

Aline Ferreira

*Beyond the Womb? Posthuman Parturitions in Joanna Kavenna's
«The Birth of Love»*

Abstract

This essay reflects on a number of issues related to mothering and the possible repercussions of the introduction of ectogenesis, gestation outside the womb, for women and society. Some of these new scenarios appear dramatized in Joanna Kavenna's *The Birth of Love* (2010), a novel that includes a vision of a dystopian future where artificial wombs are used and women no longer get pregnant, contrasted with the present-day situation. Will a society in which artificial wombs have replaced pregnancy and birth be fundamentally different from our own? Will pregnant embodiment be a thing of the past? Will ectogenesis irreversibly change human nature?

Significantly, in recent utopian and dystopian fiction as well as cinema the absence of women as mothers is striking, with women no longer performing a reproductive role and artificial wombs taking the place of the maternal uterus, while in most science fiction films pregnancy has basically disappeared. In worlds where eggs or ovarian tissue can be created in the lab and gestation carried out wholly outside the maternal uterus, women can become redundant. This ectogenetic imaginary is powerfully criticized in Kavenna's novel.

The potential consequences of these new reproductive scenarios for women and the future of the family will be examined in the light of philosophical and psychoanalytic work on the dynamics of a different natality, as well as some of the biomedical and ethical aspects of mothering and ectogenesis.

Keywords: motherhood, pregnant embodiment, birth, ectogenesis, dystopia

This essay is centrally concerned with a reflection on two radically different ways of bringing children into the world: traditional mothering, with the conventional gestational period of an embodied pregnancy, and the denial of mothering in a woman's body with recourse to ectogenesis, extra-uterine fertilization and embryo development. These two diametrically opposed situations appear dramatized in Joanna Kavenna's *The Birth of Love* (2010), which fictionally rehearses the posthuman scenario of a world where women do not give birth, having been replaced by artificial wombs. This dystopian state of affairs, where women have no say in their reproductive choices, is contrasted, in a distinct time frame, with the negotiations of a normal pregnancy by the protagonist, a contemporary woman living in London, whose labour is fraught with difficulties. The book appears to suggest that despite all the pain and suffering which has to be endured by the pregnant woman during delivery of her baby, the dystopian scenario that consists of a eugenic selection of embryos followed by extra-uterine gestation, in a highly technological and impersonal environment, where artificial wombs have taken the place of women's uteruses, is drastically unthinkable and undesirable. There is, however, an alternative scenario which might be feasible in a few decades, which would consist in the implementation of artificial wombs. This reproductive technology would be chosen by those women who may have trouble carrying a pregnancy to term, or who for professional or personal reasons decide to take advantage of ectogenetic technology to have a baby.

Posthuman Wombs

A future world where gestation in a womb is not the only way to procreate is a recurring fantasy for many women and men, while for others it seems like a nightmare scenario, unnatural and damaging to the fabric of society. The question is not if it will happen, but when, although scientists seem to agree that this will probably not be before the end of the XXI century. Reproductive specialist Carlo Bulletti, however, believes that partial ectogenesis – the growth and development of foetuses between 14 and 35 weeks

of pregnancy – is within reach given our current knowledge and existing technical tools¹ (2011, 127).

In this essay, one of the key sites of reflection centres on the paradoxical notion of the freedom of reproductive choice women are said to have, when in reality their only option is whether to have children or not. The possibility of selecting not only whether to have children but also if they want to gestate them inside their bodies would provide women with a greater panoply of alternatives. Until such time as artificial wombs are implemented and made available (and affordable) for those who wish to select that technology, women's so-called freedom of choice in terms of reproduction will remain only partial and illusory.

According to Ann Oakley, the «absolute removal of pregnancy from women's uteruses to laboratories could either be liberating or oppressive for women» (1984, 282), a state of affairs that crucially depends, as she rightly maintains, on who is in control. However, as Aristarkhova pertinently observes the central issue here is whether the «terminology of control and ownership should be our conceptual framework» (2012, 107-108), since the fact that «machines are “man-made” appears to have made them suspect, by default, as extensions of male domination» (2012, 108). This is indeed a fundamental perception in the debate about whether women will be summarily replaced by artificial wombs and robbed of their role as gestational mothers or on the contrary be given more freedom of choice and further alternatives with relation to their bodily autonomy. In Kavenna's dystopian future women have no options, and a patriarchal structure that has full authority over women's bodies and eugenic selection of embryos appears to have total control of the population.

