

AN ETHICAL ANALYSIS OF ECTOGENESIS AND ITS IMPLICATIONS ON THE ABORTION DEBATE

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Abstract

Ectogenesis, the technology which allows a foetus to develop independently from its mother's body, will likely become a reality within the next few decades. This paper explores the potential and significant implications of this technology on the abortion debate. It first examines William Simkulet's argument, according to which ectogenesis will end the abortion debate by presenting a unique opportunity for a moral compromise between those who oppose and those who favour abortion. It will be argued that Simkulet's reasoning is unsound and non-feminist, premised upon a misinterpretation of the concept and purpose of abortion. Furthermore, this paper raises the question of whether there are plausible reasons which justify killing abortions in the context of ectogenesis. Eric Mathison and Jeremy Davis, and Bruce Blackshaw and Daniel Rodger have advanced several arguments against the right to the death of an ectogenetic foetus. This paper responds to their analyses, concluding that their arguments are unsuccessful and that there is a right to the death of a foetus which is not sentient, even when ectogenesis will be available.

Key words: ectogenesis, abortion, foetus, moral compromise, rights, parenthood, moral status.

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Introduction

Imagine living in “Ectoworld” (Brassington, 2009), a place where ectogenesis, the process of transferring the foetus from a mother’s womb to an artificial womb and carrying it to term, is standard practice. It is a world where the extreme prematurity of a foetus has stopped to be one of the leading causes of neonatal mortality. It is a world where “mother” is a superfluous term. If you think that this is just a thought experiment, recent developments in medical technology have actually led to the potential realisation of Ectoworld in the foreseeable future. The possibility for foetuses to develop artificially, independently from their gestational mother’s body, has raised significant worries in the bioethical discussion, and an analysis of the ethical consequences ectogenesis might bring to society, foetuses, and women is required.

Some theorists have argued that the use of ectogenesis would conclude the debate about abortion (Singer and Wells, 1984; Simkulet, 2019). By making it possible to remove the foetus from the gestating woman without killing it, this technology allows reconciliation between the alleged foetal rights with women’s rights. Therefore, it presents a unique opportunity for a moral compromise between those who oppose and those who support abortion. However, others have claimed that the abortion debate could not be ended. According to such views, conceiving abortion as the termination of a pregnancy disregards the actual reasons behind undertaking such a practice; namely, the desire not to become a mother (Rowland, 1992; Langford, 2008). In this regard, some philosophers sustain that abortion rights are grounded not only on the right to terminate the pregnancy but also on the right to the death of the foetus (Räsänen, 2017). As a result, even if ectogenesis was available, they argue that it would be morally permissible for the parents to kill the foetus.

My essay has two aims. The first is to evaluate the sacrifices of the two parties involved in the abortion dilemma – namely, anti-abortionists and pro-choice advocates – and to establish whether a moral compromise would be possible. I argue that the views which present ectogenesis as a moral compromise do not consider the moral relevance of a woman’s desire not to become a mother in the abortion debate. I claim that such arguments are non-feminist and unsound, and that a moral compromise is not possible. The second is to discuss whether the parents have a right to the death of the foetus, despite the opportunity of the foetus’ survival via ectogenesis. I aim to reject the objections against the possibility of this right raised by authors such as Eric Mathison and Jeremy Davis (2017), and Bruce Blackshaw and Daniel Rodger (2019). I claim that, in light of a sentience criterion for the moral status of the foetus,

the biological parents have a right to kill it within the end of the second trimester of development.

Within *Section One*, I will feature an exposition of the definition and purposes of ectogenesis. In *Section Two*, I will present William Simkulet's argument (2019), which presents ectogenesis as a valid alternative to abortion. Simkulet asserts that any argument for abortion relying on the right to self-defence and bodily autonomy can be satisfied by terminating the pregnancy, without the otherwise necessary implication of the foetus' death. I will reject his view by claiming that such an "ectogenetic compromise" is a reductionist representation of abortion as a woman's wish not to be pregnant. Instead, by adopting a feminist standpoint methodology, I will argue that the aim of abortion and the reason why women choose to abort primarily consist of preventing motherhood. My claim will be sustained by empirical research about women's attitudes towards abortion and ectogenesis. I will conclude that ectogenesis cannot be considered a moral compromise¹.

Within *Section Three*, I will introduce the argument which assesses whether the mother has a right to the death of an ectogenetic foetus. Firstly, I will present some views which believe that killing abortions would not be morally permissible once ectogenesis is available, given that abortion rights are grounded on principles of self-defence and bodily autonomy. I will respond to such claims by advancing two arguments supported by Joonas Räsänen (2017) which defend a right to the death of the foetus; namely, the arguments based on biological parents' rights and property rights. I will then consider and try to reject some objections raised by Mathison and Davis (2017) and Blackshaw and Rodger (2019) against Räsänen's arguments. My reasoning will assume the same premises on which such objections are based. This methodology allows me to counterargue more substantially and to present a more convincing conclusion. Furthermore, I will suggest that the discussion about the right to the death of the ectogenetic foetus cannot be complete without addressing the issue of its moral status – a topic which has not been adequately discussed by either Räsänen, or Mathison and Davis, and Blackshaw and Rodger.

¹ *Section One* and *Section Two* refer to issues which I have already addressed in one of my previous papers (Sica, 2020). I want to make clear that I have decided to re-use some of the paragraphs from my past paper since they are essential for the purpose of my current argument. In the text, I add a reference at the end of the paragraphs which has been entirely or partly repeated. Anyway, in this paper, I have further developed my reasoning: I have added several arguments and raised some objections to challenge and make my claim stronger and more convincing. This process helped me to develop a consistent, personal line of thoughts through different perspectives.

Finally, in *Section Four*, I will consider the debate about the moral status of the foetus. I will try to assess a criterion to establish moral status by evaluating four among the most known theories: human exceptionalism, personhood, life, and sentience. I will indicate a sentience-related argument as the least problematic account for moral status. As a result of this discussion, I will argue that Mathison and Davis (2017) Blackshaw and Rodger's (2019) objections against the right to the death of the foetus are profoundly weakened. I will claim that it is possible to kill the ectogenetic foetus before it becomes sentient.

Section One

What is ectogenesis?

In this section, I am firstly going to describe what is meant by ectogenesis. I will then briefly outline the potential implications of such a technology on issues related to pregnancy, to finally focus on the concerns related to the ethical debate of abortion (Sica, 2020).

Ectogenesis consists in the process of creating an environment that will simulate that of a pregnant woman's womb, including a flux of oxygen, filled with specific nutrients needed to recreate the environment present in the uterus, and a form of waste disposal (Gelfand & Shook, 2006; Lee, 2016; Partridge et al., 2017; Romanis, 2018; Shultz, 2010). The use of such an artificial womb would support the development of a foetus outside the gestational mother's body, during the period which it would naturally exist in her uterus. Ectogenesis and the artificial womb do not represent the same thing: ectogenesis is the process, whereas the artificial womb is the tool where the foetus develops. Nevertheless, for the purpose of this paper, making a sharp distinction is not necessary. Therefore, I will use these two expressions interchangeably (Sica, 2020).

The technology of extracorporeal support of the foetus has made significant progress over the last years. Even if still not available for human foetuses, recent technological studies on the subject have been made to assure the survival of animal foetuses such as extreme premature lambs in artificial environments (Partridge et al., 2017).² Given that extreme prematurity is a significant cause of neonatal mortality and morbidity (Glass et al., 2015), there is a strong incentive to continue developing ectogenesis. Some researchers view ectogenesis as scientifically feasible; this brings us to the need of considering the relevance of ectogenesis to the bioethical discussion on a purely theoretical level before rushing into this technology.

For the sake of the argument which will follow, I will theoretically consider the artificial womb as similar in the relevant respects to the natural womb, providing an analogous environment and stimuli. Indeed, for the purposes of this paper, a consideration over the emotional bond which develops between mother and foetus when the foetus resides in her

² In the ectogenetic debate, little weight has been given to ethical concerns non-relating to human beings. Nevertheless, animal research represents another crucial bioethical issue when considering ectogenesis. Experiments might involve trauma to the mother animals, whose pregnancy are surgically interrupted, with likely resulting damages to the foetuses themselves. Despite this going beyond the scope of this thesis, I consider such a too often discarded concern as worth mentioning.

womb will not be relevant. Moreover, this thesis will refer to both the specific practices of partial and full ectogenesis. The former one consists of a process where the use of the technology starts in mid-pregnancy, allowing the foetus to develop in the artificial womb partially. Such a practice is distinguished from full ectogenesis. We refer to the latter case when the use of technology starts from the moment of conception, or soon afterwards. Hence, the process of the development of a foetus entirely takes place in an artificial womb.

Extracorporeal gestation will plausibly have essential impacts on issues related to pregnancy and reproduction. For instance, ectogenesis might present a solution to avoid the risk of complications concerning pregnancy and childbirth. Furthermore, it might bypass some ethical worries regarding surrogacy, allowing women not to carry a child in their wombs (Simonstein, 2006; Smajdor, 2007). Finally, some argue that ectogenesis would serve as an alternative in the abortion debate, making it an appealing practice for both pro-choice supporters and anti-abortionists. Such a point raises moral problems and controversies, which I will try to expose and develop in the following sections (Sica, 2020).

Section Two

Can ectogenesis be a moral compromise?

This section focuses on the possibility advanced by ectogenesis to reconcile two opposite perspectives regarding the abortion debate – namely, pro-choice theorists and anti-abortionists.

This section is structured as follows. In the sub-section 2.1, following William Simkulet (2019) and Peter Singer and Deane Wells (1984), I present the argument which conceives ectogenesis as a valid alternative to abortion. Within the sub-section 2.2, I argue that their reasonings cannot suggest a solution to the abortion conflict since, by dismissing feminist accounts of abortion, they offer a reductionist exposition of pro-choice views. I conclude, therefore, that ectogenesis cannot be considered a moral compromise.

2.1 The ectogenetic compromise

Hereafter, I am going to discuss whether ectogenesis could be considered a moral compromise in the debate between anti-abortionists and pro-choice supporters. Before starting my argument, some clarifications regarding the key terms of the discussion are in order. Firstly, the notion of *moral compromise* consists of a means to resolve a moral disagreement in which all parties make concessions. Indeed, as David Archard (2012) specifies, in a moral compromise, each party involved obtains less than initially demanded. However, they acknowledge that the achievement of an agreement and a shared understanding is more advantageous than “to remain at logger-heads” (403)³. As I will show in the following, the moral compromise discussed here will not require the parties involved to act in ways which

³ An example of moral compromise is given by Martin Benjamin in his book *Splitting the Difference* (1990). In an intensive care unit, Benjamin depicts a disagreement between an experienced nurse and the attending physician about whether aggressive treatment should be continued for a young patient who has suffered severe brain damage. The nurse believes that the current aggressive treatment should be discontinued given the high costs and the low chances for the patient to benefit from it. She also argues that those resources could be used to provide greater benefits to other patients in the unit. On the contrary, the doctor favours continuing the treatment, by appealing to the young age of the patient, who has more chances to recover than other patients, and to a physician’s moral obligation to support life. The nurse and physician finally agree to a compromise: aggressive treatment will be continued for a specific, limited period, at the end of which the patient’s conditions will be evaluated. If no sign of improvement has shown up, the treatment will be reduced. This resolution consists of a moral compromise. Both the nurse and the physician are required to renounce to the complete satisfaction of their beliefs about their obligations towards the patient. However, even if they still acknowledge the full force of their moral responsibilities, they recognise that such an agreement is preferable to continued disagreement.

they would find morally unacceptable. In such a case, the achievement would be of a *clean* moral compromise between the two parties (Sica, 2020).

