

## **Feminism, Technology and the Fallacy of Liberation in *Woman on the Edge of Time*: A Heideggerian and Miesian Critique**

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### ***Abstract***

*Martin Heidegger rejects the idea of neutrality of technology and highlights how hi tech technologies cause ontological shift by changing mode of human engagement with the world. He points out that technology radically alters and reconstructs the meanings of social and other phenomenon and removes the contexts of things through which they were understood in the past. This study challenges Piercy's techno euphoric feminist utopia in science fiction and focuses on consequences of such techno enthusiasm in the form of enframing, exploitation, objectification and commodification of humans as a standing reserve. Heideggerian and Maria Mies' notions deconstruct the illusions regarding technology in the novel *Woman on the Edge of Time* by Marge Piercy as a feminist sci-fi writer who consider technology a source of women liberation and emancipation in her techno utopic work. A deconstructive study of Piercy's selected novel also reveals confusions related to parenthood as an expression of social potential, mother identity, individual freedom, gender equality and subject position of humans in the universe.*

**Key Words:** Standing Reserve, Enframing, Neutrality, Exploitation, alienation, Liberation.

## Introduction

*Techno euphoric feminism* (a subset of techno feminism) takes technology as an activist tool for women liberation and emancipation from unjust nature and patriarchy and raise the slogan “if nature is unjust then change the nature (through technology)” (Cuboniks, 2018, p.23). They believe that technologies must be conceptualized as social phenomenon to shape the society in right direction that’s why, *Anti-naturalist feminists* demand women liberation from tyranny of reproduction, gender equality and inclusion of queer parenthood. Firestone an anti-naturalist claims that pregnancy is *barbaric* and she identified women’s childbearing role as the source of female *oppression*. She demands that women should be freed from “the tyranny of reproduction by every means possible” (Firestone, 1970). Marge Piercy as a feminist examines women, relationships and emotions in unique and provocative ways in her works. In the novel *Woman on the Edge of Time*, she as a techno euphoric feminist shows an excitement and enthusiasm for use of technology to liberate women from patriarchal oppression by allocating values, new ethics and new modes of reproduction in her Utopic world. The feminist utopian novel is a place “where theories of power can be addressed through the construction of narratives that test and stretch the boundaries of power in its operational details” (Bartowski, 1989, p. 20). Protagonist is taken to a futuristic setting of 2137 where utopia has found ways to work on their problems. Protagonist serves to show how much modern society encourages the existence of women and technology as a hope of re-invention and it becomes a model for anticipation of better future.

The present study aims at to challenge and deconstruct this feminist utopia by bringing on surface the consequences of technology and its drastic effects on society. Man-machine relationship blurs the perception of benefit and harm to the individuals because it fails to distinguish among different modalities of the social phenomena. IVF reproduction, human cloning and organ transplant are beneficial for humans but on the other hand change the meanings of real human identity, culture, meaning of motherhood even meanings of our own bodies. IVF fertilization and child birth take place in more *abstract settings* without bodily presence, human emotions and even without the knowledge of identity of participants. A child is constructed as if it were a machine, made from isolated component parts (Hester, 2018, p. 116). It also reveals how over exaggerated arguments of women liberation leads to new form of commodification, objectification, alienation, exploitation, oppression and gender inequality.

## Literature Review

The age of technology reveals that production, reception, conception, themes and even vocabulary of literature have undergone shifts in paradigms. Now fictions are *science fictions* and cultures are becoming *techno cultures* where the myths are adapted and played out in the context of technologically driven futures smart machines which can feel feelings and have roles with more humanity than the real humans. Techno cultural modern societies are not those which use technology for their expansion but, on those that is object of such expansion with a technological way of life. Green (2002) in her work *Techno-culture: from alphabet to cybersex* writes that technology was once thought of only in relation to machines, production machines or the military ones. Now it prevails in every aspect of our lives. She argues that technology is never ever be impartial and neutral, rather, it is directly or indirectly connected to culture, society and government policies, a variety of technology cultures coexist as information culture, industrial culture, media culture and now *technoculture*. Some highly developed communities mostly reap the benefits of *technocultures*, while many others are bypassed or even damaged. Before adoption of an invention in a society, it must first be carefully accepted(not blindly) and then should be let entered into the daily life and experiences of the individuals because technology is invented and adopted due to *social determinism*.

