considered that no regulations could provide adequate protection in our societies from the undesirable eventuality of both embryos and surrogate mothers being commercialized. Yet, this still happens in Eastern countries that joined the European Union. Surrogate mothers are advertised for with little control about this phenomenon. An extra-legal market seems to be operating along side the legal one, and women who produce eggs or rent their uteruses may become victims of criminal networks that work at the transnational level. Moreover, the legislative divide between countries in the world gave birth to forms of "reproductive tourism" from the less permissive countries to the more accommodating ones. In some countries sex selection, as well as the selection of other characteristics, are not permitted - but affluent couples fly overseas where they can shop for these services.

A recent referendum about assisted reproduction in Italy (June 12, 2005) deeply divided the feminist arena: On one side a pro-technology majority front, on the other side a critical position. The referendum was misleadingly presented by the media as a struggle between progressive, pro-science women who wanted more freedom and "reproductive rights" on one hand - and Catholic bigots, anti-science and backward women on the other hand. The referendum was a total failure for the pro-technology feminist majority: only 25 percent of the population went to vote. The majority of women and men in Italy decided to abstain and keep a restrictive law, which allows IVF with limits such as the heterologue forms of fertilization (without making distinctions between the donation of sperm and eggs) and the number of embryos to be fertilized each time. The old and hypocritical law was seen as the "less-evil" of the possibilities, having to choose in a context where the fundamental choices have already been made by scientists and politicians. In fact, the contested law had been approved by the parliament without asking the women whether they agreed with IVF to start with. No debate was made in the women's community about the alienation of reproductive capacity that

new technologies imply. No question was raised about the appropriation of such reproductive capacities – governed by women since the beginning of time – by a science heavily sponsored by pharmaceutical companies and research giants who long for a complete liberalization of the embryo market.

The referendum was a too little/too late event, and the large majority of people voted without a clear grasp of what the real issues were. The reason for an almost complete silence about these important issues in the Italian feminist arena has to do with at least three phenomena. First is the desire to fight an unbearable Vatican intrusion in women's lives and reproductive issues gave birth to an almost unreflecting contraposition to any argument questioning assisted reproduction. The second has to do with a misunderstood idea of freedom, which is spread among western women, and does not take into account the position of feminists of color and their critique to white feminism and privileges. The third relates to the context of enthusiasm around the progress of medical discoveries and new technologies. Since women have been allowed to enter the realm of science, their fervent critique — built up during the feminist movement — has become more and more feeble.

A systematic critique of reproductive technologies has been around since the 1970s. In the 1980s feminist meetings were held in Germany with participation of women from all over the world and international groups of women became active on these issues, exchanging information and elaborating ideas in a collective way. Their critique moved from what happens in the labs to social effects in societies. Both Vandana Shiva and Maria Mies highlighted racist and sexist implication of assisted reproduction:

These technologies have been developed and produced on a mass scale, not to promote human happiness, but to overcome the difficulties faced by the present world system ... The female body's generative capacity has now been discovered as a new "arena of investment" and profit making for scientists, medical engineers and entrepreneurs. (Mies & Shiva, 1993, pp. 174–175)

Even though reproductive technologies are presented as a solution to "natural" problems and in a context of solidarity among women (for example, donors and recipients of eggs) such "advancements" in science seem to strengthen disparity and subordination:

It is an historical fact that technological innovations within exploitative and unequal relationships lead to an intensification, not attenuation, of inequality, and to further exploitation of the groups concerned... dominant social relations are also part and parcel of technology itself. (p. 175)

In fact, these technologies are based on the exploitation and subordination of nature, women and people of color. In her critique of science, Caroyln Merchand wrote about the similarity of aspects characterizing modern technology, especially the violent subjugation of nature (and women as considered to be part of nature), to aspects of the witch hunts of earlier times. Both aspects are quite clear in the words of Francis Bacon, father of the contemporary scientific method:

For like as a man's disposition is never well known or proved till he be crossed, not Proteus never changed shapes till he was straitened and held fast, so nature exhibits herself more clearly under the trials and vexations of art (mechanical devices) than when left to herself. (Bacon, as quoted in Merchand, 1983, p. 169)

Also, with the intellectual support of scientists and philosophers, people of color were assimilated to nature by the white colonizers. Hegel wrote that:

the Negro represents natural man in all his savagery and unruliness; if one wants to understand him correctly, one has to abstract form him all human respect and morality. In this character there is nothing that reminds one of the human. This is perfectly corroborated by the extensive reports of the missionaries ... This character is not capable of development and education. As we see them today, so they have always been, The only connection the Negroes have ever had with Europeans and which they still have today is that of slavery. (Hegel as translated by Mies, pp. 178–179).

The developing social sciences supported the "survival of the fittest" and the concept of "superior societies." Darwinism permeated the nineteenth and twentieth century and, with the followers of Malthus, applauded the eugenic movement and selective breeding, in order to prevent "the deterioration of the race." The results of a racist culture also diffused among women's advocates and social democrats in Europe. Even in England, the compulsory sterilization of drunkards, gypsies and the handicapped in Germany was seen as a form of progress. The genocide of the Holocaust happened in a context of shared values about the genetic superiority of one race compared to others. Many of the experiments and technologies invented at that time are the very bases of today's advancements; yet no critique of the ethical foundations of this science has been made by modern biological research. As Mies posits there is:

an historical continuity from the eugenetics movement, via Nazi Germany, to the new reproductive technologies: prenatal diagnosis, genetic engineering, in vitro fertilization and suchlike. The promoters and practitioners of these technologies turn a blind eye to his historical heritage ... Ethics committees are set up only after the scientists have had ample time and money to experiment and publicize their results. Such reactive ethics, however, which can only try to prevent the most dangerous abuses of these inventions, is

not only impotent, but is no ethics at all, since the main task of these committees is to promote the acceptability of these technologies. (pp. 183–184)

In such a context, science is socially represented as neutral and above the natural universe, and biotechnologies as the way to improve humans by recombining and manipulating pieces of the DNA, and discovering "defective" individuals in advance. Women become the main source of "organic matter" and thanks to their capacity of bringing forth children, they become the instrument of socio-economic control over reproduction.