Moreover, I use the term *anti-abortion* rather than *pro-life* since the latter might incorrectly imply that pro-choice supporters do not defend life or do not consider it as intrinsically valuable⁴. Furthermore, I have opted for the term *pro-choice* to indicate a view which supports women having the legal possibility to resort to aborting practices (Sica, 2020).

Finally, a distinction between the practices of *killing abortion* and *disconnect abortions* is needed. Such a distinction finds its basis on the moral difference between killing and letting die (Simkulet, 2019: 2). Indeed, whereas killing abortions consist of killing the foetus in the womb, disconnect abortions entail letting the foetus die by removing it from the womb. As I will show in the following, such a difference might serve as a foundation for a moral compromise between anti-abortion and pro-choice advocates (Sica, 2020).

Having clarified the central concepts of the discussion, let us now consider the argument of conceiving ectogenesis as a moral compromise in the abortion conflict. In the following, I am going to briefly show the views of the two opposite sides of the debate about abortion as presented in Simkulet's analysis (2019). By considering Jarvis Thomson's thought experiment of the famous violinist (1971), I will present the argument which claims that ectogenesis can be an alternative to abortion. Furthermore, I will expose some ethical and practical concerns related to ectogenesis, and Simkulet's and Singer and Wells' proposals (1984) to bypass them. Such worries include the future of the foetus and the resulting child after having implemented ectogenesis; the medical risks involved in disconnect abortions through the medical process of hysterotomy; finally, the issue of carrying experiments on a foetus (Sica, 2020).

In the abortion debate, conferring moral status to the foetus, and the rights that such an attribution implies, has become a matter of utter importance. In *Section Four*, I will focus specifically on how and why a foetus can be considered having moral status. So far, it will be sufficient to say that abortion opponents such as John Noonan (1984) and Eberhard Welty (1963) claim that, given the foetus having full moral status, it cannot be killed under any circumstances: "At the moment when conception occurs in the mother's womb God infuses

⁴ See, for instance, Ronald Dworkin's exposition (1993) of the so-called detached view on abortion, according to which both anti-abortionists and pro-choice advocates agree on the sanctity of life: "This idea that I said binds us all together, that our lives have intrinsic, invaluable value, also deeply and consistently divides us, because each person's own conception of what that idea *means* radiates throughout his entire life" (28).

the soul and human life begins [...] To kill this helpless creature with full knowledge and consent is to commit murder” (Welty, 1963: 123). The foetus has, indeed, a right to life. The majority, however, would claim that abortion is permissible when pregnancy has been caused by rape, or when the life of the pregnant woman is endangered (Warren, 2000).

According to pro-choice advocates, approaching the ethics of abortion from such a one-side perspective might be quite limiting. Considerations on the moral status of the foetus cannot be guided only by focusing on the intrinsic properties of the foetus. Instead, such intrinsic properties must also be compared with the rights conferred to the pregnant woman. As Mary Anne Warren claims (2000: 202), the relational properties of the foetus with the pregnant woman are relevant, and the foetus has no moral status independent of its mother⁵. Specifically, such relational properties regard the foetus’ entire physiological dependence upon the body of a woman (who is normally both sentient and a moral agent) until near term. Such a consideration needs to be taken into account in the debates of the moral status of the foetus and abortion. Given this relationship of foetus’ dependence on the pregnant woman, the competent mother-to-be assumes the role of moral guardian of the foetus, and her rights should overcome the foetus’ alleged ones if conflicts arise. Indeed, pro-choice supporters emphasise the fact that women, as moral agents, have the right to life, freedom, and the responsible exercise of moral agency. They have the right, specifically, to decide what happens to and in their bodies. In Simkulet’s paper (2019), therefore, the arguments pro-choice find their ethical grounds on the principle of self-defence, bodily autonomy, and the right to terminate a pregnancy, which should override the right to life of the foetus as advocated by anti-abortionists. Such reasonings are illustrated by Thomson’s thought experiment (1971), an analogy to pregnancy which I present hereafter (Sica, 2020).

A famous violinist suffers from a fatal kidney ailment. To assure his survival, his circulatory system has been plugged into yours, being the only one with the right blood type to help. However, such measures have been taken while you were unconscious or sleeping. Once awake, you are told that the violinist needs to remain connected to your circulatory system for nine months for him to be completely recovered. If you try to unplug yourself, you will let the violinist die. Thomson (1971) claims that it would be morally permissible to detach yourself. Indeed, in her view, no one should be morally required to make such an extreme sacrifice to

⁵ In regard to the relational properties between the mother and the foetus, it is worth noticing Elselijn Kingma’s considerations in her paper *Were You Part of Your Mother?* (2019), where she discusses whether the mammalian embryo/foetus is a part of or merely contained within the organism that gestates it.

keep another individual alive (64). Analogously, a pregnant woman has no obligation to keep carrying her foetus since, even by accepting the view that a foetus has a right to life, this does not imply having “a right to be given to the use or a right to be allowed continued use” of someone else’s body (56). Our right to liberty and bodily autonomy, therefore, should assure the right to abortion (Sica, 2020).

In this paper, I am not going to evaluate whether such an argument is effective in supporting abortion rights. Instead, as Simkulet argues (2019), Thomson’s analogy (1971) is crucial in determining how abortion opponents and supporters might find a compromise in the use of ectogenesis. Thomson makes a clear moral distinction between disconnect abortions and killing abortions. The author aims to demonstrate the moral justifiability of the former, where no argument for the latter is provided. Indeed, abortion is here conceived as a means to provide the termination of the pregnancy rather than the end to the life of the foetus. Such a distinction emphasises a moral difference between killing and letting die, which is essential as a foundation for a moral compromise. Indeed, some anti-abortionists do not object against disconnect abortions in those particular cases when, for example, a pregnant woman’s life is at risk (Sica, 2020).

Currently, the removal of the foetus to terminate pregnancy necessarily implies its death (if the foetus is not viable yet). However, the possibility of ectogenesis would prevent such a consequence, still fully respecting and fulfilling women’s self-defence and the right to terminate a pregnancy. Being able to save one’s foetus through this technology is a real revolution to many people, especially when a woman’s choice to abort is taken in cases of extreme urgency (e.g., saving her own life), despite her wish to become a mother. Singer and Wells (1984) specifically claim that feminists would not object against the possibility of ectogenesis. Once this medical procedure is available, the issues of the “Freedom to choose what is to happen to one’s body”, and the “Freedom to insist on the death of a being that is capable of living outside one’s body” (135) will be no longer in conflict. Therefore, by providing an artificial environment where the extreme premature foetus can develop outside the gestational woman’s body, ectogenesis might present an excellent alternative to abortion, and “Pro-choice feminists and pro-foetus right-to-lifers can then embrace in happy harmony” (135).

Some might worry about what would happen to the foetus developing in an artificial womb, once discarded by the biological mother. Singer and Wells (1984) and Simkulet (2019) argue

that adoption would be the most plausible solution for those women who do not wish to become mothers. In particular, Simkulet suggests that the government might intervene to facilitate adoptions; for instance, by paying parents to adopt and raise children. In sub-section 2.2, I will argue that considering adoption as a valuable solution to ectogenetic children might raise critical controversies.

It might be objected that disconnect abortions through hysterotomy entail more medical risks than killing abortions (Simkulet, 2019: 2; Tupa, 2009: 8). Nevertheless, such risks might be a price worth paying in order to achieve a moral compromise. As Simkulet suggests (2019), pro-choice theorists might agree to “exclusively pursue (relatively risky) disconnect abortions over (relatively safe) killing abortions” (2). In my view, Simkulet proposes an overly simplified solution to the matter. Despite the satisfaction of ectogenetic moral compromise requiring such a concession, women would unlikely choose the ectogenetic solution, given the higher medical risks of alternative procedures as the foetal removal through the caesarean section to the currently safest treatment of suction aspiration (Langfoord, 2008: 266). However, these concerns might be empirically disproven. As Christopher Kaczor (2005) argues, many medical procedures were previously dangerous and are now safe. Hence, as technology and medical care progress, we might plausibly assume that the danger involved in ectogenetic procedures will be insignificant (108) and that, only in such a case, women could be more likely induced to undertake ectogenesis.

Another worry is that, as some might argue, anti-abortionists might oppose experiments carried on the human embryo since they might cause its death. By not allowing such experiments, ectogenesis would be difficult – if not impossible – to achieve and perfect as a medical procedure. However, Singer and Wells (1984) claim that, despite the techniques implemented to carry out ectogenesis being experimental, their implementation will be acceptable in cases where the life of the foetus is in danger. In their view, those who oppose abortion and conceive the embryo as a human being since conception will support medical progress which guarantees the foetus a higher chance to live (134).

In addition, anti-abortionists would support ectogenesis not only in cases of spontaneous abortions, or in those exceptional cases where continuing the pregnancy implies necessarily the gestational woman’s death. In order to achieve a moral compromise, Simkulet (2019) suggests that anti-abortionists might concede to “withdraw legal and moral objections to induced (disconnect) abortion” (2) whenever the mother-to-be requests it. Indeed, since ectogenesis

would guarantee the life of the foetus once removed from the woman's body, anti-abortionists might agree to concede deliberately induced disconnect abortions in any circumstance. To put it in Singer and Wells' words (1984: 135),

[...] it is only our inability to keep early foetuses alive that makes abortion synonymous with the violation of any right to life which the foetus may have. [...] Abortions would in effect become early births, and the destruction of the unborn would cease.

Hence, in Singer and Wells' (1984) and Simkulet's (2019) views, through the introduction of the technology of ectogenesis, a moral compromise is finally possible. Indeed, ectogenesis seems to assure the pro-choice supporters' concerns in terminating the pregnancy, while satisfying the anti-abortionists' demand of defending the foetus' life.

However, in the next sub-section, I will show that the correctness of Simkulet's argument (2019) depends on a specific interpretation and understanding of the practice of abortion. I will argue that Simkulet's analysis of the pro-choice argument fails since it does not consider women's perspectives on the matter. Hence, I will claim that the reasoning supporting the ectogenetic compromise is incorrect since it implies problematic and reductionist aspects from a feminist point of view.