Positioning women as mothers as “natural”, in sharp contradistinction to putative medical technologies that might be both therapeutically and individually enabling for women in a social and political context, perpetuates an essentializing move that is

¹ As Carlo Bulletti explains: «“Artificial wombs”, as they are currently conceived, would function by connecting to an extracorporeal supply of maternal blood or replacement fluids. The artificial womb would supply nutrients and oxygen to an incubated fetus and would be capable of disposing of waste materials. This would, therefore, necessitate an artificial placenta for mediating the necessary exchanges between fetal circulation and the system that would replace the maternal flow» (2011, 124). According to Bulletti, it has been demonstrated that the human placenta «can still supply nutrients and dispose of waste products when connected to an artificial uterus» (2011, 125).

detrimental to women in general. Provided that decisions are effectively women's, arrived at in the context of a regulated, egalitarian framework where both men and women scientists are in control, then women will be given a fair chance of shaping their own lives and their environment. As Aristarkhova in a related vein points out, calls to reinstate women's so-called natural power in terms of gestation and birthing are «misleading and implicated in the very power structures of patriarchy that operate through the same discourses of control and ownership» (2012, 108-109), with their reliance on concepts of «some kind of “natural” maternal goodness» (2012, 109), which does not account for the fact that «not all women are inherently more nurturing than men» (*ibid.*).

Beyond Eve's Womb

The inextricable association between woman and motherhood, woman as a body that births, thoroughly theorized by Simone de Beauvoir, Julia Kristeva, Luce Irigaray, Adrienne Rich and many others, with a negative inflection in some cases but also described in a positive, indeed adulatory vein, is being reassessed². As Kelly Oliver observes, due to the fact that women have been «reduced to reproduction and maternity, they have been excluded from production and culture» (1995, 165). However, rather than marginalizing maternity, Oliver believes that the reasons that led to women's exclusion need to be understood so that motherhood can be reconceived from a non-patriarchal standpoint. This is a highly contested terrain, the site of a vigorous debate between those that regard motherhood as women's untouchable prerogative and unassailable position of “power” and those who would welcome technological advances that might free women from that biological bond to maternity³. For many scholars, philosophers and ethicists birth is a fundamental event that underscores humanness. Virginia Held argues that while

² Heather Latimer traces the changing views of maternity, abortion and the place of the fetus in the wake of *Roe v. Wade*, going on to examine selected fictional and visual representations of reproductive technologies which, in Latimer's view, crucially influence how reproductive politics are understood «popularly and culturally» (2013, 11).

³ See for instance Beauvoir (1949), Shulamith Firestone (2003), Adrienne Rich (1995), Andrea O'Reilly (2007) and Anna Smajdor (2007; 2012).

birth should be considered as central to what is «distinctively human» (1989, 362) the tradition of describing birth as a natural occurrence has «served the normative purpose of discounting the value of women's experiences and activities» (*ibid.*). What if, however, women did not have to give birth for new lives to emerge? The paradigm shift would be immense. Significantly, in recent utopian and dystopian fiction as well as cinema the absence of women as mothers is striking, with women no longer performing a reproductive role and artificial wombs taking the place of the maternal uterus⁴, while in most science fiction films pregnancy has basically disappeared⁵.

Eve's Curse

However, until artificial womb technology is implemented and becomes widespread, women will have to accept their fate as the only child-bearers. On the other hand, when ectogenesis proves a safe way to have a child, many women may presumably readily avail themselves of that technology without for that reason becoming less maternal after their babies are removed from the foetal incubators. The Biblical curse imposed on Eve to bear children in pain and be the only sex able to gestate the foetus inside her womb would

⁴ This trend is visible in for instance Elisabeth Vonarburg's *The Silent City* (1981), where the protagonist, Elisa, was born with recourse to technology, created and reared in a laboratory, and does not seem to consider the possibility of having a baby in the traditional way, although she enjoys the intimacy of breastfeeding the babies she herself creates in the genetic laboratories. While the women outside the protected confines of the City bear children in their wombs, Elisa never appears to envy their condition. In Winterson's *The Stone Gods* (2007), similarly, the fact that women no longer bear children in their wombs does not appear to be questioned by women any more, having become completely a part of the fabric of society. In Lois McMaster Bujold's Vorkosigan saga (*Barrayar*, *Ethan of Athos*) uterine replicators crucially reconfigure society and women's roles. While artificial wombs are never mentioned in *Oryx and Crake*, *The Year of the Flood* or *MaddAddam* (2013) it is clear that the Crakers, genetically engineered by a scientist named Crake, had to be allowed to develop in some kind of incubator, even though the whole process had to be speeded up with some kind of growth factors, as in the film *The Sixth Day* (2000), directed by Roger Spottiswoode, where clones of the characters appeared as perfect replicas of their originals, as fully grown adults, without any plausible explanation as to their mysterious and speedy development from conception to adulthood, leading to radical misconceptions as to the cloning process.