Raymond (1995) in *Women as Wombs: Reproductive Technologies and the Battle over Women's Freedom* argues that the main purpose of these reproductive technologies like IVF and surrogate pregnancies is the manipulation of women. Third World women are treated with unsafe contraceptive, in an age of in vitro fertilization (IVF), embryo transfer, sex predetermination and reproductive contracts, women have become abstract entities called *surrogates*, *maternal environments*, *population polluters* and *human incubators*.

Corea (1986) is In *The Mother Machine: Reproductive Technologies from Artificial Insemination to Artificial Wombs* argues that ARTs exploit women and represent a male need to control reproduction. The issues of the assistant reproductive technologies are confusing, when women are called 'living incubators' and 'oöcyte donors', they got confused. The confusion keeps them powerless and speechless, *confusion* is a tool of *oppression* and they struggle to get out of this confusion through

speech. They are not yet able to fully understand the benevolent rationales for these technologies which clashes with their sense of dignity and worth. So they stand stubbornly and say: Something is wrong here. When women collectively should come forward and break the silence the world will have to change.

Shiva (2000) points out that reproduction was primarily considered a woman's domain and affair but technological intervention and women's willful consent has transferred it into males' hands and men reinvented and recreated women as *essential mothers*. She points out that Reproduction has been linked to the female body's automation, wherein a number of disjointed, fetishized and replaceable pieces are implanted by qualified medical professionals. She objects the industrialization of farming, citing patentable seeds and the usage of genetically modified organisms (GMOs), which she argues contribute to *the degradation of environment, loss of biodiversity, the erosion of traditional knowledge*. Shiva questions the *commodification* of reproductive processes and the potential implications of these technologies on women's bodies and reproductive autonomy.

According to Lie (2002) "Science and technology has gained insight into the totality of process, where woman is no longer 'the creator of children'". Knecht (2012) explains that reproductive and genetic engineering are admired as miracle for infertile couples and genetically diseased people in having healthy child. Today's civilized world treating a woman's body as a *commodity* and *object* of use but it is regarded a sign of liberty in liberal circles. The surrogacy and egg donation come with health risks for the women from poor social strata who sell their eggs and who carry the fetus but doctors and researchers are paying no heed to long term effects of such experiments as there has been little research on the long-term health effects (Murphy, 1989). *Commercialization* of reproduction routinely involves the *exploitation* of poorer women, especially in the *Third World*.

Allen argues, HGE is crossing some limits and domain that humans even as a subject of universe have never entered before, a domain that leads towards a new kind of debate and raises new ethical considerations and dilemma (2011, p.17). Spengler in his work in *Man and Technics: A Contribution to Philosophy of Life* writes "...all things organic and natural are decaying and dying in the grip and control of the vice of organization" (1932). An artificial, synthetic and fake world is poisoning the natural one.

The civilization itself has become technological that does, or tries to do, everything in automated mechanical ways.

## Research Methodology

Heidegger believes that there is something wrong with the modern technological culture where reality of objects and humans only exist as a *standing reserve*. The ordering of everything as a standing-reserve along with *Enframing* bring forth men and objects take their positions in the system where they become available as materials and commodities ready to be used as standing reserve. Technological process is an ongoing and forward moving process where “everything is functioning and that functioning drives us more and more to even further functioning” (Heidegger, 1977, p. 53). He says that technology constitutes a framework which reduces our phenomenological engagement where all things living or non-living become objects of use even time and space are turned into *new ontological models* and are removed from their *traditional context*. Cultures and meanings of social phenomenon are also reconstituted, alienated, commodified and objectified under technology as standing reserve when they are brought close and available through the context of use value regardless of locality. He recommended a way out as *the will not to will* means we need to open up our eyes that how much we can rely on technologies without becoming slave to them because at the end every *enframing* “is the process of gathering together bits and pieces which challenges man and makes him as raw material and standing reserve” (Heidegger, 1993, p. 329).