Under patriarchy she has always been an object for male subjects, but in the new reproductive technologies she is no longer one whole object but a series of objects which can be isolated, examined, recombined, sold, hired or simply thrown away, like ova which are not used for experimentation or fertilization. This means that the integrity of the woman as a human person, an individual, as an integral indivisible being, is destroyed, It is the ideology of man's dominance over nature and woman, combined with the scientific method of analysis and synthesis that has led to the destruction of the woman as a human person and to her vivisection into a mass of reproductive matter. (Mies & Shiva, 1993, p. 186)

Many feminists have joined the opposition to IVF, hyper-stimulation of ovaries, surrogate motherhood and other devices offered in the market, often without informed consent from the women. As Gena Corea and Jalna Hanmer have written in the prologue to Spallone and Steinberg's (1987) Made to Order: The Myth of Reproductive and Genetic Progress:

the desire of some individual women to "choose" this technology place women as a group at risk. With the new reproductive technologies, women are being used as living laboratories and are slowly but surely being divorced from control over procreation.

This exposes women to different types of mistreatment and mutilation. Corea (1987) believes that women accept and support these technologies because the information they are given is "one-sided and male-centered and the conviction creeps into our minds that men and their technology must be better than our own body and our experience of it" (p. 69). As Hanmer (1982) warned, these techniques are thus an attempt to appropriate the reproductive capacities which have been, in the past, women's unique source of power. The technologies, in her words aim to "remove the last woman-centered process from us."

Feminist writer Judy Wajcman's (1991) critique of technological determinism is also very important around the issue of how reproductive technologies are socially constructed and may be "delivered into men's hands."

The emphasis over women's rights to use these technologies tends to obscure the way in which historical and social relations are built into the very fabric of technologies ... technologies are not neutral but themselves have political qualities.

Women are selecting from a very restricted range; such a restriction in options is shaped by particular political and economical interests:

even decisions about whether a device works are social. As such, the technical outcomes depend primarily on the distribution of power and resources within society.

Acceptability of risk and threshold of tolerance are assessed with the same criteria.

Another issue related to reproductive biotechnologies is experimentation on women who are considered to be more expendible. It happened in the past for IUD programs and for a mass testing of Depoprovera (long-term injectable contraceptives):

Third World women were used as guinea-pigs by multinational drug industries. It is cheaper, faster and politically more convenient to use a crash program against fertility to discover long term effects of a contraceptive than it is to run clinical tests on samples of women in the West. In this sense, a number of Third World countries have been turned into human laboratories for transnational drug industries. (Mies & Shiva, 1993, p.192)

There are multiple adverse effect of these technologies. In many countries the use of sex determination tests has already turned into the selection and elimination of females. The women's movement political reaction led several governments to ban this practice and today the possibility of a preconception selection based on chromosome separation of the sperm is proposed by scientists as a possible "ethical" alternative.

The supermarket of reproductive alternatives – especially in the case of eggs and surrogate motherhood, once socially affirmed to "help the infertile woman," has become a right, for anyone who can pay for it, to have a child without the burden of pregnancy (Mies & Shiva, 1993, p. 198). The possibilities of selling body parts like eggs, or renting organs like wombs, define new types of social relations, created by the technologies of assisted reproduction, in a classist and often racialized way. The feminist front is divided on this issue.

Among the pro-technology of reproduction feminists we can mention Sheila Rowbotham, who argues that gender is not distinct and unchanging and is itself shaped by circumstances of class, race and ethnicity. With Swasti Mitter (Mitter & Rowbotham, 1995) she also asks for caution with respect to an undifferentiated concept of "patriarchy" as an unchanging

#### structure:

The view that men shape works to protect their gender interests assumes that gender is monolithic, rather than multidimensional and internally inconsistent. It also assumes that men are omnipotent, that they know what their gender interests are and have power to construct the world the way they want. Feminist research needs both to question male power rather than assume its existence, and to examine what its limitations are.

#### These authors believe that:

neither the postmodernist nor the eco-feminist rejection of modern science have much to offer women seeking to maneuver within gender boundaries or attempting to shift them to establish better terms. Studies of women's complex relation with science and technology in earlier times suggest that a more nuanced approach could indicate how certain groups of women made gains or contrived to turn technology to their advantage.

I agree that gender alone is an insufficient category to understand such complex phenomena, and that other forms of social exclusions and subordinated experiences have to be considered. Maybe, as Mitter and Rowbotham posit, those who use it can create a new relationship between technology and gender. But this type of change seems to be quite impracticable today at the level of assisted reproduction – and infeasible in a social climate of increased neoliberalism about technologies. The contemporary social context is dominated by a captious ideal type – manufactured by the media – of the woman who wants "a child at any cost," and characterized by the corporations' and the medical lobbies' ability to manipulate expectations about positive outputs, also with the omission of negative aspects for health and high percentage of failure.

An interesting position is displayed by Elaine Denny (1994), who is critical of pronatalism and other forms of glorification of motherhood. She sees these as the motives pushing women to accept the risks of super-ovulation, ovarian cysts, miscarriage and to use every means available to get pregnant, despite the potential of much harm for themselves and possible problems for the health of the child. This especially true in the case of heterologue reproduction performed by the implantation of a fertilized egg "donated" by another woman; incompatibility may arise since the donor and the recipient have different mitochondrial DNA. Elaine Denny is – on the other side – critical of radical feminists who take a stand against technologies of reproduction and genetic engineering – the main weakness of the anti-technology position would be "to treat women as universally oppressed and passive." She seems to suggest the possibility of developing a feminist agency for the use of this science – which cannot be done without analyzing its foundations and consequences.

Dion Farquhar (1995, 1996) criticized the contradictions in the antitechnology feminist discourse – since it would invoke "false consciousness" to explain (mostly) middle-class white women's escalating demands for high-technology infertility services, regardless of the fact that they are dangerous, destructive, debilitating and demeaning. While these technologies are considered as a form of medical violence against women by some feminists – as Janice Raymond (1993) argues in her famous work, *Women as Wombs*. Farquhar (1995) believes this is an erroneous generalization:

For anti-technologists, the female "experience" is universal; there are no exceptions, no individuals for whom they do not speak.