⁵ Allison Muri also observes how in postmodern fiction and film the «mechanical womb or matrix is fearsome, monstrous and grotesque» (2007, 177). Muri traces the roots of contemporary representations of cyborgs to the «man-machine» of the Enlightenment. Muri further distinguishes two main versions of the female cyborg in late twentieth-century fiction and film: one is a highly rational, sexualized, often lethal machine while the other is the «horri-fying representation of the disembodied and independently reproducing organic-mechanical womb» (107), which is a «gruesome exaggeration of monstrous industrial machinery» (*ibid.*). However, as Muri aptly notes, these are mostly male representations of contemporary female cyborgian bodies which stand in stark contrast with the real bodies of normal women.

then be lifted and a potentially more egalitarian society in gender terms might arise. Artificial wombs, when freely chosen, would also deliver women from the feeling and physical reality of being prisoners of their own bodies, solely responsible for the health of the foetus they are carrying, experiencing a concomitant loss of bodily independence. Joanna Kavenna's *The Birth of Love* (2010) addresses these very opposed visions of reproductive choice, while interrogating and complexifying the issues. In *The Birth of Love* pregnancy and the physical act of giving birth, extensively treated, are compared with the situation in a dystopian society set in the year 2153, where women no longer become pregnant, with the eggs and sperm being harvested and the healthiest and most promising foetuses growing in an artificial environment. The notion of pregnant embodiment, theorized at length by Iris Marion Young (2005) and others, and comprehensively illustrated in Kavenna's narrative, together with its opposite, ectogenetic reproduction, constitutes one of the main thematic nodes of the book.

The novel comprehensively dramatizes the numerous ambiguities attendant upon motherhood as well as its impossibility in a future eugenicist, dictatorial, dystopian regime. It consists of four interrelated narratives set in distinct time frames, spanning three centuries, which share a number of thematic concerns that provide a common thread: maternity, the pains of childbirth and the future of motherhood. The action moves between London in 2009, Vienna in the year 1865 and a future dystopian world in 2135. These threads are all held together by the dreams and fantasy of a 42-year-old pregnant woman, Brigid Hayes, who lives in London in 2009 and who has just started to feel the onset of labour pains announcing the imminent birth of her second child. In the same time frame a writer, Michael Stone, attends the launch of his historical novel, *The Moon*, whose main theme is the life and work of a Hungarian doctor, Ignaz Semmelweiss, an obstetrician who discovered the cause of an epidemic of childbed fever (puerperal fever) that killed hundreds of mothers who had just given birth or were about to. Semmelweiss traced the genesis of the spread of the disease to doctors who moved from performing autopsies on women who had died of puerperal fever to examining the other women without washing their hands. When the doctors started using chlorinated lime solutions to sanitize their hands the incidence of childbed fever was dramatically reduced. Semmelweiss could not stand the thought that he had also unwittingly contributed to the

deaths of many women before realising what was causing the disease to spread, goes mad and is incarcerated in a lunatic asylum, a fate that in the futuristic dystopian narrative similarly awaits Prisoner 730004, who fears she will be sent to what is euphemistically called an «Institution for the Improvement of Reason» (Kavenna 2010, 123). Brigid was also aware of this doctor's life and work, listening to a radio programme about him while experiencing labour pains, another of the many intertextual echoes connecting the narratives.

«She was entirely child [...] her body had been colonized» (Kavenna 2010, 50)

In his prison cell Semmelweiss muses on why philosophers like Aristotle had failed to reflect on the state of pregnant embodiment, when a woman contains another life within herself. Following this train of thought Semmelweiss ponders:

Surely this must change our notion of the human form? Surely this must change our sense of bodily autonomy, when many a woman spends decades with another self – various other selves – contained within her, as she moves successively from one pregnancy to another [2010, 148]?

Brigid feels acutely this sense of bodily invasion by another being, of having become «someone else» in her «colonized» (2010, 50) body. She was no longer autonomous but totally dependent on the new baby inside her. Indeed, for Brigid, «deprived of feeling» (2010, 287) due to an epidural, her «body does not seem to be her own» (*ibid.*). Not only does Brigid feel like a prisoner in her own body but her baby is also described as «trapped» (2010, 48) inside her, «pushing against the prison walls» (2010, 54), the language hinting at an underlying current of resentment and fear of childbirth. Simultaneously, Brigid hoped her yet unborn baby was not «too uncomfortable, too frightened, in this dark womb with the walls tightening around it» (2010, 201).