Maria Mies's work *White Man's Dilemma* (1993) provides a frame for critically analyzing issues regarding capitalism, gender, labor and power dynamics. This perspective discusses the commodification of reproductive services in the context of different concepts of parenting like queer parenthood (Mies, 1993, p. 198). ARTs, such as sperm or egg donation and surrogacy raise questions about the ethical implications of these practices. Mies's work also emphasizes how the use of ARTs in surrogacy and egg donation commodify women's reproductive capacities as “they may choose to provide such services for financial reasons” (1993, p. 199). This raises question whether women's bodies and labor are being *exploited* for profits. In this way the commercialization of women's bodies and the potential for exploitation start. Mies and Hossmann (1993) in article *From the Individual to the Dividual: In the Super Market of Reproductive Alternatives* explores how women have been alienated and separated from their products

of labor and disempowered in various social and economic structures. In the context of *commercialization* of genetic materials donors, experience a sense of alienation from the child produced as they are not the intended parents, eventually leads to complicated emotional and ethical issues.

## Analysis

### Techno Euphoric Feminisms in the Novel

Piercy was a social activist and radical feminist that is why her work is greatly influenced by radical movements and techno euphoric feminists especially by The second wave feminist Firestone's work *The Dialectic of Sex*. Firestone (1970) diagnosed that culture is not the only factor to make woman a woman but nature is also cruel toward women and put the whole burden of reproduction on them biologically. She demands that women should be freed from 'the tyranny of reproduction by every means possible' (Firestone, 1970). Biomedical technologies became great source of hope for techno euphoric feminists because they offered multiple fantastic opportunities for their self-realization as they can have designer babies, can choose not to have child, can have children after menopause, can choose sex of child. Andrews recommends that women who undergo cancer treatment and who are afraid that this treatment "might prove mutagenic to her eggs should be told about the possibility of freezing eggs or embryos in advance of treatment for subsequent use to create a child" (Andrews, 1987, p.4). Firestone (1970) as an anti- naturalist thought and demands reproduction shift on technology with an inclusion of queer identities in parenthood. They believe that re-composition and reconstruction of future social modalities are leading to flexibility and saying *No to fixidity* as Hester insists "Nothing should be accepted as fixed, permanent or given--- Neither material conditions nor social forms" (Hester, 2018, p.19). Against patriarchal ideology of natural motherhood, Simone De Beauvoir attempts to reveal root cause of oppression of women through tyranny of the process of pregnancy which is not only painful but also *barbaric*. Incidents in the novel *Woman on the Edge of Time* endorse and conform to the arguments of Firestone (1970) and anti-naturalist feminists' notions about reproduction. Connie has visions, she's visited by Luciente who claims that she has come from the future and also takes Connie to that future which is a way better than the connee's society.

Luciente lives in the village of Mattapoisett, technology is used to facilitate lives of people as everything is recycled and babies are born out of tubes in the brooders.

Descriptions of Mattapoissett presents the potential future society with egalitarian lifestyle and intentional effort of writer make readers believe that women's collective struggle has made them successful to have genderless and equity based society. The time and again skillful mentioning of different technologies also shows writer's enthusiasm for modern technologies. In Piercy's utopia, brooders bear the task of reproduction "This is the brooder, where our genetic material is stored, where the embryos grow" (Piercy, 1976, p.106). The value of female is not associated with reproduction and infertile females are not discriminated by the male-dominated society. Along with the freedom of the female body, an important aspect of ectogenesis is raising of the economic status of women. Child reproduction takes a lot of energy and time of women which leaves less time to improve working abilities and makes them less competitive than men in works. Gilman says "as a chaotic hot house governed by ignorance where the woman is overwhelmed with work and where her emotional and intellectual energies are frustrated to the point of neurosis. From an economic point of view, the system is enormously wasteful" (Donovan, 2006). It is unequal that housewives do *countless* housework and give birth to babies while husbands go out for paid work with the exchange value.