2.2 A feminist objection

The objection which I present hereafter takes into account feminist worries regarding the ectogenetic compromise. The methodology adopted in this sub-section is based on a feminist standpoint theory, which sustains that "the standpoint of women has an epistemic advantage over phenomena in which gender is implicated, relative to theories that make sexist or androcentric assumptions" (Anderson, 2020). I argue that Simkulet's perspective (2019) is flawed by excluding women from the inquiry. In my view, involving feminist considerations in the abortion debate is essential to consider women's opinions and have a more comprehensive analysis of the ethical issues here at stake. Women are the direct and primary subjects of the abortion conflict. Hence, in order to avoid committing epistemic injustice⁶

⁶ Miranda Fricker (2007) defines epistemic injustice as "a wrong done to someone specifically in their capacity as a knower" (1). Particularly, a wrong to the participation of a group or a person in collective epistemic activities is often caused by prejudices towards the knowers, which consist in a refusal to concede the relevance or significance of the information given by such a group or individual (Kidd & Carel, 2017: 181). Fricker crucially

against women, their positions should be taken into account when considering issues that are so relevant to their lives.

In the following, I expose a feminist interpretation of abortion. The feminist conception here presented is built on the findings of some empirical research about women's view of abortion and based on the importance of choice and control of one's own life. Specifically, I will expose Cannold's (1995), de Lacey's (2005), and Simonstein and Maschiach-Eizenberg's (2009) empirical research. The conception of abortion which results from such empirical findings opposes the one presented by Simkulet (2019) and Thomson (1971), which consists of a woman's desire not to be pregnant, basing its ethical justification on an agent's autonomy and sovereignty over her body. From the feminist perspective here suggested, the latter interpretation lacks an understanding of the actual reasons why women have chosen to undertake the aborting practice. Namely, abortion does not solely involve the end of the pregnancy but also requires the termination of the life of the foetus. Therefore, these empirical studies are crucial to present a more accurate account of how women conceive abortion than the one shown in Simkulet's argument. They are a confirmation that, by disregarding women's voices, Simkulet's assumptions are epistemically unjust against them. Furthermore, contrary to Singer and Wells' proposal (1984), these empirical findings strongly suggest that adoption cannot be a valid compromise for the biological mother who wishes to refuse her role as a moral mother⁷. Therefore, in light of such empirical results, which include both anti-abortionists' and pro-choice supporters' views, I present a feminist account of abortion which refuses the ectogenetic compromise as a potential solution in the abortion conflict.

The view of abortion as fulfilling a woman's desire not to be pregnant, also supported by philosophers such as Singer and Wells (1984), is problematic from a feminist point of view. As Sarah Langford argues (2008), such a conception fails to represent feminist views of abortions, since it dismisses women's right to have control over their lives; in particular, to have the freedom to determine if, how, and when, a woman becomes a mother (Sica, 2020). To put it in Robyn Rowland's words (1992: 285):

points out that such prejudices typically operate "without any focused awareness" (39), and the resulting epistemic injustice might often be involuntary.

⁷ The term "biological mother" refers to the genetic mother, whereas "moral mother" represents that person who possesses those moral characteristics and responsibilities usually associated with being a legal guardian of the child.

What feminists really mean by “a woman’s right to choose” is a “woman’s right to control” [...] Women need access to abortion in order to control their lives in a less than perfect world. We have to ask the same question with respect to reproductive technology: does it necessarily increase the control of women over their lives?

If ectogenesis is conceived as an alternative to the practice of abortion, women might lose their right to control their parenting preferences. Simkulet (2019) addresses such a concern in his paper. Specifically, he suggests that sacrificing some of the women’s reproductive freedom is an acceptable concession that pro-choice supporters have to make in order to achieve a moral compromise (4). However, I believe that Simkulet dismisses the matter too quickly, and does not give proper weight to what such a sacrifice would mean to a woman who does not wish to become a mother (Sica, 2020).

From the feminist perspective here presented, termination of unwanted pregnancies is a mere means to the end of avoiding women’s inescapable moral responsibilities towards the foetus and the resulting child (Langford, 2008). A woman’s decision to undergo the abortion procedure is grounded on her wish not to be pregnant, but also on her wish not to be a mother. It has been suggested that a mother-to-be might plausibly give the foetus up for adoption, as soon as it is extracted from her womb (Singer & Wells, 1984; Simkulet, 2019). However, opting for abortion instead of giving one’s child up for adoption involves a woman’s wish to escape from the burden of knowing that her biological child is “out in the world somewhere being raised by people she does not know or have reason to trust” (Schultz, 2010: 887).

In this respect, a consideration is in order, which focuses on the empirical research pursued by Leslie Cannold (1995). According to her article, which includes interviews with 45 Australian women about their perspectives on ectogenesis, women would not feel that their role as moral mothers ends once their foetus is removed from their bodies. Instead, they would still feel a sense of responsibility towards the foetus’ status “as a being that could become their child” (59). In Cannold’s article, pro-choice women do not consider the end of the foetus’ life as a deplorable but inevitable effect of disconnect abortions. Instead, the death of the foetus is desired since it represents the way to remove the parental responsibility that they would not be able to fulfil.

Furthermore, the interviewees believe that it would be ethically irresponsible to let a foetus be born if they are unable or unwilling to raise the resulting child. Indeed, as reported by the

interviews, women claim that to bring one's own genetic offspring into existence is to accept moral responsibility for their child's well-being. As Cannold quotes (1998: 107),

No matter what you thought, there's life there, and you are in some way responsible. [...] you are responsible for putting another person on the planet [...] they would have to come back, or they'd be wanting their medical history [...] You are still responsible for them.

In the interviews, quite surprisingly, such opinions were shared by both those in favour and those against abortion. Indeed, anti-abortion supporter women were not only against the termination of the foetus' life but also against the idea of women interrupting their gestational duty. Therefore, it seems that ectogenesis would present issues even more problematic than adoption since it implies the woman rejecting her responsibilities to parent her child, along with her responsibility to gestate her foetus. Such findings discredit Singer and Wells' theoretical assumption over the anti-abortionist view (1984), as exposed in the sub-section 2.1 (Sica, 2020).

By considering women's sense of moral responsibility, which persists even once the foetus is removed, adoption cannot be an alternative to becoming moral mothers. Such a position refuses the above suggestion advanced by Singer and Wells (1984) that adoption would be a valid solution for ectogenetic children. Indeed, if Singer and Wells were right, offering one's child up for adoption would have been able to solve the abortion conflict much sooner than the possibility of ectogenesis being available. Given this has not been the case, the only option a woman has in order to prevent becoming a biological and moral mother, is to prevent the birth of the foetus in the first place.

In conclusion, Cannold's article (1998) suggests that pro-choice supporters base their convictions on a kind of morality which is not confined to women's sovereignty over her body. Instead, such a morality emphasises the idea of maternal responsibility, which would persist unless the foetus' existence is terminated. Therefore, neither adoption nor ectogenesis might be considered as moral compromises in the debate about abortion, since "by perpetuating the child's life, its mother's responsibility is also perpetuated" (Cannold, 1998: 107). By implementing the ectogenetic solution, women will lose their control over their parenting preferences. Furthermore, as this sub-section suggests, women's voices should not be excluded from a moral evaluation of the abortion debate. In order to make such an evaluation meaningful, women's contribution is essential.

Empirical research resulting in similar findings has been carried out by Frida Simonstein and Michal Maschiach-Eizenberg (2009). Their survey includes 216 Israeli subjects, both women and men. Interestingly enough, the results show that people's attitude towards artificial wombs is quite positive, especially in two cases: when used to solve problems for people who cannot biologically have children on their own; or when implemented with the aim to save the foetus' life, if it happened to be in danger. Nevertheless, the majority of people in their study – especially women – stated that they would not use an artificial womb to avoid pregnancy. They view pregnancy and birth as fundamental experiences for a woman. The explanation of this general attitude might be found, again, in Cannold's article (1995): unless the death of the foetus is assured, women consider their role as mothers as inalienable (Smajdor, 2016). Therefore, ectogenesis is not generally perceived as a valid alternative to abortion. On the same line of Cannold, the authors of the survey conclude that additional research addressing the population's positions on ectogenesis is crucial in order to develop appropriate ethics and legislation on this matter.

Another survey, conducted by Sheryl de Lacey (2005), has produced interesting and analogous results. The study focuses on the inconsistency in IVF (*in vitro* fertilisation) mothers in making decisions about donating their frozen embryos. Namely, before successfully undergoing IVF, women are willing to donate their spare embryos to other couples. However, once they become mothers, their position drastically changes, and they opt for the embryo's destruction. From this pattern, de Lacey concludes that the embryo assumes a shifting symbolism which is strongly influential in parents' decision-making. Before undergoing IVF, the embryo would represent a "successful endpoint of ovarian stimulation and an opportunity for pregnancy" (1667). Nevertheless, after becoming parents, the embryo assumes the symbolism of a potential child. As a result, in this survey, participants associate donating their embryo with "relinquishment of a child" for whose well-being they feel accountable (1667). Discarding the embryo, therefore, seems the only solution in order to avoid such parental responsibilities.

Furthermore, in de Lacey's article (2005), previous research on this matter is cited, which addresses whether embryo donation morally resembles adoption from the parent-to-be's perspective. Some participants show concerns which might similarly be raised in the circumstances for adoption, such as the worry related to the kind of environment in which the children resulting from their embryos would grow up. As de Lacey reports (1666),

Several women were worried that their ‘children’ would be mistreated or abused, that they would be in an inappropriate family for their personality and/or intellect, that they may become ‘orphans’ through accidental death or that their recipient parents may have insufficient emotional or material resources to adequately provide for them.

Plainly, such findings can be related to the discussion about ectogenesis. The surveys here reported suggest that women do not make a clear distinction between being biological and moral mothers. In their views, ectogenesis and adoption would not prevent them from being morally responsible for their embryo or foetus and the resulting child. By preferring embryo destruction to donation in order to avoid the burden of parental obligations, participants’ attitude in the de Lacey’s study (2005) would further confirm Cannold’s results (1995), according to which neither adoption nor ectogenesis is considered as a valid alternative to abortion.

To conclude, the argument of ectogenesis as a moral compromise, as suggested by Simkulet (2019) and Singer and Wells (1984), does not give sufficient weight to the views of those directly interested in the matter – namely, both pro-choice and anti-abortionist women. The ectogenetic solution is considered by feminists as a reductionist representation of abortion as a woman’s right not to be pregnant. Instead, the feminist view here presented asserts that the reasons why women choose abortion consist of their wish not to be parents. Such a difference is crucial when addressing ectogenesis as an alternative to the practice of abortion. Indeed, it suggests that ectogenesis, while it would fulfil women’s right to end a pregnancy, it would not respect women’s reproductive liberty and desire not to become mothers.