Iris Marion Young describes the pregnant subject as «de-centered, split, or doubled in several ways» (2005, 46). Indeed, the pregnant woman «experiences her body as herself and not herself. Its inner movements belong to another being, yet they are not other, because her body boundaries shift and because her bodily self-location is focused on her

trunk in addition to her head» (*ibid.*), a description that perfectly fits Brigid's perceptions of her pregnant body. In words that again fittingly apply to the latter's experience of embodied pregnancy Young asserts:

THE TOPIC

The integrity of my body is undermined in pregnancy not only by this externality of the inside, but also by the fact that the boundaries of my body are themselves in flux. In pregnancy I literally do not have a firm sense of where my body ends and the world begins. My automatic body habits become dislodged, the continuity between my customary body and my body at this moment is broken⁶ [2005, 50].

Julia Kristeva also eloquently writes about the pregnant body as a site of doubling up, describing her body as «no longer mine»⁷ (1997, 313). In related vein, Simone de Beauvoir repeatedly describes the pregnant woman's perception of her body in words reminiscent of Brigid's sensations: «Tenanted by another, who battens upon her substance throughout the period of pregnancy, the female is at once herself and other than herself» (1997, 22). Indeed, another philosophically loaded question pertaining to pregnant embodiment concerns the boundaries between self and other in the pregnant woman⁸. As Kavenna explains in an interview, the notion of the «distinct, single self is profoundly questioned by the state of pregnancy, and yet there has been, until very recently, comparatively little discussion of it» so that «being pregnant, giving birth, makes you question an entire tradition of thought»⁹. According to Christine Battersby, «We are lacking models that explain how identity might be retained whilst impregnated with otherness, and whilst other selves are generated from within the embodied self»¹⁰

⁶ A criticism that Kelly Oliver makes with reference to «Pregnant Embodiment» is that Young «assumes a freely chosen pregnancy as her starting point and never considers the phenomenological or existential crisis that getting to that point may require for many women» 2010, 78).

⁷ As Kelly Oliver in analogous vein remarks, in the case of the maternal, gestating body the «notion of "one" becomes problematic and so does the notion of "two"» (1997, 162).

⁸ See also Imogen Tyler, Reframing Pregnant Embodiment. In Ahmed, S., Kilby, J., Lury, C., McNeil, M., & Skeggs, B., (eds.) (2000). *Transformations: Thinking Through Feminism*. London and New York: Routledge, 288-301.

⁹ <http://bookmunch.wordpress.com/2011/05/13/%E2%80%98i-wanted-to-write-a-book-which-somehow-expressed-the-altered-reality-of-the-woman-who-is-pregnant-or-in-labour-or-who-has-just-given-birth%E2%80%99-an-interview-with-joanna-kavenna-ortho/>, 5/4/2014.

¹⁰ Kelly Oliver suggests that «within the maternal body the structure of social relations is already in place» (1995, xvii), stating that the mother's body and its relation to the fetus and placenta «can provide a model for an intersubjective theory of subjectivity as a process of changes» (*ibid.*).

(1998, 18). Despite her sense of loss of bodily autonomy and invasion by another being, combined with despair and impotence at the hands of the medical establishment, Brigid nonetheless accepts her labor pains and when she sees the new-born baby all her suffering is forgotten. Paradoxically, however, even though there is no question about Brigid's unconditional love and devotion for her son and still unborn new baby, her ordeal during childbirth is graphically and painfully described. The book stresses these two vying and contradictory feelings, the sense of lack of bodily independence, on the one hand, and the deep-seated maternal feeling on the other.

Indeed, Brigid deeply resents her lack of control over her own body, her enforced passivity. While waiting for the baby to be born she lies on the hospital bed, «inert, [...] her labor [...] continuing, without her intervention or even awareness» (281). Moreover, she does not seem to be in charge of when the baby leaves the womb: «Within her body, though she does not notice, [...] the baby is preparing to leave» (281). The foetus is indeed in charge of Brigid's body from the beginning, colonizing it as it were, down to the moment of labor, induced by the «release of a hormone from the “baby's” pituitary gland» (1997, 26), according to Johnson and Paine¹¹, so that it is effectively the foetus that appears to be responsible for inducing its own delivery from the womb¹².

Kavenna's *The Birth of Love* provides fictional expression to this very contradictory struggle between the mother's body and the foetus, while simultaneously describing the mechanized, impersonal alternative to the inextricable closeness between mother and baby in the future narrative where women start longing for that (often problematical) proximity, having been denied that option by the mandatory use of artificial wombs. The novel appears to imply that the automation or mechanization of reproduction is radically impersonal and to be avoided, whereas traditional gestation, an experience where the mother often finds herself immersed in a profoundly conflicting situation from which she cannot disentangle herself, is, after all, preferable.