She does not disregard some of the points made by the anti-technology feminists:

their critique of our culture's compulsory natalism and the endemic sexism and racism of the western medical model; their analysis of the problem of class (the high cost of using these technologies severely restricts access and encourages the exploitation of desperate donors); and their exposure of the fertility clinic's false claims and misleading statistics on success rates.

Her vision relates to a more democratic and inclusive type of society – which these new technologies would facilitate:

All reproductive technologies separate reproduction from heterosexual sex and marriage. Potentially, that separation makes reproduction possible for those outside of the traditional heterosexual couple, offering new democratic family and parenting options. Not only are new individuals conceived as a result of technology, but so are new family, kinship, and parenting practices. Assisting reproductive technologies are expanding and challenging traditional views of just who may mother (or parent) a child today. Single heterosexual women, lesbians, single men, gay couples, and older women have fought for, and won, access to medical treatment. As more and more nontraditional would-be parents use the technologies, the ironclad identification of "mothering" with biology, heterosexuality, or even women, no longer hold.

She believes a third way is practicable between "fundamental feminism" – since most of the movement is against technologies-and "market liberalism," which is pushing for the diffusion of all forms of assisted reproduction. Her argument is that both of these perspectives are faulty because neither can allow for the complex benefits and dangers that attend these technologies in different contexts. Farquhar (1996) points to the diverse consequences of these technologies. While they undermine traditional conceptions of the family, at the same time they reinforce class privileges.

After tracing the main lines of the current debate, we will enter into specific issues regarding assisted reproduction technologies, taking into

account that a selection has been necessary. Among many scientific studies, those using the criteria of the cautionary principle have been highlighted, and research displaying a concern about the health of women and offspring – instead of reassuring studies – have been given more attention in this work. A critical stand is offered by making connection with sociological and feminist theory produced on the subject matter.

# HEALTH AND ECONOMIC ISSUES IN REPRODUCTIVE TECHNOLOGIES

We are going to look more closely at three types of technology routinely used today in order to solve reproductive problems. The first technology examined will be IVF, since it allows the implementation of the following two: the implantation in a woman's womb of a donated egg (in vitro fertilized), and surrogate motherhood. Health issues are related to all parties involved: the woman who is giving her eggs, the one receiving and the child. Keeping all actors in consideration will be more difficult when looking at surrogate mothers, because studies do not take into account important aspects, as we are going to discuss. Finally, we will look at some qualitative data from exploratory research on the egg market and the surrogate mother market – which often overlap – in several countries, through clinics' advertisements on the web.

## In Vitro Fertilization (IVF)

As Barbara Duden (1993) wrote in her work about "The Woman's Body as a Public Place" IVF allows, for the first time in human history, the externalization of the initial process of reproduction from female internal organs to the scientist's test-tube. The realization of such a possibility may be the first step for an expropriation of the capacity of generating life. In Duden's theory, this is an old scientific obsession: reproducing life without women. The terminal point of IVF would be the creation of an artificial womb, a glass column of amniotic liquid that would allow the scientist's eye to examine the most hidden process – the making of life – and eventually intervene in fetal development. In fact, IVF that has made possible embryo cloning, a "gateway" technology to other non-therapeutic goals (Newman, 2003), is enthusiastically supported by many scientists involved in the Human Genome Project, among them, Nobel laureate James Watson – who recently fully disclosed his racism and had to resign as Chancellor of the

Cold Spring Harbor laboratory (New York Times, October 25, 2007). Mainstream genetists' goals include the modification of offspring to influence traits such as intelligence, height and other characteristics, in ways that remind of Nazi eugenics (Duster, 1990). Besides medium-long-term consequences, such technologies already have reality effects on young women, who procrastinate, delaying their opportunity to have a child – mostly due to uncertainties of the labor market – trusting in the possibility of obtaining "scientific help" later in life, without knowing all the issues related to real chances and health hazards implicit in these technologies.

Mies recalls that already in the 1980s, reproduction engineers' propaganda aimed to devalue children born naturally as inferior. They boasted that IVF babies were superior to *les enfants banales* conceived and born "wildly," that is, not produced scientifically under constant medical control – stating the advantage of having artificial insemination as a more rational and safe process. This, of course, contradicts the women's experience of an invasive, painful and traumatic method – at times also humiliating (Mies & Shiva, 1993, p. 187) – which involves hormonal treatments, a surgery in the abdomen to extract the ripe eggs (with total anesthesia) and the implantation of the fertilized eggs into the uterus after more hormonal therapy and continuous monitoring.

Much of IVF found its early legitimacy in the production of human embryonic stem cells with the promise of a cure for several degenerative illnesses. Later on, because of ethical and religious issues, limitations were approved in many countries. Some economical concern was raised. A stem cell line of production requires thousand of eggs: just for a clone 200–250 eggs are needed-sometimes with no success. Diane Beeson and Abby Lippman (2006) warned about the risk of harvesting eggs for the production of stem cells:

Increasingly, researchers are seeking eggs from young women to be used for embryo cloning procedures. The harvesting of multiple eggs often involves the administration of drugs that have not been approved for this purpose. Also these drugs have not been adequately studied for their long-term effects on women despite research providing some evidence of significant harm to women in both the short and long term. Current practices follow a historical pattern of exposing women to risks that ultimately prove unacceptable. In addition, egg harvesting is taking place in a research climate marked by conficts of interest, the misleading use of language to describe research goals, and a commercial push that may lead to the exploitation of young women.

An international campaign for a moratorium on egg harvesting for cloning purposes was started to make women aware of such a practice (www.handsoffourovaries.org).

In the last few years errors and frauds surrounding research processes and results by some prestigious international teams shed a disturbing light on the whole enterprise of producing stem cells from human embryos. In 2005 Hwang Woo Suk, a prominent South Korean scientist was involved in a scandal involving coercing, paying and lying to donors who were initially reported to be volunteers.