Piercy also challenges the obligatory sexual life in her *utopia* with the abolishment of traditional marriages. As Piercy displays, "We couple. Not for money, not for a living. For love, for pleasure, for relief, out of habit, out of curiosity and lust" (Piercy, 1976, p.64). Piercy emphasizes on this transformation which liberates females from obligation of reproduction and provides them a chance for mastering their own bodies. Dolly is wrong when she thinks "a man respects you more if you have his baby" (Piercy, p. 39). In traditional and average societies child's birth is considered strength of woman but in case of Dolly even this perception got false. At the end of the novel, Connie thinks that women have got liberation through technology from pains of reproduction and says, "At last once we fought and won" (Piercy, p.375). The Brooders (Reproductive ponds) which they use instead of natural female wombs show how innovative and modern technologies helps women for not having pregnancies and deliveries. Connie got uneasy initially and called them as *canned babies* but later comes to the realization and thought that her own daughter, would have had an opportunity in Mattapoissett to "grow up much better and stronger and smarter than I" (Piercy, 1976, p.141). Connie's realization is actually writer's consent to use modern technology for reproduction. Genetic materials are mixed artificially and embryos are transferred to birthing pools to grow for several months.

Women are neither attached to reproduction nor responsible for giving birth and positions of power circulate among women and men equally.

New technology is in common use to produce babies in brooders and men have breasts developed through treatment which enable them to feed their children. Luciente told Connie, “we had to give up too, the only power we ever had the original production (the power to give birth) because as long as we were biologically enchained, we’d never be equal. And males never would be humanized to be loving and tender. So, we all become mothers” (Piercy, p.105). A child can have multiple parents through technology like carrying mothers, biological ones, rearing mothers, social ones, two mothers and one father and many more in case of queer parenting. The LGBTQ rights movement began with the Stonewall riots in New York in June 1969 and this idea of LGBT is also discussed by Piercy to deal with problem of heterosexuality to break the strength of *patriarchal norms*. The idea of queer characters as Jackrabbit, Skip, Luciente and others throughout the novel depicts writer’s knowledge about newly emerged voices of queer identities in 70s. Skip’s going to a mental hospital for being gay shows piercy’s continuation of struggle for other individual identities. Individuals can pursue sex identity according to their choice and can also change sex and gender role through advanced hormonal treatments.

### **Deconstructive Study of Feminist Techno utopia**

Techno euphoric feminists claim that technology can and should be controlled to improve the human conditions responsible for continuation of life, to liberate women from pains and sufferings. These claims have many holes and spaces to fill up, if technology emancipates women from pains and sufferings then what if it leaves the whole society in dispersed and chaotic form without stable connectivity of relations. ARTs, such as surrogacy and egg donation further objectify and commodify women's reproductive capacities, turning them into *service providers* for rich women who can afford such expensive technologies and *commercialization* of women's bodies and the potential for exploitation starts (Mies, 1993, p.198). The implementation of certain technologies creates clash with cultural or social values. An uncritical adoption of technology leads to the erosion of cultural diversity and the imposition of values associated with the technology's origin. Luciente mentions “embryos are growing and ready to birth. They do that at nine months. Sometimes they wait ten month believing that extra time gives stronger babies”. (Piercy, 1976, p.94). Here Piercy favors Ectogenesis that could be a