While Julia Kristeva believes that mothers might be «our only safeguard against the wholesale automation of human beings» (1997, 402) Kelly Oliver calls attention to the

¹¹ See Kelly Oliver, 1997, 26.

¹² In related vein Kelly Oliver observes that the fetus «has become the superior individual in the relationship between the maternal body and the fetus [...]. Pregnant women have become subjects only insofar as they are responsible for providing the proper prenatal care for their unborn child» (1997, 27).

paradoxical position of mothers in our contemporary, highly technologized society by observing that women continue to «carry the burden – or labor of love – of introducing children to language and sociality» (2010, 93). It is precisely this «burden – or labor of love» that is elaborately dramatized in Brigid's pregnancy and painful childbirth in Kavenna's novel, with Brigid's experience contrasted with that of a dystopian future where women no longer bear children.

Closed Wombs, Egg Donors and Progeny of the Species

The futuristic thread of Kavenna's book is set in a dystopian world in 2135 where global warming and overpopulation have led to widespread destruction of the natural world. In this strictly controlled, eugenically driven society, reproduction is completely divorced from sex, women are barred from childbirth, with babies created and brought to term in artificial wombs; such concepts as home and family have disappeared, and children no longer live with their parents. The word “mother” is not in use anymore¹³, having been substituted by the expression «egg donor» (111), children are known as «progeny of the species» (*ibid.*) and parents are described as «sperm and egg donors» (*ibid.*). In this future world women are «harvested» (*ibid.*) for eggs when they are eighteen and then sterilized, while their wombs are «closed up» (119).

The thoroughly clean and aseptic world of «The Tower», where human beings are «bred in sterilised sparkling machines, in the pristine technocratic sanctuary of the Genetix» (129), is contrasted with the traditional world that existed prior to the cataclysmic devastation, where women gave birth. The ideology of this new world revolves around what its rulers describe as the survival of the species, including regulated procreation from only the most superior eggs and sperm. A group of people, unhappy with their confined and strictly regimented life in a city significantly called Darwin C, believe that a woman amongst them, named Birgitta, has against all odds become pregnant. They flee with her to an island in the Arctic Circle, described as a Restricted area, where whole generations had previously been born and spent their lives. There they

¹³ This situation is reminiscent of that in Aldous Huxley's *Brave New World* where the word mother is considered obscene.

set up their own farms but are eventually captured and brought back to Darwin C where they are put in prison. During her interrogation, Prisoner 730004 explains how they wanted to live in a proper home and how much she wanted to have a child. Indeed, Prisoner 730004 describes having been «harvested» and having had her womb closed as being «stripped of my biological right and deprived of joy» (247). Her «allocated role» (112) was in the nurture grounds where she looked after young babies, an activity that made her feel profoundly sad because she could not have a child of her own. The representative of the Protectors who interviews her chastises her for using the words child and babies, replaced by «progeny of the species», telling her that indeed her eggs have «generated many progeny of the species» (*ibid.*). She replies she means children of her own womb, «grown and nurtured by my own body» (*ibid.*), not children generated in a laboratory with sperm from men she will never meet.

In this world emotions are frowned upon while anti-species thoughts are described as a «random twitching of neurons» (111) and thoroughly discouraged, since only the Collective counts, a situation strongly reminiscent of Huxley's *Brave New World*. Indeed, in both novels women take hormones after sterilisation in order to offset bodily yearnings for pregnancy and motherhood, although in the case of Prisoner 730004 the doses of «hormone readjustment» (115) were not enough to counteract her longing to become pregnant (in *Brave New World* Lenina's lack of "promiscuity" is also attributed to a failure in the hormonal dosage). Indeed, deprived of reproductive choice, some women develop a strong craving for motherhood despite the compulsory hormonal readjustments, dreaming of bearing a child in the old, traditional way, with Birgitta, a descendent of Brigid Hayes, cast in the role of a kind of Virgin Mary and her baby as the new Messiah. Indeed, Birgitta's is the last baby in the world to be born in the traditional way, or the first in a long time, and is regarded as a kind of Messiah by the Prisoners, like the harbinger of hope, in many ways like the unborn baby in P. D. James's *Children of Men*.