The full extent of the damage to the health of the Korean women who provided the eggs used by Hwang remains unknown. A coalition of 35 women's groups decided to sue the South Korean government on behalf of women who appear to have been harmed in the process of egg harvesting, and there are reports that about 20% of the donors have experienced side effects (Hwa-young, 2006). Finally, the possibility of fabricating stem cells through the umbilical cord of already born babies emerged as the most feasible one. This method of production of stem cell does not imply the creation of new human embryos and does not depend upon the egg market. (Findikli, Candan, & Kahraman, 2006)

#### Egg Donation

Nevertheless, for the purpose of human reproduction, egg "donation" is still commonly requested to perform IVF, regardless of a multitude of problems related to this technology. Adverse effects are found among women donors from the high exposition to hormones and drugs. Besides, it is commonly recognized that most processes fail, for a variety of reasons among which are the bad quality of eggs obtained through hormonal stimulation of the donor, and the conditions of living the in vitro environment. Findikli and co-authors (2006) summarize the findings of several studies:

In nearly all cases the donated materials are of poor quality, destined to be discarded after a routine IVF treatment. As it is generally known, not all embryos generated through assisted reproductive techniques have the same developmental potential. In fact, during extended in vitro culture only a few fertilized oocytes can actually develop into good quality human embryos or blastocysts, whereas the rest show retarded or arrested development as well as abnormal morphology due to unequal cell division or cellular fragmentation (Gardner et al., 2000). On average, approximately 70% of the fertilized oocytes fail to develop into good quality blastocysts, possibly due to inappropriate stimulation regimens and oocyte maturation, suboptimal culture conditions, maternal age and paternal factors, lack of growth factors and the presence of chromosomal and/or nuclear abnormalities (Harper, 1995; Munné et al., 1995; Janny & Menezo, 1996; Kaye, 1997; Jones et al., 1998; Moor et al., 1998; Schoolcraft et al., 1999; Bielanska et al., 2002). There can also be some embryo-specific factors that may trigger the elimination of embryos with low developmental potential. (pp. 582–583)

There are still unresolved, technical issues involved in the separation of embryo and mother at the beginning of life. As we are going to see in the

next paragraph, such problems grow in the case in which the oocyte is "donated" by another woman. Here we analyze only those risks related to ovarian hyper-stimulation and eggs harvesting and whether the in vitro fertilized egg is going to be implanted in the same woman who underwent the hormonal treatment or to a recipient one. Beeson and Lippman (2006) note that reliable, systematic, long-term research on the health effects of egg harvesting is limited. What evidence there is suggests that there are problems and risks. This has led to calls for caution, for example, in an editorial in Lancet (August 9, 2003).

There are short-term effects of ovarian stimulation and long-terms effects as well. The two-stage egg-harvesting procedure involves suppression and stimulation of ovulation with hormones and drugs. The artificially maturated eggs are then collected surgically during general anesthesia. The most serious risk for the woman related to the "hormonal bombing" is ovarian hyper-stimulation syndrome (OHSS). According to the American Society of Reproductive Medicine (ASRM) (2005) mild forms of OHSS occur in 10–20 percent of cycles with symptoms such as nausea, vomiting, diarrhea and abdominal distension. More severe OHSS leading to hospitalization or even death have occurred.

Long-term effects of ovarian stimulation have not been studied adequately. In a review of scientific studies covering the last 20 years, Mark Sauer and Suzanne Kavic state that "to date no meaningful longitudinal studies detailing the long-terms effects on donors, recipients, children born or families have been published" (Sauer & Kavic, 2006) despite the huge number of treatment cycles – most of which have been performed in the United States. Moreover, quoting Suzanne Parisian, former chief Medical Officer of the United States Food and Drug Administration (FDA), Beeson and Lippman note pharmaceutical companies:

have not been required by either the government or physicians to collect safety data for IVF drugs regarding risk of cancer or other serious health conditions despite the drugs having been available in the United States for several decades.

They go on to mention clinical reports and studies that link infertility treatments with ovarian, uterine and breast cancers, the off-label use of fertility drugs and complaints about specific drugs that have not been investigated.

Finally, risks for the children seem to be implied in ovarian stimulation treatment. It has been reported that ovarian stimulation in mice led to growth retardation, delayed bone development, and an increase in a specific rib deformity in offspring (Steigenga et al., 2006). The reasons why Finland

prohibited surrogacy — and is very cautious about heterologue forms of assisted reproduction — have to do with social and health issues. That country allows sperm donation even though some exploratory research pointed out among couples who used this technology a disproportionate number of separations ostensibly prompted by a growing discomfort among fathers having had children, thanks to another man's donation. The law in Finland also took into account the right of the child to know about the sperm or gamete donor. Ethical issues were considered as having strong links with the surrounding social and cultural environment. That country is changing now its position about egg donation owing to the high rate of birth defects and neonatal problems.

Beeson and Lippman believe we are facing an historical pattern of hormonal abuse of women. They offer, as an example, DES. Five to ten million women were exposed to a drug that physicians began to use widely to prevent miscarriages and premature births in 1947. As early as 1953 it was known that the treatment was ineffective, but use continued until 1971 when a study showed that the daughters of women who took the drug were at risk for an often fatal form of vaginal cancer. "The full extent of the damage," they note, "ironically includes infertility in female offspring and problems for many DES sons as well, and may be continuing into a third generation."

Today most risks are related to young women who consider becoming egg donors under payment, part of what Harvard Business School Professor Debora Spar (2006) calls the growing and lucrative "Baby Business." There is now an international market for eggs. Advertisements in college newspapers seek "donors" to "help" infertile couples. Compensation is also euphemistically referred to as "reimbursement" but can be as high as \$3,000 in the United States where such advertising and payment is legal. This can be attractive to young women with outstanding education loans.