mean by which homosexual and unmarried could have genetic children without depending on rental womb and also facilitate women to have babies without going through suffering and pain of the pregnancy and delivery. *Ectogenesis* process requires an artificial uterus for the growth of embryos and fetus and in artificial uterus fetus is supplied with nutrients and oxygen from artificial sources to nurture, as well as disposal of waste material is also done. All these artificial settings produce babies like factory production to sell and buy as *commodities*. These techno utopian solutions in abstract setting completely ignore the *pre-natal attachment* and bond of unborn child with mother consisting of mental emotions, mental capacities representations and fantasies, necessary to identify another human being. Muller redefined prenatal attachment as “the unique relationship that develops between a woman and her fetus. These feelings are not dependent on the feelings the woman has about herself as a pregnant person or her perception of herself as a mother” (Muller, 1990, p. 11). These feelings are influenced by subsequent attachments to family, partner and friends and ultimately this whole experience enables a woman to adapt to pregnancy and get attached to her fetus which helps her in transition to the motherhood period. Artificial reproductive technologies are considered by feminists, tools of emancipation for women but the natural birth fosters immediate maternal-infant bonding through skin-to-skin contact and breastfeeding. The process of passing through the birth canal during natural birth is thought to have developmental benefits for the newborn, including the compression of the chest, which helps expel amniotic fluid from the lungs. Successfully coping with labor and delivering without interventions gives feelings of *accomplishment* and *strength*.

Ectogenesis or artificial womb causes rift in mother-child relationship and other health factors including rising hormone levels in egg donor women or biological mothers who give eggs for in vitro fertilization during ovarian stimulation and the possibility of a less receptive lining of uterus for the embryo implantation. The process of undergoing artificial fertility has the uncertainty of success and the emotional rollercoaster causes *stress*, *anxiety* and *depression*. Use of technological devices and procedures are never neutral and solution themselves become problems like ovarian hyper-stimulation Syndrome (OHSS) is the one of the most common side effects of IVF which occurs when the ovaries become swollen and painful due to the hormonal stimulation used to produce multiple eggs. Technologies integrated into human existence are in the state of *readiness-to-hand* means they serve as tools or for achieving specific goals becoming an extension of human capabilities. Whether the technology is *external* or *internal* it is fabricated to

our lives and even to our identities. The use of reproductive technologies can be emotionally and psychologically challenging for individual participants and couples.

Piercy rethinks reproductive technology to claim that a woman's body is not the only gestational locale and the only source of breast-feeding. Connie saw a man who "pressed a panel and a door slid aside, revealing seven human babies joggling slowly upside down, each in a sac of its own, inside a larger fluid receptacle" (1976, p. 94). Babies were produced like products in the baby factory without biological ties. It also includes *rearing parents-to-be* to make agreement for a child with no biological and genetic relation to them. *Reproductive choice* and *reproductive alternatives* through the use of IVF enable even queer people and unmarried to have children. The entrepreneur in case of queer or single parent provides a part of the genetic raw materials (sperms or eggs) and advance payment is paid to the *carrier woman*. "They could use the combination of an egg donor, a sperm donor and a surrogate" (Andrews, 1987). Queer identities can have children through technology by providing biological materials to clinics or buying eggs and sperms. Piercy favors inclusion of queer identities into parenthood through reproductive technologies ignoring the aspect of biological relationship. Such options eventually entertain them but with widespread and challenging genetic screening to trace their biological relations (Mies, 1988). A character Luciente in the novel says we all members of the society are mothers. Every child has three parents to break the old conventional nuclear bonding and to reconstruct the existing family systems (Piercy, 1976). They complicate traditional definitions of motherhood and fatherhood and eventually *reshape* the concept and *reconstitute* the meanings of different social concepts like of mothers, fathers and of the family. Queer and single parents after having child through IVF adopt alternative terminologies, such as co-parent, non-gestational parent, or co-mother to describe their roles and relationships, moving away from traditional labels (Andrews, 1987). Queer parents prioritize chosen families and networks of support where parenting involve extended networks of caregivers, including friends, mentors and community members. Here text itself becomes contradictory if old family system has been destroyed then will new organized type of society be constructed? if answer is no, means feminist reproductive technologies are not neutral but destructive in their functioning. In this way existing social structure will transform into *pieces* and *fragments* losing its stability under techno-culture.