What Prisoner 730004 hoped was that women might one day «regain our former power, to create life within our bodies» (117). "Power" is an instructive word here, since women's procreative capacities have traditionally been depicted in terms of power, which men have often tried to appropriate by technological means. Precisely because it is a capability only women have, carrying and birthing a child has also been described by

men in a somewhat derisive fashion as “woman’s work”. “Choice” is of course another operative word here, carrying the burden of the possibility of the ethical decision whether and when to become pregnant and gestate a foetus or choose an artificial womb, when these become available. Prisoner 730004 also explains that the impetus to escape to the island came to a head when they discovered that a girl named Birgitta was pregnant despite having been harvested at eighteen and having had her womb closed up. Birgitta feels freakish, believing she is sick and in need of a cure. Treating pregnancy as a kind of illness requiring technological and medical help has been of course a longstanding complaint on the part of many women, which is taken here to radical extremes.

All the sections of the book are thematically interlinked by themes of confinement and incarceration in small, constricting places, symbolic of the womb, with its «prison walls» (54), by the presence of the moon and by dreams of blood like that of prisoner 730004. She dreamt she was «encased in blood» (111), which she could drink and breathe in, feeling «peaceful and happy» until she woke up «sweating and crying» (*ibid.*), mimicking a baby’s departure from the maternal womb. Significantly, after their trip to the Arctic Circle in a crater where they were hidden for three days, Prisoner 730004 describes their train journey as a cathartic experience, as a «descent into the body» (128), and their release from the crater as if «suddenly we were dirtied, reborn into viscera and filth» (129), subsequently going through a long tunnel, in short, reliving the birth experience that only Birgitta had, since she was born from a mother, just prior to the enforced sterilization of all women. At the end of the novel, the birth of Brigid’s child through a caesarean section is also depicted with recourse to blood, «torrents of blood» (306), while the doctor grapples inside the womb to remove the baby, with Brigid’s husband believing for a moment that the blood has «drowned the baby» (*ibid.*), thus establishing a symbolic connection with prisoner 730004’s dream. Meaningfully, these dreams also implicitly contrast with a future in which, with artificial wombs, there will no longer be blood involved in the “decanting” of babies from the mechanical uteruses.

In the last section of the book all the distinct but intricately intertwined threads come together, as the lives of the different protagonists come to a head: Brigid’s, Michael’s, Semmelweiss’s and the Prisoners’. Brigid and the Prisoners’ lives are interconnected by their need to “endure” (275), to suffer, to be patient, in their drugged state. Brigid has a

caesarean section to deliver her baby after almost two days of terrible suffering. The Prisoners who escaped Darwin C and helped Birgitta are found guilty of conspiring against the survival of the species and sent to the mass-scale farms where they will die of hard work and malnutrition, or to an Institution for the Improvement of Reason, that is, a lunatic asylum. They are also told that Birgitta, who gave birth to a son, has died, which they know means has been killed, together with what they call «progeny of the species». Michael, in turn, has finally decided to go and visit his mother whom he has not been in touch with for a long time and who is dying in a mental care facility. In turn, in the 1865 thread, Robert von Lucius, who has just been to visit Semmelweiss in the lunatic asylum, is told that he has just died and decides to do all he can to help prove his theory about how puerperal fever was spread and to disseminate the cure he has found in order to prevent more needless deaths.

Conclusion

Kavenna's novel traces the plights of mothers from the dangers of catching puerperal fever in hospitals where they go to give birth, to Brigid's safer but still extremely painful present-day medicalized birth and then on to the elimination of birth in a future dystopian society where mechanical incubators are used and pregnancy no longer exists. The dystopian narrative in *The Birth of Love* portrays a very negative vision of ectogenetic technology, mainly because women live in a totalitarian society where they do not have a choice. In that kind of dictatorship, there is no alternative since all women have their wombs "closed" and thus the option of selecting extra-uterine gestation never even arises.

The two very different perspectives on pregnancy in Kavenna's book, however, do not include the alternative scenario of a technologically developed society in the relatively near future where artificial wombs will have become normal and affordable, subject to the individual decision by women (or men) to avail themselves of that option. Having greater control over their reproductive functions, including whether or not to use their womb to become pregnant, can clearly be seen as part of the emancipatory potential of ectogenesis for women or men, who in this future scenario could also putatively wish to

make use of the artificial wombs.

On the other hand, it is feasible that in the not so distant future both women and men might be able to “wear” an external artificial womb, described as a «Siemens carapace» in L. Timmel Duchamp’s short story *The Man Who Plugged In* (1998), which provocatively portrays some of the implications of novel reproductive technologies for sexual paradigms. The protagonist, Howard Nies, becomes the first man to carry a baby to term in an external, gestational carapace, described as a “prenatal cradle of caring” (1998, 20) manufactured to ensure that the “child within is getting better care and protection than any naturally gestated child” (*ibid.*), together with a womb provided by his wife. This male pregnancy story turns the tables on conventional gender roles and expectations as Nies goes through a series of changes brought about by a regime of hormonal therapy, while the profound impact of his decision on his marriage is also gone into in great detail. Drawing again on Huxley’s *Brave New World* as a significant intertext, Nies declares, after becoming a male mother: «It’s a new world, for men, a big, bold, brave new world» (1998, 50).