Canada prohibits payment for eggs and there are strong pressures to do the same in the United States and the United Kingdom. This increases the possibility that buyers will turn to subterfuge, seek potential donors in less affluent countries or find sources where the ethical standards may be less exacting. Beeson and Lippman cite a (2005) paper by B. C. Heng noting that airline tickets and hotel bills are sometimes offered instead of outright payment. They also cite reports of young Romanian factory workers repeatedly selling their eggs for \$250. They note that:

Finding themselves suffering from new and mysterious health problems, some of them have taken legal action complaining of inadequate informed consent, poor medical follow-up, and other violations of established medical standards. (Magureanu, 2005; Sexton, 2005)

The harvesting of eggs has altered the doctor/patient relationship creating the potential for psychological impact and emotional damage, a potential that has received minimal attention by researchers. Beeson and Lippman report one small study. They say:

The authors report that many of the women described their care as cold and impersonal: They used metaphors such as "farm animals," "produce," "meat," and "prostitution" to describe how the experience made them feel. (Kalfoglou & Gittelsohn, 2000)

### Surrogate Motherhood

This option is offered to women who suffer with recurrent miscarriages, untreatable problems of the womb such as recurrent fibroids, uterine or endometrial scarring (Asherman's syndrome), prior hysterectomy or conditions where carrying the pregnancy would be a threat to the health of the mother to be. However, also women who do not want to carry a baby because of their profession (models, actresses, top managers) may consider such an opportunity. The phenomenon is on the rise: 221 scientific publications on surrogate motherhood are available on the U.S. National Institute of Health website (http://www.ncbi.nlm.nih.gov) and on sites of international journals.

For ecofeminist critics, the commercialization of reproduction to this extent jeopardizes human dignity, and particularly women's dignity. The first court sentence on the subject in 1987, decided that contract law counts more than a woman's claim to a child borne by her. The surrogate mother industry was legitimated and allowed to grow by transforming the surrogate mother — as in the judge's words — to a mere "factor of conception and for gestation" (Mies & Shiva, 1993, p. 202).

The political economy of commercial surrogate motherhood (CSM) also became a topic of debate in the past 15 years in the medical milieu. Several scientists pointed out issues of commodification of children and women who become child-bearers. Some argue that CSM contracts and agencies should be illegal (Anderson, 1993; Brazier, 1998). Others scientists believe CSM is not inconsistent with the proper respect for, and treatment of children and women (McLachlan & Swales, 2000). Their position is predicated upon the idea that commodification is a subjective process, involving a personal willingness to treat somebody like an object. Unfortunately, commodification is an objective process, taking place often regardless the individual motivations: paying for organs, blood and intimate services involves commodification of the other person. Every part of the human body, from

DNA to gametes to organs, is in danger of being transformed into a commodity – and found by "consumers" on the biomarket (Berlinguer, 1999). Bodies are for sale today, whole or in parts; they are both commodified and commodifying (Scheper-Hughes & Loïc, 2001). The concept of commodification comes from Marxian theory: by selling labor to the factory owner, the worker becomes a commodity. S/he turns into a part of the production process and his/her energies are absorbed (embodied) in the created object. The same happens for the surrogate mother: she sells her capacity for reproduction, and the final product – the created subject – is alienated from her, in the exchange of money.

In the contended scientific arena of human reproduction the topic of CSM has become increasingly political. In the journal *Health Care Analysis*, an article by Campbell (2000) pointed out how CSM may become a form of servitude and the appropriation of the baby seen as immoral. A reply was then published defending pro-CSM positions from the accusation of subscribing to unethical philosophies and child purchase:

Campbell misrepresents our specific arguments about commercial surrogate motherhood and our general philosophical and political views by saying or suggesting that we are "Millsian" liberals and consequentialists. He gives too the false impression that we do not oppose, in principle, slavery and child purchase. (McLachlan & Swales, 2001)

While the bio-ethical debate entered the scientific arena, the practice of assisted reproduction further spread in the societies, as well as the business, in organized and informal ways. The perception that a new market is emerging can easily find a confirmation by exploring offers on the web. At times eggs are sold in auction, even on e-Bay, by private donors. Many "fertility centers" freely advertise their services via Internet; they are located in the United States, Spain, Eastern Europe and India – and offer standard types of contracts. We are going to look at specific cases, in order to illustrate prices and services. The Fertility Insitute in Los Angeles, Las Vegas and Mexico is a clear example of a wide range services offered: fertility tests, egg "donation," egg freezing, IVF, surrogate mothers, gender selection. Success rates in surrogate motherhood are said to be high:

at the Fertility Institute 45% of our surrogate cycles result in pregnancy on the first attempt. Following the completion of 2 attempts, 72% of surrogates have become pregnant.

Also, success rates in sex selection are publicized as being high:

100% in the 1200 record cases and the institute encourages clients coming from countries such as Canada where sex selection is prohibited. (www.fertility-docs.com)

This Institute displays very competitive fees:

We urge you to compare our complete Surrogacy prices (less than \$38,000.00) with other programs costing over \$65,000.00. Our program prices include ALL charges. Do not be misled by programs offering surrogates with no such surrogates available. Our patients requiring the assistance of a gestational surrogate can be matched with well qualified, highly screened and selected surrogates within a week or two of joining our program. TOTAL program costs, including all medical and legal fees and arrangements by a surrogate attorney specialist average 1/2 the cost of similar programs.

The objection of surrogate mothers to a parting of ways with the commissioning persons after the child is delivered is a common concern clearly addressed:

We do not accept surrogates who demand a post-delivery relationship with the couple, and contractually require that the surrogate not attempt to contact the couple after delivery unless the couple so desires ... The contract signed by the surrogate mother gives all the assurance that no problems will follow the delivery of the child: on the birth certificate the surrogate mother will not be mentioned and she will not have any chance to see the child after partition.

Health concerns are addressed in a specific section titled *Medical Eligibility to Become a Surrogate*:

Potential surrogates in our program are screened to assure they are medically, physically, sociologically and psychologically fit for surrogacy. A successful surrogate candidate will be over the age of 18, and will have delivered at least one infant, at term (9 months), and without major complication. Surrogates must be non-smokers, and must live in smoke free households. The surrogate must have no history of serious or ongoing medical conditions. The ability to attend medical office appointments during the treatment cycle and pregnancy must be assured. Surrogates must be financially secure. Surrogacy should not be looked at as a primary source of income or support. Partners of surrogates must be similarly suited for the proposed procedure.