In Mattapoissett, motherhood is available to both genders because there is no live birth and women are no more oppressed. It is strange that there is no mentioning of

fathers in that society because men are also mothers as they feed their children through hormonal treatment. Barbarossa takes on one of the roles of motherhood, nursing and he had breasts, “Not large ones. Small breasts temporarily swollen with milk” (Piercy, 1976, p.142). Some hormones make it possible for fathers to produce milk and to breastfeed like mothers, such hormonal treatment stimulate limited milk production in men. Induced lactation and breastfeeding in men mostly have emotional and psychological impacts being highly unusual and socially unconventional practice. Like any other hormonal treatments, it also has potential side effects and complications, such as mood swings, libido or other physiological functioning disorders. Heidegger argues that “when technology is used as neutral tool, it leads to further domination and manipulation” (1977, p.333). Our own bodies become *transformed* and *enframed* through technology, we no more remain free for genuine individuality as breastfeeding in men is not a natural biological process as male bodies are not naturally designed to produce milk. Hormonal treatment stimulates limited milk production in men, the quantity and quality of milk produced by men are likely to be significantly lower than what women produce naturally. Men involved in this process experience a range of emotions and societal challenges related to gender norms and expectations. Feminist demand of technological shifting of birthing and breastfeeding toward men is irrational and illogical demand, it will lead to further imbalances and inequalities between genders. Male breast feeding is nothing but *exploitation* of men in the name of gender equality through technology.

Genetic material donation and Surrogacy liberate elite class women but on the other hand poor women are usually exploited through their financial conditions. Most of the egg seller women are from lower strata, so they are exploited for their needs and not paid according to product but to their circumstances. Poor women could be exploited by richer and even, that “a new class of breeder and donor women might arise, where women out of sheer necessity will be forced to become surrogates, or sell their gametes or eggs” (Corea, 1984, p.18). Women who enter into such contracts for rental wombs, the selling of embryos, eggs and other reproductive and genetic materials can no longer interact with their own bodies and lose their identities as an independent sovereign person. They feel alienated from their products and raw materials. Technology alienates both men and women from their bodies because reproductive technologies offer a disenchanting alienation (Mies, 1993, p.199). Worries or concerns of the intended parents for the child can be a source of stress and anxiety, artificial process involves significant medical procedures, hormone treatments, potential complications and contribute to psychological

stress, including *anxiety* and *depression* about success of procedure. ARTs provide opportunities for single individuals, queers identities or infertile couples to have children but on the other hand raise critical social and ethical questions about “the potential exploitation of women’s reproductive capacities and the economic factors that influence these decisions” (Mies, 1993, p.198). The *commercialization* of reproductive technologies results in the *commodification* of human reproduction where pursuit of profit in this field compromise the well-being and autonomy of those involved participants.

Legal problems resulting from multiple parenthood through technological arrangements only take into consideration contracts before conception that stipulate who will be the biological mother/ father, who will be the genetic parents, the carrying mother, partial parents, the social and rearing parents without explaining the legal provisions regarding producers like medical doctors and genetic material donors who deliver the products to customer and not having the right to keep them for their own use. This means that they have implied acceptance that what they produce is a commodity which can be sold and bought in the market by money, not something of their own and that they are doing alienated labour as Connie at first criticizes, "How can men be mothers! How can some kid who isn't related to you be your child?" (Piercy, 1976). Here confusion of protagonist rejects authenticity of writer's own techno-feminist claim and arises question in reader's mind that how a confused arrangement could build a sound social system. In multiple parenthood, there might be differences in levels of commitment and involvement, potentially leading to varying levels of bonding and attachment between the child and each parent. Multi-parenthood involves complex emotional dynamics including *rivalry*, *jealousy* or *feelings of inadequacy*. Emotional conflicts among parents directly or indirectly impact the child's emotional well-being.