Maybe the closest approximation in fiction to a utopian, egalitarian scenario in reproductive terms is Marge Piercy’s *Woman on the Edge of Time* (1976) where in Mattapoissett, a pastoral, sustainable and yet highly technological society of the future babies are gestated in artificial wombs, in a welcoming «space that looked more like a big aquarium than a lab» (1976, 101), sexual differences do not matter anymore and men can breastfeed their babies thanks to hormone injections. Even though to the protagonist, Connie, it looks like a factory for «bottle babies» (1976, 94), another character, Luciente, who inhabits this future, utopian, alternative world, explains that with the development and introduction of ectogenesis, when they were «breaking all the old hierarchies» (1976, 97), there was

that one thing which we had to give up too, the only power we ever had, in return for no more power for anyone. 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 became mothers»¹⁴ [*ibid.*].

¹⁴ Mattapoissett, however, does not bear much resemblance to Western societies and as a blueprint it is thus not as effective as it could be. Piercy does not consider Mattapoissett as a utopia since there’s «almost nothing there except the brooder not accessible now. So it’s hardly a utopia; it is very intentionally not a

Shaken and stunned by the sight of the foetuses in the brooder Connie «hated them, the bland bottleborn monsters of the future, born without pain»¹⁵ (1976, 98).

It was this very feeling of being biologically enchained to reproduction mentioned by Luciente that Beauvoir, Firestone and others vehemently objected to and that is also addressed and problematized in Kavenna's novel. As Simone de Beauvoir observes: «woman, like man, is her body; but her body is something other than herself» (1977, 61). According to Beauvoir women often experience their body, especially during menstruation, «as an obscure, alien thing» (1977, 29), a feeling that also applies to the pregnant body and menopause. Indeed, as Beauvoir claims, when it comes to reproduction, the «individuality of the female is opposed by the interest of the species» (1977, 25). This sense of lack of bodily autonomy is at odds with the sacralization of maternity prevalent in our society, where the demands of pregnancy and motherhood are often negotiated through biomedical technologies. With inevitable progress towards the implementation of artificial wombs, what can be described as posthuman parturitions will in the not so distant future undoubtedly reconfigure the natal and postnatal landscape of reproduction and as a consequence the sexual politics of this “brave new world”.

References

- Aristarkhova, Irina (2012). *Hospitality of the Matrix: Philosophy, Biomedicine, and Culture*. New York: Columbia University Press.
- Atlan, Henri (2005). *L'utérus artificiel*. Paris: Éditions du Seuil.
- Atlan, Henri (2011). The Mother Machine. Transl. by Cara Weber. In Stephanos Geroulanos and Todd Meyers (Eds.), *Selected Writings on Self-Organization, Philosophy, Bioethics, and Judaism* (342-350). New York: Fordham University Press.
- Atwood, Margaret (2003). *Oryx and Crake*. London: Bloomsbury.
- Atwood, Margaret (2009). *The Year of the Flood*. London: Bloomsbury.

utopia because it's not strikingly new. The ideas are the ideas basically of the women's movement» (Piercy, 1982, 100).

¹⁵ The pain of childbirth is of course a crucial *leitmotif* in Kavenna's novel.

Beyond the Womb? Posthuman Parturitions in Joanna Kavenna's «The Birth of Love»