The "Fertility Institute" claims to provide totally non-discriminatory services to all patients with "no consideration of race, gender, national origin or sexual orientation. The institute leaves a high degree of choice to the clients. They can choose their own surrogate and/or egg donors, which are well selected; only college students between age 18 and 27 with a grade point average of B+ or higher are eligible. A list of donors' profiles includes race, parents' ethnicity, skin tone, height, weight, eyes and hair colour and texture, college major and hobbies (www.fertility-docs.com). In the website there is no mention of adverse physical effects or psychological implications for the involved actors. The emphasis is on three main aspects: the healthy, and possibly gifted, surrogate mother, which evokes her role as a mere incubator of a life that belongs to paying commissioners; the easiness and

absence of complications during the whole process; and assurances about the result: going home with "your child."

Another Institute "Surrogate Alternative" does business in Texas, Idaho, Northern California, San Diego and Los Angeles, It offers surrogacy and egg donors at different fees, without offering the "all inclusive" solution. The surrogate mother will be paid at least \$25,000, up to \$35,000, and all other related services (such as legal assistance, health insurance, criminal record check) are to be paid separately. Age limits look higher then in other websites; there are also donors in their 30s. The surrogate mothers were often portrayed in colour pictures with partner and children – probably to assure the clients about their "emotional stability." The compensation amount for egg donors varies: \$4,000 for first time donors, \$5,000 for second time donors who did not guarantee a pregnancy, to \$6,000 and up for second time donors who facilitated a pregnancy (http://www.surrogatealternative.com). Looking at the donors' profiles - their weight, height. ethnic background, religion and previous experiences - it is evident how many women have been "proven donors" for 3-4 times, and up to 8 times. Even though the rhetoric of this website is about "compassionate individuals and experts helping people to have children." being a "donor" is clearly a job.

The business of egg "donation" under payment and surrogate mothers is also established in Russia. An agency called Rosjurconsulting - Russian and International Family Law Firm offers three solutions for different pockets. The "economy package" starts with €20,000; a "special package" for €30,000 covers more services, including hotel, auto with driver and a "tutor" who will control the pregnant woman, her behaviors, nutrition, check ups, keeping in touch with the commissioning couple. The "all inclusive" package costs €40,000 - and also includes legal assistance, health insurance, translator, vitamins for the surrogate mother, proper clothes after week 8 from conception, a private clinic for the delivery, a birth certificate from the Ukrainian Consulate with the names of the commissioning couple as parents. A 10% discount on the total price is offered for those who will decide to deposit the whole amount in one payment to the agency's bank account. Surprisingly, later on it is mentioned that the egg donor needs to be paid separately, €5,000 after achieving pregnancy and €10,000 in case of twins. The emphasis is on the business and legal aspect of the relationship and around the commitment to fully reimburse the unsatisfied client - even though such a promise looks quite improbable and naïve. Couples are asked to travel to Russia and reassured about professional attitudes and confidentiality (www.jurconsult.ru).

In India several fertility centers can be found in big cities; they have been started in recent years for a growing market of married couples with problems in conceiving. In New Delhi I visited the Kijvf Laparoscopy and Test Tube Baby Center and interviewed the director, Dr. Kuldeep Jain. who discussed with me the mission of his clinic and the characteristics of patients - most of them Asian women from different countries. He reported that only a 5-7 percent of clients are white women, even though the center's website displays a pregnant western woman. Two different rates are applied – for Indian and overseas couples. The cost per cycle of IVF for foreign patients is \$1,200, which includes consultation charges, ultrasound scanning, blood tests, anesthetic fees, the egg pick up, sperm preparation. embryo culture and embryo transfer and day care hospitalization (http:// www.kjivf.com/overseas.asp). Services and costs related to surrogate motherhoods do not appear. During the interview the center director pointed out that the clinic does not recruit egg donors and surrogate mothers; this is up to the couple, and it usually happens inside the extended family.

Malpani Clinic in Mumbai (http://www.drmalpani.com) offers a wide range of services, including egg donation, with prices slightly lower, and surrogacy - warning the possible client about the legal problems still unresolved in India, and offering information about adoption. The Christian Science Monitor (April 3, 2006) estimates the cost for surrogacy in India as one-third less than in the United Kingdom - this is why, increasingly, childless couples look to India to find surrogate mothers creating a volume of business around \$449 million. The outsourcing of babies came after the outsourcing of services in the third sector. A first estimation in 1992 assessed the number of children born from surrogate mothers as 4,000. Today – 15 years later– it seems to be impossible to have a quantitative clue about this phenomenon (www.csmonitor.com).

### CONCLUSIONS

In this essay, some of the many issues related to IVF, egg donation and surrogate motherhood are addressed with an ecofeminist perspective and the intent to further stimulate the debate in gender studies, sociology of science and health and in the feminist milieu. Serious ethical and political concerns emerge from considerations having to do with concepts such as freedom, rights and responsibility.

The equivalent of the scientific freedom paradigm, reproductive freedom, is represented as the "right to choose" assisted forms of reproduction, and it is considered to be an important terrain of mobilization for white feminists in western countries. In a recent interview I conduced with Loretta Ross -African American leader of the Women of Color Reproductive Rights Movement in the United States – she deconstructed the idea of "individual freedom." Individualism should not be considered the correct answer to contradictions produced by a globalization that deepens the gap between women in rich countries, who may now enjoy reproductive privileges, and poor women who consider selling eggs or renting their uteruses. The individual option of taking advantage of the economic divide should not be encouraged by feminists; it does not take into account severe consequences to other women, which is ethically unacceptable to women's advocates. We should reach a shared recognition that - as Judy Wajeman, phrased it - new technologies may have different implications for Third World and First World Women, within and between countries. Feminists - regardless of their positions about the directions of science and technologies - should commit to recognize and reveal those lies women are told in the assisted reproduction market, when they find themselves in the process of becoming "clients," and work consistently in the direction of demanding informed consent about risks and adverse effects. "Reproductive rights" should be reconceptualized in light of new technologies that allow the externalization of the work of gestation from one woman to another. Feminists have the moral duty to unveil the hypocrisy of a public discourse on egg "donation," which hides the reality of an illegal market where poor women become the producers of ovocites for IVF and the sellers of their reproductive capacities. We are facing a global phenomenon that cannot be studied separately, avoiding looking at the price paid by other women elsewhere in the world or in the class system.