Since women are the primary subjects of the issues of abortion and related questions, their opinions and contributions should be included in such ethical debates to prevent committing epistemic injustice. In light of the feminist standpoint methodology adopted in this sub-section, including empirical research on the matter of abortion is essential to evaluate the assumptions which Singer and Wells (1984) and Simkulet (2019) make about anti-abortionists’ and pro-choice positions. By not considering women’s moral views, ethical theories on abortion become meaningless to women’s moral needs.

Section Three

Do the parents have the right to the death of the foetus?

In the previous section, I have argued that the possibility of ectogenesis would not produce the harmony between anti-abortionists and pro-choice supporters anticipated by Simkulet (2019). Many pro-choice advocates claim that the decision to undertake abortion does not depend on the wish to stop gestating; instead, they are based on the wish not to become biological mothers. Cannold's (1995), de Lacey's (2005), and Simonstein and Maschiach-Eizenberg's (2009) empirical research shows that, despite the possibility of ectogenesis, women would still prefer to abort their foetus rather than undergoing with foetal extraction. Nevertheless, some might claim that these empirical observations do not necessarily imply the same conclusion on a normative level. Which is to say, a woman's wish not to become a mother does not entail her right to abort the foetus. The potential introduction of the use of ectogenesis within the medical and social field consequently presents new moral issues, since the mother-to-be's rights must be compared with the alleged rights of a foetus which is now independent of her body.

However, some might reject the claim that abortion rights cannot be solely grounded on considerations of the wishes of the pregnant woman. Proponents of the ethics of care such as Carol Gilligan (1982), Nel Noddings (1984) and Eugenie Gatens-Robinson (1992), consider a morality based on abstract principles as strongly limited. They argue that a moral reflection on individual rights such as the right to autonomy and the right to life does not adequately express the experience of a pregnant woman. Instead, they claim that an attentive examination of the needs of women who face the choice of whether to abort should be the central element to consider in the debate of abortion rights.

Nevertheless, this paper does not aim to address the question of which is the most accurate theoretical background in the discussion about abortion. Instead, I decided to adopt the approach chosen by the authors whose arguments I am going to expose and counterargue in the following. This methodology allows me to follow their reasonings and object their conclusions on their own grounds. The approach which they assume in order to address abortion rights is based on a traditional discussion of abortion, according to which abortion rights can be grounded on bodily and autonomy rights.

Since I assume that not wanting to become a mother is not morally sufficient to justify undertaking killing abortions, this section tries to address abortion rights asking whether the mother has then the right to the death of the foetus. I divide this section into two main sub-sections. Within the sub-section 3.1, I aim to clarify two points which are essential in the debate of abortion rights: the concept of right itself, and the role of mother and father in the ectogenetic decision. Within sub-section 3.2, I first present some views which oppose the moral permissibility of the right to kill the foetus. I show that, since abortion rights have been based on bodily rights and the principle of self-defence, some authors believe that a justification for the killing of a foetus which develops independently of its mother's body is inadmissible. Secondly, I challenge these positions by advancing two arguments, as proposed by Räsänen (2017), which try to provide some moral grounds to the right to the foetus' death: the first focuses on the so-called right not to become a biological parent; the second on property rights. Both arguments have been objected to by Mathison and Davis (2017) and Blackshaw and Rodger (2019). I aim to reply to such objections and to highlight that, by not dismissing the debate regarding the moral status of the foetus, Mathison and Davis' and Blackshaw and Rodger's arguments remain incomplete.

Furthermore, it is essential to point out that I decide to develop my reasoning by addressing and objecting Mathison and Davis' (2017) and Blackshaw and Rodger's (2019) arguments on the basis of their own assumptions. Such assumptions include their definition of the concept of right, the specific arguments which allegedly justify the right to the death of the foetus, and, as already mentioned, a rights-based approach to the abortion debate. In addition, as I will explain in *Section Four*, their premises are partly the reason why I suggest a sentience-criterion account for moral status. By testing their claims from their own terms, this methodology⁸ allows me to make more powerful and convincing conclusions.

⁸ In this paper, I have decided to exclude consequentialist considerations regarding the introduction of ectogenesis into society. To make a few examples, such considerations might consist of, as Anna Smajdor (2016) suggests, the benefits enjoyed by a foetus who would otherwise die during complicated pregnancies. However, as Giulia Cavaliere (2019) points out, ectogenesis might be strongly limited by financial constraints. Such technology might entail enormous costs, and it seems unlikely that this service will be state-sponsored and widely accessible. Furthermore, if ectogenesis will become legally enforced once available and socially accepted, there might be an increase in the number of women undertaking illegal (and probably unsafe) abortions (Warren, 2000: 210). In addition, as Mary Gordon (1991) crucially highlights, the impact on society of millions of unwanted children in an overpopulated world might be quite dramatic.

Discussing these problems raises empirical questions which are not central to the aim of my paper. However, in a more comprehensive discussion of ectogenesis, I believe that such considerations categorically need to be taken into account.

3.1 The concept of right and the role of the father

To adequately address the discussion regarding the right to the death of the foetus, some clarifications are needed. In particular, in what follows the concept of right is crucial. A general description of rights might be given by Leif Wenar (2020), who claims that a person has a right to do or have something when it would be wrong to interfere with one doing or having it. Furthermore, a person has a right that others do or do not perform certain actions. However, there are two prominent theories which specify what constitutes a right: the will theory and the interest theory (see, e.g., Wenar's *Rights* [2020]). This paper has no intention to address the discussion about which theory offers the best account of rights since it is beyond its scope. Instead, I adopt the same theory as presented by those authors whom I will later try to object: Mathison and Davis (2017), and Blackshaw and Rodger (2019).

In order to establish a right, Mathison and Davis (2017) refer to an interest-based account of rights: "a right is a significant interest that confers upon its possessor the power to make claims on others to respect or protect it" (314). Moreover, Blackshaw and Rodger (2019) specify that an interest must be significant in order to constitute a right. By quoting Joseph Raz (1984), they claim that "an interest is sufficient to base a right on if and only if there is a sound argument of which the conclusion is that a certain right exists" (209). Moreover, "grounds for attributing to it the required importance" are needed (Raz, 1984: 209). In this section, I will try to provide sufficient grounds capable of abrogating the reasons not to kill the foetus.

Another crucial point to clarify concerns the role of the father in the abortion debate. Currently, in heterosexual couples, the fact that the mother's body is directly involved in the gestational process guarantees her primacy in deciding whether to continue with her pregnancy. As far as gestation is concerned, male parents can only have a secondary role. However, when taking into consideration the possibility of ectogenetic technology, which would allow the foetus to develop in the artificial womb completely, the physical proximity between mother and foetus becomes insignificant. Correspondingly, supposing that parents have a say in the future of the foetus, the absence of foetus' physical dependence on the mother's womb would profoundly change the current balance between a father's and mother's roles in the abortion debate.

In that regard, as Iain Brassington (2009) points out, in an "Ectoworld" – a world in which ectogenesis is standard practice – there would be no "mother". Parents of either sex would be "fathers" since the possibility of *in vitro* fertilisation would allow both parents to provide a

gamete to be fused with another gamete and gestated somewhere else. Such a representation of Ectoworld might be quite disturbing, especially from a woman's perspective, who testifies the annihilation of gestating, one of her most fundamental function⁹. Nonetheless, once ectogenesis is available, it seems clear that excluding one parent from the abortion decision merely because of his or her sex "would be straightforwardly sexist" (204).

It might be said that *in vivo* pregnancies would present a different outcome. Indeed, the medical procedure to remove the foetus needs the gestating woman's consent. Let us consider a situation where parents' desires would differ: the male parent wishes to keep the foetus, whereas the mother-to-be wants to undertake killing abortions. Many would claim that, evidently, the father cannot force the woman to undergo a medical procedure which she does not approve (especially if such a procedure is highly invasive). However, Brassington (2009) argues that given the fact that the woman's role as gestatrix would end whichever option was taken – namely, killing abortion or disconnect abortion – "the mother would relinquish her automatic priority in deciding what happened to the foetus either way" (205). Therefore, a pregnant woman would have guaranteed her privileged position in decisions such as whether to maintain or cease the pregnancy. Nonetheless, she would not have any priority when considering what would happen to the foetus thereafter.

The issue of such a legal and moral translation from the centrality of motherhood to the one of parenthood presents several controversies. For instance, we might wonder what should be done when the biological parents disagree regarding the fate of their foetus (see, e.g., Räsänen [2017]). It might be said that an essential role can be attributed to the foetus and the view about its moral status: if it is believed that the foetus has an interest in living, then this interest should be taken into account when considering a decision about its life. I believe such an issue categorically needs an in-depth analysis when addressing the ectogenetic debate. However, this not being the central focus of this paper, I will not delve into this topic any further. In the following, I use the terms "mother" and "parent" interchangeably.

⁹ Some feminists have criticised the possibility of ectogenesis to encourage male patriarchy (Langford, 2008: 266). Robyn Rowland (1992: 288) gives an alarming representation of artificial wombs, describing them as the ultimate phase of patriarchal control over women. A similar argument has been expressed by Sarah Eaton (2005), who argues that the desire for ectogenesis and the consequent suppression of women's role of gestating is the result of men's desire to have higher control over the reproductive process and women's bodies. Despite this not being the main focus of this paper, I believe it is an essential point to take into consideration when addressing the discussion of ectogenesis.

3.2 Abortion rights and the right to the death of the foetus

Having clarified what conception of rights will be used in this paper, and briefly discussed the new role attributed to fathers, let us now consider some changes which might be implied by the time that ectogenesis will become a medical standard. Hereafter, I expose the arguments of authors such as Thomson (1971), Warren (1975), Overall (1987), and Singer and Wells (1984), which refuse the moral permissibility of killing an ectogenetic foetus by basing abortion rights on principles such as autonomy and self-defence.

The possibility of foetal transfer might portend major re-examinations on both legal and ethical levels concerning the abortion debate. As we have seen, the right of the woman to control her body and the alleged right of the foetus to its life have been heretofore in conflict, since the actualisation of the one precludes the exercise of the other. The possibility of ectogenetic technology, however, ensures a separation between such rights, allowing them to be both exercised at the same time. In a potential reality where ectogenesis will be standard practice, this conceptual and practical separation is crucial in assessing the morality of abortion. Given abortion rights having been based on the woman's bodily rights and self-defence, such rights will be fulfilled through the foetal removal, without inevitably imply the end of the foetus' existence. As Brassington (2009) claims, the right of the pregnant woman "unilaterally to decide to terminate the pregnancy" would not entail her right "unilaterally to decide to act foeticidally" (203). To justify killing abortions, therefore, it will be necessary to claim abortion rights based on rights different from self-defence and autonomy. In this regard, this section tries to provide arguments for such rights.