Piercy on her own build new and novel ideas of gender and sex. They had given it all up by letting men steal from them the last remnants of old and biological power gifted by nature, sealed in blood and in milk” (Piercy, 1976, p.94). She considers shifting of reproduction and feeding to technology and men a source of liberation for women and says that women have left this domain willfully “What’s special and unique about being a woman after giving up reproductive power? The identity of a woman in most of the average and traditional societies is formed in relation to the social values, meanings and symbols. Their self is affected and defined by the culture because values of the cultural identity are internalized deeply and the ideology of motherhood differs and vary according to the cultural context. One most important value is parenthood which is seen

as social potential of individuals, where woman as mother and man as father express themselves. Parenthood is a social expression of individuals and plays a vital role in shaping both individual lives and of whole society. Parenthood is not mere a biological phenomenon but involves a complex interplay of personal, social, cultural and economic factors. Different cultures and societies have different expectations and norms surrounding parenthood. Parenthood is a *multifaceted* social phenomenon that reflects the complex individual choices and broader societal influences. It is also a deeply personal expression of one's values and aspirations to the social fabric of their community and culture. In traditional societies a woman considers herself *complete* or *real* only when she becomes a biological mother, “the need to bear and nurture children was encoded in women's genes and only childbearing can make a woman psychologically *actualized*” (Lerner, 1998, p.19). Of the many reasons why women want their *own* child, one is the desire to experience their own body's natural creativity and productivity to experience that living power in their body which permeates nature. The ideology of motherhood is related to the mode and the way families are structured on kinship practices and linked to the variations in them. kinship is also important in understanding rights over children, inheritance, authority and responsibility of the family and kin-groups. The way the patriarchal family is *structured* is one of the major fault and causes of inequality between men and women. The mothering role of women is reproduced in society and the ideology of motherhood is dependent on the way a society *constructs* it, so that way and *ideology* should be corrected instead of abolition of mothering role. Motherhood is direly needed to be seen positively as women’s reproductive capacity is something which women should consider their source of power and pride instead of burden and enslavement.

A 70s trend of *individual* freedom and choice is also prominently celebrated by Piercy in the novel as each person lives in a private tent or one-room home. When connie saw two children playing with their genitals, she mentioned it but Luciente said with a criticism of Connie’s society: “We are not mad to control” (Piercy,1976, p.132). Children are developed and grown outside the womb of an individual and adopted parents are responsible for care and upbringing until puberty; every person chooses his own name and can also make his/her choice of study field, work and belief according to their interest. Piercy presents a non-traditional and unconventional family structure in Mattapoisett following the technical and scientific developments for the process of birth. Piercy proudly explains how pre-described set rules are used to control society and reproduction through technology in a disciplined way. They produce a new baby in birth

pools to replace a member of society who dies (Piercy, 1976). Here Piercy's own claim of freedom become *contradictory*, how citizens can be free either male or female if all actions are supervised and decisions are *controlled* by state. They cannot even reproduce their child without the permission of state. Her claim of individual freedom is the one side of coin because freedom leads to strangeness and creativity which is not possible under pre prescribed and pre-determined state rules. Feminist utopia of freedom turned into *dystopia* when individuals are given limited and prescribed spaces to act with limits and boundaries set by state. Individuals are expected or required to conform to the pre-established rules and norms, leaving very little room for alternative ways of living, leading to a *suppression* of free speech and expression. Pre-prescribed orders often prioritize uniformity and stability, which might come at the expense of individual diversity and cultural expression.

Luciente tells Connie that the age of human is not long in their village due to genetically modified foods and technologically comforted life style (Piercy, 1976, p.32). The kind of control we have over technology leads to technological control over us. Use of technology to increase the production of crops eventually change the crops genetically. The most pressing issue being debated in Mattapoisett is "whether to interfere genetically with the babies produced in each village, selecting for desirable traits" (Piercy, 1976, p.33). Luciente believes it would be unfair and misguided, while majority of people favor and argue, it will make no difference because they are already doing with their vegetables and other crops. They claim that reproductive technologies mainly would help parents to have children free from genetic disabilities and disorders through, a science of modifying and altering the human population by selective breeding, with the intention of *improving* the human race. Piercy here shows her interest in eugenics, the word *eugenics* means *well-born* and a way to breed *desired* traits. Gene editing techniques having a risk of unintended and off-target *genetic modifications* and errors in these processes could have unknown consequences for the individual and future generations. The affordability of *gene modification* technologies leads to disparities in access to genetic modifications and enhancements, creating *social divides* and exacerbating existing inequalities. The long-term effects of genetic modification in humans are not mostly understood at first and potential unintended consequences only become apparent after many years or generations.