Most of feminist research is limited to women who undergo IVF and does not consider the long-term issues of women donors and the problems for the offspring. We need to intensify efforts to produce investigations in this area of knowledge, at the global level. Women have never acted from a unity of interests or aims worldwide; today this may become possible. It seems quite urgent to start with issues of women's health, with special attention to the international traffic of reproductive services in terms of egg selling and surrogate motherhood. This is a good reason for looking beyond white middle-class women's agenda, which does not take into account the interconnectedness of reproduction issues. I believe that the debate about reproduction should not be considered a monopoly of

scientists and specialists. It is crucial to open a critical debate in social science about the risks for women's psycho-physical health related to surrogate motherhood, hormonal hyper-stimulation, egg explantation, egg implantation and related intrusive practices. We should start questioning genetic engineering and assisted reproduction technologies, their methods and goals, from embryo selection and manipulation to cloning and experiments in ectogenesis.

Alessandra Dipietro and Paola Tavella in their book "Wild Mothers" (1996) un-translated into English, produced important documentation about the free market of eggs and took a stand against what they called "techno-robbery of women's body and generative capacities," against the commodification of eggs as body parts and against surrogate motherhood. Their reasons are different from those produced by the Catholic Church: they are related to women's health and to political coherence as radical feminists. The ethical issues of IVF are going to be fundamental in the future debate in feminism and eco-feminism, questioning around what choice means in a highly manipulated setting, and the relationship between freedom and responsibility in a globalized economy where affluent women can commission their genetic children through the pregnancy of other women. A serene confrontation is needed, toward a collective theorizing of what reproductive rights are. One of the sensitive themes, unavoidable in the feminist debate, is the relationship between the "two mothers" - which is mostly symbolic in the case of egg "donation" and quite real when it comes to renting a womb. From an anthropological point of view, Teman (2003) started addressing feminist issues around surrogate motherhood. She explored links between the medicalization of childbirth in Israel and the personal agency of surrogate mothers after the Israeli surrogacy law of 1996. She focussed on the definition of the surrogate body as "artificial" and the location of "nature" in the commissioning mother's body through interviews with surrogate mothers. This may be a starting point: to look at the representations of the subjects involved and the problems they raise, producing empirical data to nourish our analysis, which may become too ideological and polarized.

Marianne Hirsch and Evelyn Fox Keller (1990) in their anthology Conflicts in Feminism propose new strategies for negotiating and practicing divergence among women, instead of hiding disagreements or launching anathemas. They examine the most divisive issues within feminism today with sensitivity to all sides of the debates – and considering IVF and other techniques of "assisted reproduction" manufactured by western science among the problematic areas that should be deepened in feminist

theory. By analyzing how the debates have worked for and against feminism, and by promoting dialogue across a variety of contexts, they explore the roots of divisiveness while articulating new models for a productive discourse of difference. I believe this is really what we should be doing around the themes discussed in this essay – without expecting any magic solution to our problems as feminists and scholars – while working in a deeper way toward the examination of health issues; social and ethical problems; and the business/economical aspects in assisted reproduction.

### **NOTE**

1. Pictures have been recently removed. The website displays a note "We apologize for removing the photos of our donors. New Federal patient privacy guidelines have limited our ability to provide such photos online, even though the donors have provided their consent for such display. As we await further clarification of these laws and regulations, we ask that you contact us for any additional donor information you may require. We appreciate your understanding.

### REFERENCES

- American Society of Reproductive Medicine (ASRM). (2005). Patient's fact sheet: Side effects of gonadotropins (http://www.asrm.org/Patients/FactSheets/Gonadotropins-Fact.pdf).
- Beeson, D., & Lippman, A. (2006). Egg harvesting for stem cell research. Reproductive BioMedicine, 13(4), 573-579 (available at www.rbmonline.com/Article/2503, 14 August, pp. 1-11).
- Berlinguer, G. (1999). The human body, from slavery to the biomarket: An ethical analysis. London: Eahmh Publications.
- Campbell, A. V. (2000). Surrogacy, rights and duties: A partial commentary. Health Care Analysis, 8(1).
- Cockburn, C. (1981). The material of male power. Feminist Review, 9, 41-58.
- Cockburn, C. (1985). Machinery of dominance: Women, men and technical know-how. London: Pluto Press.
- Corea, G. (1987). Man-made Women. Bloomington: Indiana University Press.
- Denny, E. (1994). Liberation or oppression? Radical feminism and in-vitro fertilization. Sociology of Health and Illness, 16(1), 62.
- Duden, B. (1993). Disembodying women: Perspective on pregnancy and the unborn. Cambridge, MA: Harvard University Press.
- Duster, T. (1990). Backdoor to eugenics. New York: Routledge.
- Farquhar, D. (1995). Reproductive technologies are here to stay, Sojourner, 20(5), 6-7.