Let us now turn our attention to the views which deny the presence of those grounds categorically needed to justify the right to the death of the foetus. According to some authors, who interpret the abortion right as the right to terminate a pregnancy, killing abortions will not be morally permissible once ectogenetic technology is available. In particular, they argue that the implementation of the use of ectogenesis will entail restrictions on abortion and legal impositions to undertake foetal extraction. In order to clarify this point, let us take into consideration Thomson's violinist argument for abortion (1971) one more time. The potential introduction of ectogenesis in medical care would considerably impact her argument for abortion. Indeed, as outlined in the sub-section 2.1, Thomson defends the right to the removal of the foetus, not its death. Thomson claims that (66)

“[W]hile I am arguing for the permissibility of abortion in some cases, I am not arguing for the right to secure the death of the unborn child. [...] I have argued that you are not morally required to [sustain] the life of that violinist; but to say this is by no means to say that if, when you unplug yourself, there is a miracle and he survives, you then have a right to turn round and slit his throat. [...] you have no right to be guaranteed his death, by some other means, if unplugging yourself does not kill him. A woman may be utterly devastated by the thought of a child [...] put out for adoption [...]” She may therefore want not merely that the child be detached from her, but more, that it die [...] [But] the desire for the child’s death is not one which anybody may gratify, should it turn out to be possible to detach the child alive”.

Thomson’s view (1971) suggests that killing abortions would not be morally permissible if there is a chance for the foetus to survive outside the gestational mother’s womb – as the practice of ectogenesis would assure. Mary Anne Warren (1975) expresses a similar position by claiming that, “if abortion could be performed without killing the fetus, [the mother] would never possess the right to have the fetus destroyed, for the same reasons that she has no right to have an infant destroyed” (131). In a similar view, Christine Overall (1987) claims that making possible the distinction between the rights of the woman not to be pregnant, and of the foetus not to be killed makes then possible the claim that the woman has no right to the death of the foetus (72-73). Along the same lines, Singer and Wells (1984) argue that “[f]reedom to choose what is to happen to one’s body is one thing; freedom to insist on the death of a being that is capable of living outside one’s body is another” (135). Therefore, if pro-choice supporters base their argument for abortion on the right of women to control their bodies, the use of ectogenetic technology would not encounter objections, and the right to the death of the foetus must be denied.

These views seem to find a *prima facie* confirmation on what currently occurs in the case of viability. There are two ways to interpret the concept of viability (Mathison & Davis, 2017). The first considers viability as the foetus’ ability to live and develop without depending on any external apparatus or technology. However, in some cases, new-borns require constant medical assistance and intervention. It seems unreasonable to claim that those infants are not viable. A second interpretation defines viability as the foetus’ ability to live and develop *ex utero*. Indeed, the Peel Commission report on the use of foetuses for research (HMSO, 1971) defined the viable foetus as “one which has reached the stage of maintaining the co-ordinated operation of

its component parts so that it is capable of functioning as a self-sustaining whole independently of any connection with the mother”.

Some argue that the possibility of full ectogenesis implies that every foetus will be viable by being transferred to an artificial womb. If this prevision was correct, according to the law of many states, including the U.S., a standard abortion could no longer be an option. Indeed, the case *Roe v. Wade* (1973), and a later case, *Planned Parenthood v. Casey* (1992), set the legal right to abort prior to viability, with the exception for extreme cases (e.g., mother’s life is at risk). For now, such arguments are sufficient to briefly present the comparison between potential, legal and ethical implications of ectogenesis and the current measures adopted when the foetus is viable. I will return to this issue in *Section Four*, where I will explore the concept of viability more in-depth. I will try to challenge the conclusion here outlined which affirms that the possibility of ectogenesis entails the consideration of the foetus as always viable, in normal circumstances, and the elimination of the right to abortion accordingly.

In conclusion, according to the reasonings here exposed, there is no right to the death of the foetus. If ectogenesis becomes available (and recent developments seem to confirm this possibility), the use of such a technology could not be objected, and it might even become morally obligatory in the cases of unwanted pregnancy. Nevertheless, these positions have been challenged by some authors, who have advanced that a right to the death of the foetus can be justified on the basis of arguments which differ from self-defence and bodily rights. If this were the case, a woman would have the option to kill the foetus which develops independently from her body, namely in artificial wombs.

In the sub-sections 3.2.1 and 3.2.2, I expose two main arguments discussed and objected by Mathison and Davis (2017), and Blackshaw and Rodger (2019), and defended by Räsänen (2017), which support the moral justifiability of the right to the death of the foetus, based on property rights and the right not to become a biological parent. I consider and focus solely on these two arguments¹⁰ since I believe these to be the most plausible reasons advanced to ground the right to the death of the foetus. Quite surprisingly, none of the authors mentioned above introduces the debate about the moral status of the foetus in their argumentations. If they do,

¹⁰ Christine Overall (2015) advances several potential arguments in defence of parents’ right to kill the foetus. Mathison and Davis (2017) examined three of Overall’s arguments, which they consider the most plausible ones: biological parents’ right, property rights and the right to genetic privacy. I decided not to take into consideration the third argument since I consider it the weakest. For an analysis of the genetic privacy argument, see Mathison and Davis, Räsänen (2017), and Blackshaw and Rodger (2019).

their analysis is superficial. Nonetheless, they all recognise the centrality and cruciality of this debate in their discussions. After exposing their views, the imperative necessity of a more definite exploration regarding the moral status of the foetus becomes evident in order to assess whether there is a right to its death accurately.

3.2.1 The right not to become a biological parent

In this sub-section, I consider a popular argument advanced in support of the right to the death of the foetus, based on the so-called biological parents' right. Firstly, I introduce and explain the argument, and I expose Blackshaw and Rodger's objections (2019). Secondly, I try to advance some replies to those objections. I conclude that Blackshaw and Rodger's argumentation does not stand, and that there is the possibility to guarantee a right not to become a biological parent. However, a more definite answer about this issue will be given in *Section Four*, when considering the moral status of the foetus.

The argument based on the right not to become a biological parent considers abortion as both the acts of terminating a pregnancy and preventing parenthood. Mathison and Davis (2017) explain that such a right ensures the right to the death of the foetus as a way to prevent the possibility that neither the woman nor the man becomes a parent (315). However, as Blackshaw and Rodger (2019) note, the adults involved are already biological parents (79). Therefore, in my view, a better formulation of this argument is that, rather than ensuring the right not to become a biological parent, abortion would provide a means for the parent to cease being one.

As Mathison and Davis (2017) state, the most common way to explain this argument is to claim that a right to the death of the foetus is indispensable in order to prevent certain harms from befalling the biological parents (315). The harms in question consist of parental obligations for adults who do not wish to be parents. This interpretation reflects women's wishes and needs as outlined in Cannold's empirical research (1995). As previously exposed, some women would fear to feel morally responsible for the foetus and the resulting child, even if the latter is given up for adoption.

This sort of parental harms might not only be self-imposed but also socially inflicted, as a result of what Glenn Cohen (2008) calls "attributional parenthood". This concept defines a social attitude expressed by others towards a genetic parent, considered as someone having the

same moral obligations to the child as a custodial parent, even when the legal system has released him or her from such responsibilities (Cohen, 2008; Mathison and Davis, 2017). As a consequence, some biological parents might feel discriminated against and be subject to negative reactive attitudes from others. Such a felt or socially imposed moral responsibility would cause significant harm to those women who do not wish to be mothers. Räsänen (2017) confirms this view by claiming that parental obligations could never be eliminated, even when adoption takes place. To put it in his words: “Adoption won’t resolve the issue because parental obligations cannot fully be transferred or delegated to someone else; such obligations are non-transferrable in nature” (699).

However, Blackshaw and Rodger (2019) claim that the fact that certain obligations result harmful to us does not necessarily imply that we are justified to avoid such obligations. If we make a promise, they argue, and later realise that keeping that promise will be harmful to us, this does not imply that our obligation to maintain the promise should or could be bypassed. However, they also point out that significant harms may “mitigate our obligation, depending on the circumstances” (79). In the following paragraphs, I will come back to this point, which they seem to dismiss too quickly.

Furthermore, Blackshaw and Rodger (2019) claim that when a woman and a man have sex, they implicitly assume the risks which might follow from that activity (namely, becoming pregnant). Nevertheless, it can be objected that this claim does not stand when taking into consideration, for instance, rapes, where no consensus to sex has been given. In addition, by affirming that a heterosexual couple has to accept the potential consequences of their sexual activity, Blackshaw and Rodger seem to include also those cases when contraceptive measures are taken. Since contraceptive measures are not infallible, if something goes wrong, they seem to argue that the couple must keep the foetus or undertake ectogenesis. However, it might be pointed out that such a strict view on the moral responsibilities implied by having heterosexual sex would have negative implications to the modern idea of sex as something pleasurable and not necessarily related to procreation. I suggest a more nuanced perspective on this subject: the risk of getting pregnant is not always the same (e.g., the couple might decide to use or not contraceptives or avoid sex during the stage of ovulation), and some might argue that this entails a moral difference which Blackshaw and Rodger seem not to consider.

The question Blackshaw and Rodger (2019) pose is what the circumstances are, if any, that allow adults to reject their parental obligations by ending the life of the foetus. They claim that,

“given that we grant the foetus has some moral status, it would seem that ectogenesis followed by adoption should be obligatory” (79). However, they do not comment on any further to what extent a foetus has moral status. A debate about the foetus’ moral status might considerably change the issue regarding killing a foetus. Therefore, their argument remains incomplete, and their conclusion unjustified.

Finally, Blackshaw and Rodger (2019) point out that these parental responsibilities can be rejected by killing the foetus in circumstances when “the resulting harms are significant” (79). In my view, this seems to confirm, rather than confute, Räsänen’s view (2017). Indeed, it can be argued that the significance of such harms has to be defined and expressed by those people who live the experience as primary subjects. In the case of abortion debates, those are parents, and women in particular. As Cannold’s (1995), de Lacey’s (2005), and Simonstein and Maschiach-Eizenberg’s (2009) empirical studies have shown, many women would opt for killing abortion rather than ectogenetic solution since they consider the suffering which would follow from abortions and unfulfilled parental obligations unbearable. As previously argued, by not taking into considerable account women’s positions on this matter, we would commit empirical injustice. Clearly, relevant psychological and societal harms can also follow from the decision to abort. Nevertheless, it can be claimed that, whether this would be the case, it needs to be judged by the people involved.

To conclude, there seems to be a strong possibility to claim for the right to the death of the foetus based on the right not to become a biological parent. Blackshaw and Rodger (2019) make important objections, to which I tried to reply. I pointed out that their argumentation superficially explores the debate about the moral status of the foetus. However, as I will show in *Section Four*, a more detailed analysis of this matter might substantially change our perspective regarding the moral right to kill the ectogenetic foetus.

3.2.2 The right to property

Another way to argue for the right to the death of the foetus is to claim that ectogenetic abortion, when not voluntary, violates a right to property. Räsänen (2017) argues that genetic parents own the foetus. Consequently, their property rights would be violated if the foetus is developed in artificial wombs without their consent. Property rights, as exposed by Räsänen,

entail that the person who owns a specific entity has total control over the object, and it is in her power to decide what should be done with it¹¹.