- Atwood, Margaret (2013). *MaddAddam*. London: Bloomsbury.
- Battersby, Christine (1998). *The Phenomenal Woman: Feminist Metaphysics and the Patterns of Identity*. New York: Routledge.
- Bujold, Lois McMaster (1986). *Ethan of Athos*. Riverdale NY: Baen.
- Bujold, Lois McMaster (1999). *Barrayar*. In *Cordelia's Honor* (257-290). New York: Baen.
- Bulletti, Carlo; Palagiano, Antonio; Pace, Caterina; Cerni, Angelica; Borini, Andrea & de Ziegler, Dominique (2011). The artificial womb. *Annals of the New York Academy of Sciences*, 1221, 124-128.
- Corea, Gena (1985). *The Mother Machine: Reproductive Technologies from Artificial Insemination to Artificial Wombs*. London: The Women's Press.
- de Beauvoir, Simone (1977). *The Second Sex*. Trans. and eds. by H. M. Parshley. Harmondsworth: Penguin.
- Descamps, Philippe (2008). *L'utérus, la technique et l'amour: L'enfant de l'ectogenèse*. Paris: Presses Universitaires de France.
- Duchamp, L. Timmel (2006). The Man Who Plugged In. In Mary Flanagan and Austin Booth (Eds.), *Reskin* (19-50). Cambridge, Massachusetts: MIT.
- Firestone, Shulamith (2003). *The Dialectic of Sex: The Case for Feminist Revolution*. New York: Farrar, Straus and Giroux.
- Held, Virginia (1989). Birth and Death. *Ethics*, 99 (2), 362-388.
- Huxley, Aldous (1998). *Brave New World*. New York: Perennial Classics.
- James, Phyllis D. (2010). *The Children of Men*. London: Faber & Faber.
- Kavenna, Joanna (2010). *The Birth of Love*. London: Faber and Faber.
- Kavenna, Joanna (2011). Interview with Joanna Kavenna conducted by Valerie O'Riordan. <http://bookmunch.wordpress.com/2011/05/13/%E2%80%98i-wanted-to-write-a-book-which-somehow-expressed-the-altered-reality-of-the-woman-who-is-pregnant-or-in-labour-or-who-has-just-given-birth%E2%80%99-an-interview-with-joanna-kavenna-autho/>, 5/4/2014.
- Kristeva, Julia (1997). Stabat Mater. In Kelly Oliver (Eds.), *The Portable Kristeva* (308-330). New York: Columbia University Press.

- Latimer, Heather (2013). *Reproductive Acts: Sexual Politics in North American Fiction and Film*. Montreal: McGill-Queen's University Press.
- Muri, Allison (2007). *The Enlightenment Cyborg: A History of Communications and Control in the Human Machine, 1660-1830*. Toronto: University of Toronto Press.
- Oakley, Ann (1984). *The Captured Womb: A History of Medical Care of Pregnant Women*. Oxford: Blackwell.
- Oliver, Kelly (1995). *Womanizing Nietzsche: Philosophy's Relation to the "Feminine"*. New York and London: Routledge.
- Oliver, Kelly (1997). *Family Values: Subjects Between Nature and Culture*. New York and London: Routledge.
- Oliver, Kelly (2010). Enhancing Evolution: Whose Body? Whose Choice?. *The Southern Journal of Philosophy*, 48, 74-96.
- O'Reilly, Andrea (Eds) (2007). *Maternal Theory: Essential Readings*. Ontario, Canada: Demeter Press.
- Piercy, Marge (1976). *Woman on the Edge of Time*. New York: Fawcett Crest.
- Piercy, Marge (1982). *Parti-Colored Blocks for a Quilt*. Michigan: University of Michigan Press.
- Rich, Adrienne (1995). *Of Woman Born: Motherhood as Experience and Institution*. New York: W. W. Norton & Company.
- Smajdor, Anna (2007). The Moral Imperative for Ectogenesis. *Cambridge Quarterly of Healthcare Ethics*, 16 (3), 336-345.
- Smajdor, Anna (2012). In Defense of Ectogenesis. *Cambridge Quarterly of Healthcare Ethics*, 21 (1), 90-103.
- Tyler, Imogen (2000). Reframing Pregnant Embodiment. In Ahmed, S., Kilby, J., Lury, C., McNeil, M., and Skeggs, B., (Eds). *Transformations: Thinking Through Feminism* (288-301). London and New York: Routledge.
- Vonarburg, Elisabeth (2002). *The Silent City*. Trans. from the French by Jane Brierley. Calgary, Alberta: Edge.
- Winterson, Jeanette (2007). *The Stone Gods*. London: Hamish Hamilton.
- Young, Iris Marion (2005). Pregnant Embodiment: Subjectivity and Alienation. In *On Female Body Experience: "Throwing Like a Girl" and Other Essays* (46-61). Oxford:

Beyond the Womb? Posthuman Parturitions in Joanna Kavenna's «The Birth of Love»

Oxford University Press.

The logo consists of a light brown square with a white border, containing the text 'THE TOPIC' in white, uppercase letters on a dark orange background.

Film

Spottiswoode, Roger (2000). *The Sixth Day*. USA.

Aline Ferreira is an Associate Professor at the University of Aveiro, in Portugal, where she teaches English Literature. Her main interests include the intersections between literature and science as well as literature and the visual arts, feminist utopias and women's studies. Her book *I Am the Other: Literary Negotiations of Human Cloning* was published by Greenwood Press in 2005. Recent publications comprise articles on feminist utopias, eugenics, biotechnological dystopias and bio art. She is now working on a book provisionally entitled: *The Sexual Politics of the Artificial Womb: Fictional and Visual Representations*.