- Farquhar, D. (1996). The other machine: Discourse and reproductive technologies. New York: Routledge.
- Findikli, N., Candan, N. Z., & Kahraman, S. (2006). Human embryonic stem cell culture: Current limitations and novel strategies. *Reproductive BioMedicine Online*, 13(4), 581-590 (available at www.rbmonline.com/Article/2397, 17 August).
- Hirsch, M., & Keller, E. F. (1990). Conflicts in feminism. New York: Routledge.
- Ho, M.-W. (1998). Genetic engineering: Dream or nightmare? Dublin: Third World Network.
- Ho, M.-W. (2003). Living with the fluid genome. London: Institute of Science in Society.
- Hwa-young T.K. (2006). Ova donors demand compensation from government. *Asia News*, pp. 2-7 (available at http://www.asianews.it, accessed on 10 August).
- Keller, E. F. (1992). Secrets of life/secrets of death: Essays on language, gender and science. New York: Routledge.
- Lancet. (2003). Editorial: Eggs shared, given and sold. Lancet, 362, 413.
- Marx, K. (1844). Economic and philosophical manuscripts of 1844 (available at www.marxists.org/archive/marx/works.1844.)
- McLachlan, H. V., & Swales, J. K. (2000). Babies, child bearers and commodification: Anderson Brazier et al., and the political economy of commercial surrogate motherhood. Health Care Analysis, 8, 1–18.
- McLachlan, H. V., & Swales, J. K. (2001). Surrogate motherhood, rights and duties: A reply to Campbell. *Health Care Analysis*, 9(1), 101–107.
- Mies, M., & Shiva, V. (1993). Ecofeminism. London: Zed Books.
- Mitter, S., & Rowbotham, S. (Eds). (1995). Women encounter technology. London: Routledge.
- Newman, S. A. (2003). Averting the clone age: Prospects and perils of human developmental manipulation. *Journal of Contemporary Health Law & Policy*, 431–463 (available at http:// thehumanfuture.org/commentaries/newman averting.pdf, accessed on 10 August).
- Noble, D. F. (1992). A world without women, The Christian clerical culture of western science. New York: Alfred A. Knopf.
- Pringle, R. (1988). Secretaries talk: Sexuality, power, and work, London: Verso.
- Raymond, J. (1993). Women as wombs. New York: HarperCollins.
- Sauer, M. V., & Kavic, S. M. (2006). Oocyte and embryo donation 2006: Reviewing two decades of innovation and controversy. (available at http://www.rbmonline.com/Article/ 1901 on web 21 December).
- Scheper-Hughes, N., & Loïc, J. D. (2001). Commodifying bodies. *Body & Society*, 7(2–3), 1–8. Shiva, V. (1993). *Monocultures of the mind: Perspectives on biodiversity and biotechnology*.
- London: Zed Books & Penang.
- Spallone, P., & Steinberg, D. L. (1987). Made to order: The myth of reproductive and genetic progress. Oxford: Pergamon Press.
- Spar, D. (2006). The baby business: How money, success, and politics drive the commerce of conception. Cambridge, MA: Harvard Business School.
- Steigenga, M. J., Helmerhorst, F. M., De Koning, J., Tijssen, A. M. I., Ruinard, S. A. T., & Gails, F. (2006). Evolutionary conserved structures as indicators of medical risk: Increased incidence of cervical ribs after ovarian hyperstimulation in mice. *Animal Biology*, 56, 63-68.
- Teman, E. (2003). The medicalization of 'nature' in the 'artificial body': Surrogate motherhood in Israel. *Medical Anthropology Quarterly*, 17, 78-98.
- Wajcman, J. (1991). Feminism confronts technology. University Park, PA: Pennsylvania State University Press.

### Additional Reading on Related Topics

- Ahuja, K. K. (1999). Money, morals and medical risks: Conflicting notions underlying the recruitment of egg donors. Human Reproduction, 14, 279-284.
- Ahuja, K. K., Simons, E. G., Nair, S., et al. (2003). Minimizing risk in anonymous egg donation. Reproductive BioMedicine Online, 7, 504-505.
- Andrews, L. (1989). Between strangers: Surrogate mothers, expecting fathers and brave new babies. New York: Harper & Row.
- Andrews, L. (2000). The Clone age: Adventures in the world of new technologies. New York: Holt Paperbacks.
- Arditti, R. (Ed.) (1984). Test-tube women: What a future for motherhood? London: Pandora.
- Balsamo, A. (1999). Technologies of the gendered body. Chapel Hill: Duke University Press.
- Biehl, J. (1991). Rethinking eco-feminist politics. Boston: South End Press.
- Brinton, L. A., Kamran, S., & Moghissi, M. D. (2005). Ovulation induction and cancer risk. Fertility and Sterility, 83, 261-274.
- Corea, G. (1985). The mother machine: Reproductive technologies from artificial insemination to artificial wombs. New York: Harper and Row.
- Di Pietro, A., Tavella, P., & Selvagge, M. (1996). Contro la tecno-rapina del corpo femminile. Einaudi.
- Hanmer, J., & Allen, P. (1982). Reproductive engineering: The final solution? Feminist Issues, 2(1), 53–74. Reproduced from Alice Through the Microscope, Brighton Women and Science Group (Eds) (1980). London: Virago.
- Harding, S. (1986). The science question in feminism. Ithaca, NY: Cornell University Press.
- Harding, S. (1991). Whose science? Whose knowledge? Thinking from women's lives. Ithaca, NY: Cornell University Press.
- Harding, S. (1993). The 'Racial' economy of science. Bloomington, IN: Indiana University Press.
- Harding, S. (1998). Is science multicultural? Postcolonialisms, feminisms and epistemologies. Bloomington, IN: Indiana University Press.
- Harding, S. (2006). Science and social inequality: Feminist and post-colonial issues. Chicago: University of Illinois Press.
- Hartouni, V. (1997). Cultural conceptions: On reproductive technologies and the remaking of life. Minneapolis, MN: University of Minnesota Press.
- Katz Rothman, B. (2008). Review of the book Surrogate motherhood and the politics of reproduction by Susan Markens. *Gender & Society*, 22(2), 264–266.
- Keller, E. F. (1985). Reflections on gender and science. New Haven, CT: Yale University Press.
- Keller, E. F. (2000). The century of the gene. Cambridge, MA: Harvard University Press.
- Mellor, M. (1992). Breaking the boundaries: Towards a feminist green socialism. London: Virago
- Merchant, C. (1980). The death of nature: Women, ecology and the scientific revolution. San Francisco: Harper Row.
- Norsigian, J. (2005). Stem cell research and embryo cloning: Involving laypersons in the public debates. New England Law Review, 39, 527-534.
- Purdy, L. (1996). Reproducing persons: Issues in feminist bioethics. Ithaca, NY: Cornell University Press.
- Rothblatt, M. (1997). Unzipped genes: Taking charge of babymaking in the new millennium. Philadelphia, PA: Temple University Press.

- Rothschild, J. (Ed.) (1983). Machina Ex Dea: Feminist perspectives in technology. New York:
  Pergamon Press.
- Schiebinger, L. (1992). Why science is sexist. Women's Review of Books, X(3 December).
- Spivak, G. C. (1993). Outside in the teaching machine. New York: Routledge.
- Tong, R. (1997). Feminist approaches to bioethics: Theoretical reflections and practical applications. Boulder, CO: Westview Press.
- Wolf, S. (Ed.) (1996). Feminism and bioethics: Beyond reproduction. New York: Oxford Press.