Hereafter, I illustrate Räsänen's argument (2017) and present the objections exposed by Mathison and Davis (2017) and Blackshaw and Rodger (2019). Interestingly enough, these authors make a comparison between the foetus and pets, as both sentient beings, in order to reject the possibility to the right to the death of the foetus. I will go back to this point in *Section Four*, where I will try to show that such a comparison actually rejects their view. I will conclude that, without specific consideration of the moral status of the foetus, the argument based on the right to property is incomplete.

Räsänen (2017) argues that the foetus is the collective property of the parents. Therefore, their consent is mandatorily required in order to place the foetus in an artificial womb. Alternatively, since people can destroy their property, the parents-to-be can choose to kill the foetus (700). Räsänen relates this argument to the case where a couple uses *in vitro* fertilisation to get pregnant: surplus cryopreserved embryos are the couple's property, and it is commonly believed that the couple has the right to destroy them. Räsänen argues that the same intuition works for the case of killing foetuses.

Mathison and Davis (2017), and Blackshaw and Rodger (2019) present relevant objections to Räsänen's (2017) argument. Firstly, they specify that Räsänen affirms that there is a difference between foetuses' and children's death since the latter are not their parents' property - this is because children are "persons: morally valuable individuals" (Räsänen, 2017: 701). However, Blackshaw and Rodger point out that, previously, Räsänen (2016) has also claimed that infants are not even close to the threshold view for persons (660). The logical consequences of such affirmations make a possible defence of Räsänen's argument (2017) quite difficult since they go against our conventional morality. Indeed, two possible arguments can follow.

The first is that Räsänen (2017) implies that human non-persons are property. As a consequence, both infants and foetuses are their parents' property, and both can be killed – a conclusion which very few would be willing to accept. The second is that some non-persons, including infants, are not property. If this was the case, being a person cannot be a valid

¹¹ I acknowledge that the debate about private property and ownership rights present philosophical issues about their justification. The range of justificatory themes is broad, and extensive discussions of property can be found in the writings of several philosophers who even date back to Plato. Nevertheless, such a discussion does not concern the focus of this paper.

criterion to establish the property status. If we claim that an infant has non-property status, whereas a foetus has, then the question is how and when a point of transition from property to non-property status can be established. Mathison and Davis (2017) argue that “there is no clear place where the property claim can be justified” (319). Blackshaw and Rodger (2019) suggest that birth could be the event which determines such a transition, and which can make a moral distinction between foetuses and infants. Birth, they say, is the point when the foetus can begin an existence independent from its mother’s body (81). Clearly, the possibility of ectogenesis would determine the point of transition for property status much earlier. Furthermore, even embryos produced through *in vitro* fertilisation would be considered as non-property, since they are initially placed outside the mother-to-be’s womb. However, Blackshaw and Rodger notice that such a conclusion presents the so-called episodic problem, where the property or non-property status of the foetus depends on its location (81).

In my view, Mathison and Davis (2017), and Blackshaw and Rodger (2019) raise significant objections against the argument based on property rights. Nevertheless, they do not explore in more detail other possible criteria to determine the property status. Instead, they claim that, even if something can be considered property, this does not necessarily entail a right to destroy it. As I will show in the following section, I believe that a criterion to determine property status could be established by taking into consideration the debate regarding the moral status of the foetus. Blackshaw and Rodger introduce such a debate by claiming that foetuses have some degree of moral status. They also argue that foetuses’ moral status is comparable to the one of the pets, as the latter are sentient beings. Mathison and Davis make the same analogy. To put it in their words: “We do not destroy pets if they are unwanted and there are people eager to give them a home. Similarly, even if the foetus is the property of its parents, this does not entail or justify a right to its death” (81). They do not elaborate any further. In my view, however, a comparison between foetuses’ and pets’ moral status needs a more comprehensive analysis.

To conclude, in this section I have tried to expose and elaborate two arguments advanced by Räsänen (2017), which defend the right to the death of the foetus: the argument based on the right not to become a biological parent, and the argument based on the right to property. Mathison and Davis (2017), and Blackshaw and Rodger (2019) advance significant objections which I have partially tried to reject. However, I have also argued that both arguments remain incomplete by dismissing the discussion regarding the foetus’ moral status.

In the next section, I will introduce the debate regarding the moral status of the foetus. This will strengthen my view that a distinction in terms of property status should not be made between embryo and foetus, or foetus and infant. Instead, the criterion which determines whether the foetus can be considered property can be found by taking into account the status of development of the foetus. As I will try to argue in the following, such a foetal development also determines the foetus' moral status. This analysis will also be significant to the argument based on the biological parent's right, which Blackshaw and Rodger (2019) have left unfinished, in order to establish which the circumstances are, if any, when the foetus can be killed to avoid parental harms.

Section Four

The moral status of the ectogenetic foetus

Räsänen (2017), Mathison and Davis (2017), and Blackshaw and Rodger (2019) recognise the cruciality of the moral status debate, which could profoundly affect the outcome of the ectogenetic discussion. Mathison and Davis claim that settling the issue of the moral status of the foetus might be eventually needed. Their contribution to the matter, however, remains small. Räsänen explores this topic quite superficially. He merely affirms that his argument refers to those views which believe that the foetus has partial moral status – as opposed to those claiming for no moral status, or a status equivalent to a standard adult human. Along the same lines, Blackshaw and Rodger’s argument considers the foetus as having partial moral status. They also assess that if the ectogenetic foetus has no moral status, killing it would be morally acceptable. On the other hand, if the foetus is considered to have full moral status, the foetus has a right to life, and its death would be unjustifiable. However, their discussion does not explore the issue any further.

This section tries to conclude Räsänen’s (2017), Mathison and Davis’ (2017), and Blackshaw and Rodger’s (2019) discussions, as exposed in *Section Three*, by addressing the debate of the moral status of the foetus. As previously claimed, assessing to what degree, if any, a foetus is granted moral status is essential to the outcome of the arguments of biological parents and property rights. My conclusion is that a right to the death of the foetus can be granted before it develops sentience.

This section is structured as follows. Firstly, I analyse the concept of moral status. Secondly, I expose some of the most popular theories of moral status. By exploring potential implications and problematics of these theories, I claim that a sentience-related view is the most plausible account for moral status. Finally, I return to Mathison and Davis’ (2017) and Blackshaw and Rodger’s (2019) arguments. I argue that, by adopting a sentience criterion, the right to the death of the ectogenetic foetus within its second trimester of development should be granted. As a result, Blackshaw and Rodger’s objections against such a right would be highly weakened.

4.1 The concept of moral status

In this sub-section, I explore and elaborate on the concept of moral status. Firstly, I give Warren's (2000) general and intuitive definition of moral status. She explains the concept of moral status as a means to specify those entities towards which we are required to have moral obligations (9). For an entity to have moral status, therefore, it is to be morally considerable and to be treated according to "its needs, interests or well-being" (3). Our moral obligations are imposed by the moral importance those entities' needs have as such, regardless of benefits or disadvantages we might derive from them. To be precise, having moral status might imply a second characterisation, which is to say, to have moral rights: "to have valid claims to, or entitlements to, some kind of treatment by other agents in virtue of one's nature, characteristics, or capabilities" (Reichlin, 2014: 1955). I acknowledge that some authors reject the conception of moral status as the possession of fundamental moral rights but accept the conception of moral considerability solely. In either way, having moral status, or being morally considerable, is to be a potential source of requirements and responsibilities for moral agents, whether in light of one's possession of rights or one's moral considerability (Reichlin, 2014: 1956). In this paper, I use "to have moral status", "to have moral rights" and "to be morally considerable" interchangeably.

The majority of theoretical accounts of moral status understand it as a concept which indicates a being's particular attribute which confers it moral standing. In other words, according to these views, the criterion according to which an entity has moral status consists of a specific trait or quality that this entity possesses. Nevertheless, there is not a unique or universal conception of moral status (Wasserman, Asch, Bluestein & Putnam, 2017). For instance, as we have seen above, some theories make a crucial difference between the concepts of full moral status and partial moral status. Such a distinction is typical of those views which confer moral status in accordance with the degree of the status-providing attribute that a being possesses. This implies that some entities have higher moral status when compared to others and can enjoy different rights or rights of different strength which others do not.

However, it is essential to point out that some philosophers would not accept the distinction between full and partial moral status (DeGrazia, 2008). Indeed, some philosophers would try to define those entities which are morally considerable by understanding moral status as a threshold concept and a range concept. To put it in David Wasserman's words (2017), those entities which "fall below a minimum level – the threshold – of a status-conferring attribute [...] lack a certain kind of moral status despite possessing the attribute to some degree". Furthermore, those entities which reach the threshold level of the attribute, fall within a

“range”, and have “the same moral status regardless of how far they exceed that threshold”. Adopting or not ethical views which allow degrees of moral status entails important consequences on the abortion debate, as I will show in the sub-section 4.2.

A final clarification regards the distinction between single-attribute and multi-attribute accounts of moral status. Intuitively, the former indicates that there is a single condition which determines the possession of moral status; conversely, the latter indicates a more inclusive view which recognises more than a single criterion for moral status (see, e.g., Warren [2000], and Massimo Reichlin [2014]). In the next sub-section, for greater simplicity, I will start by analysing those views which present one condition for moral status. Subsequently, by presenting some objections against specific single-attribute accounts, I will suggest how consideration of more than a single criterion might be a more plausible alternative.

4.2 Criteria for moral status

As we have seen, some views claim the existence of a particular type of attributes that a being must possess in order to have moral status. The crucial question concerns, therefore, the specific normative criterion on which moral status is based. Hereafter, I expose some of the most known and discussed theories of moral status. Each of these accounts indicates a specific intrinsic property of an entity as a criterion for moral status. Consecutively, with no claim to be exhaustive, I report the views which confer decisive value of being a human, a person, a living individual, a member of a community of forms of life, and a sentient being¹². This exposition will help me to establish the most suitable or least controversial theory of moral status, which I identify with a sentience-related account.

4.2.1 Human exceptionalism

This option considers the property of being human as the only significant feature to confer moral status. In this view, belonging to the human species is a necessary and sufficient condition which guarantees moral considerability. Consequently, this theory considers both

¹² I am aware of the enormous difficulty to comprehensively discuss the different accounts of moral status in such a limited space. This is because, in the first place, such a debate is still ongoing and remains unresolved. Many might find hurried some of my argumentations in this section. However, I have tried to be as most objective and accurate as possible, despite the modest space available.

embryos and foetuses as beings with full moral status. This also implies that there are no other entities except humans which are inherently morally considerable. Nevertheless, some defenders of the human exceptionalism view claim that other living entities might possess indirect moral importance in reference to human beings (e.g., ecosystems need to be respected because their preservation is in the interest of present and future human generations [Reichlin, 2014]).