The use of gene modification technology for medical purposes paves the way for non-medical and potentially unethical applications, such as enhancing cognitive abilities or physical attributes.

Assisted reproductive technologies also raise ethical dilemmas and issues surrounding the creation, selection and manipulation of embryos. When reproduction is controlled by bioengineers, “they made child like a machine made from isolated component parts” (Mies, 1993, p.198). Advancement of knowledge of the human genome to select for desired traits has prompted fears of *designer babies* where fetus becomes *standing reserve* and the concept of standing reserve is central to critique of modern technology and its impact on human existence as “man himself will have to be taken as standing reserve” (Heidegger, 1977, p.332). It is the way in which modern technology views the world and human beings as resources to be controlled, manipulated and exploited. Diversity and difference in races are beauty of the universe as different is beautiful but human themselves eliminating these differences through technological experiments of selection and ultimately generating *monotony* and *sameness* in species. Reproduction engineers and experts are calling the female womb a dangerous environment for the foetus (Henifin, 1989, p.98). This insistence of scientists on splitting up of embryo and mother becomes ongoing and *treadmill process*, where once it starts always goes forward at a greater speed. Technology cannot be conceived as merely machine or device but must be examined through the way in which it works to enact an ontological shift. Heidegger says, “the objectification of the world is a condition which underwrites the possibility of more inexperienced forms of technological liberation which results in objectification of the subject” (Heidegger, 1977, p.332). According to eco-feminists, natural pregnancy is wild and spontaneous “Pregnancy is something that occur within the body without conscious deliberation that makes the whole process enchanting and this unpredictability constitutes the newness of every child” (Mies 1993, p.198). Artificial arrangements of reproduction contribute to a sense of *alienation*, where women and men are estranged from their genetic materials. Science and technology has gained insight into the totality of process, “where woman is no longer the creator of children” (Lie, 2002).

Techno euphoric feminists see technological methods and tools as a liberation and they welcome them as an opportunity to enhance individual choice, control and autonomy.

Piercy puts her arguments about freedom and choice strongly and presents a technology based social set up in a simple way but it looks so outwardly because free choices and freedom never come alone, they are always *complicated* and *internalized* and cause big changes to societies mostly with ultimate destructive tendencies. Free choices result in externalities, where one person's free choices affect other groups of the society without their consent and priorities as in the Mattapoissett men are forced to share rearing and breast feeding responsibilities even though they are not capable biologically to do so. When individuals have complete freedom in making their technological choices, they prefer short-term gains over long-term benefits leading to impulsive decisions with adverse consequences in the future. Individual interests over collective well-being lead to *social fragmentation* and weaken social cohesion. The statement *technology is not a solution but an illusion* questions the idea that technological advancements alone can solve complex societal issues or fulfill all human needs. It suggests that relying solely on technology as a panacea creates an illusion of progress without addressing underlying challenges or considering potential drawbacks. An overreliance on technology diminishes the importance of the human element in solving problems.

## 1. Conclusion

Shifting reproduction onto technology raises several concerns and potential dangers, as, these technological solutions come with more *complex problems*. Reproductive technologies apparently offer possibilities for overcoming infertility but secretly facilitating *genetic manipulation*, they also result in ethical, social and psychological risks that need careful considerations. Individuals can take responsibility for their relationship with technology through a *reflective* awareness of how technology affects our understanding of the world and our own existence but humans insist only *calculative thinking* and ignore *meditative mode* of thinking that resists the dehumanizing effects of excessive *enframing*. “We are delivered over to technology in the worst possible way because we regard it as something neutral “(Heidegger, 1977)). Cautious and responsible behavior is needed to mitigate *intended* and *unintended risks* or harms of artificial reproduction otherwise these feminist technological solutions will give way to more complex problems. Balancing the potential benefits of these technologies with the ethical, social and psychological risks is crucial to ensure responsible and equitable use, otherwise *feminist techno utopia* is nothing but a *dystopia*.

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