Such an account of moral status encounters significant controversies, and it has been largely objected. In the first place, no explanation has been provided to justify why the mere fact of being human confers a higher moral consideration over other living entities or species. Some have advanced the claim that humans possess distinct capacities (e.g., developing family ties, expressing emotions, being autonomous, being rational, using language, or thinking abstractly) which are themselves morally relevant. They claim that the fact that all humans and no other living entities possess these capacities guarantees to the former a more significant consideration of their interests.

Nevertheless, no reason has been given to explain why those capacities should justify such a partiality for the interests of any being. Furthermore, some functions are not even possessed by all the members of human species (e.g. severely mentally disabled people do not possess the capacity of being rational or autonomous, or using language). Finally, none of these capacities belongs uniquely to humans. For instance, some non-human animals are able to express feelings, have complex emotional relationships and develop life-long bonds with their partners or family units. Moreover, some studies have shown that some non-human animals are able to understand symbolic representation and use expressive behaviours which are very similar to human language (Bar-On, 2013). Therefore, as Peter Singer (1974) claims, if no moral justification is given to favour a species over another, human exceptionalism (or speciesism) is a prejudicial attitude similar to racism or sexism.

4.2.2 Personhood

This view ties the possession of moral status rights to the concept of person, by arguing that being a person is a necessary and sufficient criterion for the attribution of full moral status (Newson, 2006). Nonetheless, it is essential to establish which characteristics are determinant to make an entity a person. We have already seen that being a person is not identifiable with

being a human since such an association would encounter the same objections previously exposed. Another option might be identifying the concept of person with entities possessing morally relevant psychological capacities, such as consciousness or rationality. However, whereas this approach would recognise some non-human animals as morally considerable entities, it excludes foetuses, new-borns, severely demented individuals, or people in a vegetative state from the status of being moral patients.

A possible answer to this objection might be that some of these individuals – such as foetuses, infants and even embryos – should be conferred moral status on the basis of their potential to become persons; which is to say, to develop those distinct capacities such as self-awareness and rationality. Along the same lines, older people with dementia or individuals in a vegetative state should possess moral status in virtue of the fact that they have previously been persons. In my view, whether the latter might be plausible, it is hard to justify the former. As some philosophers have argued, there is a crucial distinction between being and becoming: “a caterpillar is not a butterfly, and a foetus is not a human *being*, only a human *becoming*” (Newson, 2006: 279). The claim of the potential to become a person as a criterion for moral status is “unfounded as not every fertilized egg will rise to a new individual; many pregnancies are spontaneously lost” (279).

Another objection might be that, as Warren (2000) and Singer and Wells (1984) argue, if potentiality is broadly applied, zygotes should be credited moral status, as they have the potential to become embryos and foetuses. From this, it oddly follows that sperm and ova have moral status, having the potential to develop into a zygote. In conclusion, the option of personhood as a criterion for moral status raises significant issues difficult to bypass (such as excluding infants from moral considerations), and they go against our ordinary moral intuitions.

4.2.3 Life

The third option presents life as a valid criterion for moral status. According to this view, all living organisms have full and equal moral status. Such a theory has been further developed by Paul Taylor (1986), who claims that all living individuals are part of the community of life, and each of them possesses biologically predetermined ends and have an interest in achieving them. Since there is no biological or moral justification which recognises one group of living

organisms – such as human beings – as morally superior over the others, all living entities are due equal respect. In particular, as humans, “our true relation to other forms of life, even to those that might do us harm, is a relation among beings of *equal* inherent worth, and not a relation between superior, higher beings and inferior lower ones” (133).

This account of moral status presents some controversies. Firstly, the attribution of inherent worth to all living organisms entails an implausible commitment to grant equal respect not only to humans and non-human vertebrates, and invertebrates, but also microbes and bacteria. The promotion of the well-being of all such living entities seems impossible since we can plausibly assume that cases of conflict between different individuals’ interests will be frequent. This account leaves us with poor normative guidance.

Further development of this view includes species and ecosystems in its moral considerations (Callicott, 1989). Which is to say, it is the biotic community *per se* which is morally considerable, and not merely its members. However, such a view collides with the protection of human interests when they conflict with the interests of whole biotic systems, and even basic human rights might be neglected in many instances. For instance, a right to life for individuals would be inconsistent with the structure of the biotic community. Again, the implications of assuming such a criterion for moral status are extremely problematic.

4.2.4 Sentience

Finally, the last option I discuss in this paper is a sentience-related theory of moral status, where sentience is defined as the capacity to feel pleasure and pain. This view values and promotes actions which fulfil the interests of those beings involved, where “beings” refer to all sentient beings, since all and only the latter have interests. Whether experienced by humans or non-human animals, “it is a pain to be in pain” (Korsgaard, 1996: 154). Hence, all beings who can suffer are morally relevant since all of them have an interest in avoiding pain.

Such a view might raise objections similar to the life-related account. Which is to say, if moral standing is granted to all sentient beings, their interests might often collide. Absurdly, it would follow that humans’ well-being could be disregarded to favour, for instance, spiders’ benefits. However, although all sentient beings deserve moral consideration, they would not deserve equal consideration. Accordingly, the interests of some animals are more valuable than others, and they require higher priority in moral disputes. This is because, according to such

views, sentience – and, therefore, moral status – comes in degrees. A scalar version of the sentience-related account is therefore suggested by the proponents of this view (Sumner, 1981).

The sentience criterion generally excludes human embryos and foetuses at an early stage of development from moral consideration, as entities which are not sentient. On the contrary, foetuses which have reached the capacity to feel (a stage which is usually established in the second half of the second trimester) have interests and should be morally considered.

Warren (2000) argues that such a view poses controversial problems in light of the common-sense moral consideration of human mentally disabled individuals, who would be considered with a lower level of moral status compared to “normal” adults. For this reason, she suggests a multi-criterial account of moral status: by not considering sentience as the sole criterion of moral status, other essential aspects for the assessment of moral status can be taken into account. By virtue of the criterion of social relationships, for instance, mentally impaired human persons would have a stronger moral status than other equally sentient beings.

The acquisition of a multi-attribute account, primarily based on sentience, might be a more suitable solution for the debate of moral status. For instance, as Warren (2000) points out, considering sentience as the only criterion for moral status implies no moral distinction between late-term foetuses and infants, since they both are sentient beings. Should the law accord to late-term foetus the same protections as are accorded to infants and older human beings? If so, the consequences of such a claim differ depending on whether ectogenesis would be available or not. In the case where it would be possible to get access to ectogenetic technologies, a woman would be forced to undergo disconnect abortions and put the foetus in an artificial womb. On the other hand, in current circumstances, the resulting situation would be quite problematic since the extension of equal rights to sentient foetus would necessarily allow severe violations of women’s basic rights to bodily defence and autonomy. Indeed, to put it in Warren’s words, “[the] right to self-defence is not usually taken to mean that one may kill innocent persons just because their continued existence poses some threat to one’s own life or health” (59). This would imply that, by making second-trimester abortions illegal, pregnant women’s lives would be highly in danger.

However, by adopting a multi-attribute view, such a problematic consequence would not apply. Indeed, it would be possible to justify giving priority to the interests of individuals who possess full moral status, “because the capacity to anticipate the future, for example, confers far greater breadth and depth to the interests of self-conscious rational individuals, thus

rendering the frustration of such interests a far worse event” (Reichlin, 2014). As a consequence, late abortions are not necessarily ruled out, however highly discouraged.

Conferring moral status from a multi-criterial approach entails relevant considerations. It suggests that sentience is a sufficient criterion for partial moral status – though not for full moral status. Indeed, as argued in the previous paragraph, a sentient foetus has granted a level of moral status which is considerable inferior to other entities which possess capacities other than sentience (e.g. infants). By not considering sentience as the sole criterion for moral status, they argue that it would be possible to take into account social and ecosystemic relationships in the attribution of moral status. Therefore, human infants and mentally disabled individuals have a stronger moral status than other equally sentient beings, by virtue of their social relationships to other humans. Furthermore, such a view would also allow to ascribe stronger moral status to animals which belong to species in danger of extinction rather than animals comparably sentient which are not endangered (Warren, 2000: 88).

It might be important to point out that there is an ongoing debate which asks whether sentience can be attributed to living things without consciousness. For instance, Warren (2000) claims that non-self-aware beings, however unconscious, might possess interests in, e.g., being alive. This would overturn the argument just given, since it might be said that embryos and fetuses might still have interests in continuing to live until birth, however being unaware of it. Nonetheless, claiming that unconscious living beings are sentient is a questionable premise. So far, whether not self-aware entities are capable of sentience is an assumption which remains unjustified. Due to restricted space, I have to leave this discussion to another time. In this paper, I accept the view that I have advanced in the previous paragraph.

In conclusion, I have discussed the criteria of human exceptionalism, personhood, life and sentience. Clearly, my exposition and discussion are quite narrow, given the limited space available. Nevertheless, I have been able to present some of the most common arguments and objections against each account. All things being equal, according to what has heretofore discussed, I believe that a sentience-based sliding scale approach to confer moral status is at least less questionable than the others exposed. However, as previously pointed out, an account which considers only sentience as a criterion for moral status might entail complications which lead us to revise, for instance, current abortion legislation. Therefore, I believe that a multi-criterial account, which is primarily based on sentience but also considers other relevant attributes, is a more acceptable theory to confer moral status. In the following, for greater

simplicity, by using the term sentience I will implicitly refer to and include other possible morally significant attributes.

In addition, there are other three reasons why I decided to focus on a sentience-related account. Firstly, as previously said, authors such as Mathison and Davis (2017), Blackshaw and Rodger (2019), who deny a right to the death of the foetus, introduce themselves the relevance of sentience by making a comparison between the foetus and sentient beings such as pets. By focusing on the capacity to feel pleasure and pain, therefore, my counterarguments against their position will be stronger and more effective. Secondly, by taking into consideration the level of maturity of the foetus, the sentience criterion allows a moral distinction between early and late abortions, emphasised by many authors as morally significant, and a moral condemnation of infanticides. Therefore, such a criterion confirms our belief that the human form of the foetus, combined with sensation and the capacity for consciousness, itself demands respect (Campbell, 1985: 233).

Finally, a third reason is that the sentience view is compatible with a particular understanding of the so-called viability criterion. In the sub-section 3.2, I have exposed the concept of viability, defined as the ability of the foetus to live and develop *ex utero*. According to some current legislations, if terminating a pregnancy is required and the foetus is viable, the latter should not be killed, but extracted. I have presented some authors' positions which claim that the possibility of ectogenesis would entail that every foetus will be viable independently of their stage. Consequently, if viability is understood as a dividing line which establishes when a foetus can or cannot be killed, the right to the death of the foetus should be denied, even at the earliest stages of pregnancy.

However, I believe that this claim is questionable, since such a concept of viability is too relative to external circumstances to provide a moral criterion. Such circumstances might include access to medical care, due to family's economic resources, current medical practices available and technological progress. As Raanan Gillon (2001) argues, even nowadays "there will be an enormous difference between the fetal viability in a Third World village and in a First World neonatal intensive care unit" (ii8). Instead, I suggest that viability should be understood in relation to a specific stage of human development, which allows the foetus to survive outside its mother's body. Therefore, the concept of viability should be relative to the level of maturity of the foetus, rather than the technologies capable of making the foetus develop *ex utero*.

By assuming sentience as the most convincing criterion, I do not certainly expect to end the discussion on moral status. Objections might still be raised against the sentience criterion, even if not considered as the only requirement for moral standing, as Warren suggests (2000). However, being the moral status debate one of the most argued and controversial topics in bioethics, I would commit an act of arrogance by presuming to find a final answer to this issue. For the sake of this paper, I will not further develop this discussion. In the next sub-section, I discuss my findings on moral status in relation to the debate of abortion of the ectogenic foetus.

4.3 The right to the death of the non-sentient foetus

In the following, I conclude my analysis of the arguments based on the right not to become a biological parent and the right to property. As already mentioned, Blackshaw and Rodger (2019) advance significant objections against such arguments. However, their evaluation remains incomplete by dismissing the discussion of the foetus' moral status. In the next two sub-sections, I combine what I have discussed regarding the foetus' moral status with the arguments previously presented.

4.3.1 The right not to become a biological parent

Let us start by taking up where we left off the discussion of the right not to become a biological parent. I reported Blackshaw and Rodger's claim (2019) that the parents have no right to kill the foetus, given that they credit the foetus with "some moral status" (79). Let us now ask again whether it would be possible to allow adults to reject their parental responsibilities by killing the foetus. According to the sentience criterion, the answer to such a question seems now quite straightforward. Indeed, if the foetus is killed before becoming sentient, it seems unreasonable to deny the right not to become a biological parent. The neurological evidence shows that the earliest stage at which the lower boundary of sentience can be placed is between week 18 and 25 (Tawia, 1992). If such a criterion is accepted, the right to the death of the foetus within the end of the second trimester is justified. Even if the foetus would survive outside the mother-to-be's womb, there is no moral obligation to preserve its life.

However, some might object that embryos and fetuses are valuable individuals, even if they lack any moral status of their own. Particularly, some have argued that embryos and fetuses possess added value being genetically unique. Since it would be possible to avoid the foetus' death with the use of an artificial womb, such an indirect moral considerability might be sufficient to deny the possibility to kill the non-sentient foetus. Indeed, killing the foetus might appear as a needless waste in destroying something valuable. Two replies can be made against this reasoning.

Firstly, the quality of uniqueness is not a proper basis for special moral status. As Singer and Wells (1984) notice, if such a condition would be suitable, we would have to accept the disturbing consequence that killing one of a pair of identical twins would be less immoral than killing one of a pair of fraternal twins (92). Secondly, as Blackshaw and Rodger (2019) themselves claim, putting an end to the life of the foetus would be possible when there is a strong reason; namely, in circumstances when "the resulting harms are significant" (79). As already claimed, such harms must be evaluated by those who would potentially become parents. According to the sentience-related account, when weighing the parents' against the foetus' interests, the former should always have priority, since they concern the well-being of entities with full moral status, contrary to the interests of a being who lacks moral considerability completely.

4.3.2 The right to property

As discussed above, Räsänen (2017) describes the right to property as a right which allows the person who owns an entity to have complete control over this object. Accordingly, it is in her control to decide what should be done with it. In regard to fetuses, I previously left off the argument by asking where a point of transition from property to non-property status should be placed. Some suggestions took into consideration the passage of a being from embryo to foetus, or foetus to infant. I have pointed out Räsänen's unintentional absurdity in placing such a change of property status in the passage of a being from infant to child. He affirms that, whereas children are persons, "morally valuable individuals" (701), infants cannot be considered as such. As a consequence, children cannot be parent's property, whereas infants might. This claim posed two possible consequences: as one's property, infants can be killed, or personhood is not a valid condition for moral status. Intuitively, many would agree that the second outcome

is more desirable, and I am clearly inclined to suggest that sentience might be a more favourable criterion.

Let us now continue the debate. According to a sentience-related approach, the answer to whether a foetus can be considered property seems unequivocal. Instead of placing the point of transition from property to non-property status between embryo and foetus, or foetus and infant, it should be the stage of sentience of the foetus to determine whether this entity can or cannot be considered property. Specifically, before the second half of the second trimester, the foetus is not sentient and is not a morally valuable being. According to Räsänen's reasoning (2017), therefore, the foetus at this stage can be considered property, and the parents can dispose of it as they wish. Instead, after the 18th week, the property status is no longer applicable.

However, even by accepting such a conclusion, some might reply that there are limits to what owners can do with and to their possessions. Specifically, they do not entail a right to destroy their property. Similarly, parents do not have the right to the death of the foetus, however non-sentient. As previously explained, Mathison and Davis (2017), and Blackshaw and Rodger (2019) try to prove such a claim by making a comparison between the foetus' and pets' moral status. They claim that pets are sentient beings which cannot be killed as they owners please. Similarly, even if the foetus is the property of its parents, this does not justify the moral permissibility to destroy it. In my view, their affirmations are quite problematic for two reasons.

Firstly, by taking into consideration the sentience of pets, and by comparing the latter with fetuses, Mathison and Davis (2017) and Blackshaw and Rodger (2019) do not mention the distinction between the passage from non-sentience to sentience in the foetus' development. Secondly, they have controversially decided to take into consideration only the category of pets, rather than animals more generally. If they compare fetuses with pets since the latter are sentient beings and cannot be killed accordingly, there is no reason to exclude other types of animals from the discussion. Once such a comparison between animals and foetus is made, their claim does not stand. Indeed, our society accepts a consideration of animals as property, and humans are allowed to dispose of them as they please (e.g., farming and slaughtering bovines for the purpose of milk or meat or using baboons in scientific research). Clearly, according to a sentience-related theory, such an attitude towards animals is not justified, or at least some requirements for breeding and killing animals should be met. For instance,

according to Singer (1979), one of the major proponents of the sentience view, it is not always wrong for individuals to kill and eat animals if this is necessary for their own survival and if it is done without causing needless pain or suffering. I will not develop such a debate any further, since it goes beyond the focus on this paper.

In conclusion, I have shown that the debate of moral status is central in order to make a proper and more comprehensive argument on the right to the death of the foetus. Such a fundamental ethical question must be resolved, however complicated this aim appears. By dismissing this topic, the objections raised against Räsänen's arguments (2017) remain partial. In this section, I have argued that once a sentience criterion for moral status is established, Mathison and Davis' (2017) and Blackshaw and Rodger's (2019) counterarguments are quite weakened. Therefore, with regard to the foetus' sentience, I have claimed that it is morally permissible to kill the foetus before the 18th week, even when the possibility of ectogenesis would assure its survival. Such a claim does not depend on the right of the woman to control her body. Instead, it is based on the claims that non-sentient foetus can be considered as property, and its parents-to-be have the right to avoid their obligations towards the resulting child.

Conclusion

This paper aimed to analyse ethical and social concerns regarding the introduction of ectogenesis into society. In the first section, I have described the technology of ectogenesis and briefly presented the potential and controversial implications of its use. In *Section Two*, I have objected Simkulet's argument (2019), which sustains that ectogenesis might be a valid alternative to abortion. In *Section Three*, I have challenged the views of authors such as Thomson (1971), Warren (1975), Overall (1987), and Singer and Wells (1984), which suggest that killing abortions would not be morally permissible once ectogenesis is available. I have introduced two arguments, advanced by Räsänen (2017), which might justify the moral possibility of killing a foetus: the one based on biological parents' rights, and the other based on property rights. I have tried to defend such arguments against the objections raised by Mathison and Davis (2017) and Blackshaw and Rodger (2019). In order to properly counterargue their reasonings, and to exhaustively address the arguments in defence of killing the foetus, I have argued that it was imperative to focus on the foetus' moral status debate. In *Section Four*, I have tried to discuss a potential criterion for moral status as much comprehensively as possible, and I have concluded that the sentience-related account is the least questionable approach to confer moral status. Finally, I have completed the arguments regarding the biological parents' rights and property rights by claiming that killing abortions are permissible within the second trimester of the foetus' development, even if ectogenesis is available.

In this last section, I evaluate the achievements and limits of my paper. Firstly, the claim that the non-sentient foetus can be killed is the outcome of assumptions made at the beginning of *Section Three*. Indeed, this conclusion follows from Mathison and Davis' (2017) and Blackshaw and Rodger's (2019) premises for their objections against the arguments supporting the right to the death of the foetus. I do not assure the same outcome in a different theoretical context. For instance, the question of ectogenesis can be addressed from methodologies differing from a right-based approach. An approach from consequentialism or the ethics of care might lead to different results which have not been discussed in this paper.

Furthermore, I have not directly addressed the issue of whether the foetus has or lacks a right to life. It might be pointed out that, while a right to the death to the foetus implies the absence of the foetus' right to life, an implication in the opposite direction is not so straightforward. If an entity lacks the right to life, indeed, this might not necessarily entail that

others have the right to kill such an entity. As I have discussed in *Section Four*, there might be features of the foetus ethically relevant which do not confer it moral status, and consequently a right to life, but which might morally oppose the possibility to kill it by making the foetus morally valuable. From the brief analysis I made regarding the foetus' moral status, it is plausible to assume that the non-sentient foetus does not possess a right to life. However, a more detailed discussion might be needed in a more comprehensive debate.

Moreover, an important limitation of my paper is due to the brief space dedicated to the discussion on moral status. Indeed, other concerns might be raised against the sentience-criterion account besides the ones that I have addressed. For instance, which specific animal species possess sentience? To what degree? These are questions which still need to be empirically answered. Due to this uncertainty, I decided to dismiss them in this paper. However, a more exhaustive discussion on moral status might require such considerations to be taken into account.

Finally, a crucial point in the ectogenetic debate has been omitted; namely, the moral concerns about late-term abortions. In this paper, I have briefly pointed out that sentient fetuses, however morally considerable, do not possess full moral status. It might follow that, as I suggested, the needs and wishes of an entity with higher moral status (such as the pregnant woman) have priority over an entity with partial moral status. Again, this discussion needs further consideration in a complete debate on the morality of ectogenesis.

In conclusion, this paper has argued that the view that ectogenesis will solve the abortion debate is flawed and non-feminist. Furthermore, it has discussed the morality of killing an ectogenetic foetus by successfully objecting some arguments against this moral permissibility. In order to build convincing counterarguments, I decided to approach the issue of the right to the death of the foetus following the same assumptions made by the authors who reject it. I believe that a more detailed and exhaustive discussion regarding the potentially problematic consequences of ectogenesis is needed. Above all, I am hopeful that women's voices will be heard and highly considered in this subject, as they should, for the sake of their health, freedom, and life.

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