

## **Ectogenesis and Gender-Based Oppression:**

### **Resisting the Ideal of Assimilation**

#### **Abstract**

In a recent article in this journal, Kathryn MacKay advances a defence of ectogenesis that is grounded in this technology's potential to end—or at least mitigate the effects of—gender-based oppression. MacKay raises important issues concerning the socialisation of women as 'mothers', and the harms that this socialisation causes. She also considers ectogenesis as an ethically preferable alternative to gestational surrogacy and uterine transplantation, one that is less harmful to women and less subject to being co-opted to further oppressive ends. In this article, I challenge some of the assumptions that underlie MacKay's case in favour of ectogenesis by firstly question whether the relationship between women's capacity to gestate and birth children and gender-based oppression is as strong as MacKay makes it out to be. I subsequently argue that—even if MacKay's reading of this relationship is accurate—ectogenesis is not a desirable means to end gender-based oppression. It embodies a strategy that could be used to pursue liberating projects that follows what Iris Marion Young defines as 'the ideal of assimilation', but that must be resisted. I then concur with MacKay's contention that ectogenesis is better than gestational surrogacy and uterine transplantation. My argument is that many of the problematic issues that MacKay herself sees as features of these practices will not disappear with ectogenesis. Finally, I conclude that MacKay's narrow focus on women's biology and ectogenesis as a solution to gender-based oppression results in the overlooking of broader systemic issues that contribute to the upholding of oppressive norms.

**Keywords:** ectogenesis; gender-based oppression; equality; gestational surrogacy; uterine transplantation

## Introduction

In *The ‘tyranny of reproduction’: Could ectogenesis further women’s liberation?*, Kathryn MacKay advances a defence of ectogenesis, i.e. the artificial gestation of human foetuses. MacKay grounds her arguments in favour of ectogenesis in its capacity to challenge “the dominant conceptualization of child-bearing” and the “roles and expectations” that have been modelled on this.<sup>1</sup> In challenging such a conceptualisation and norms, argues McKay, ectogenesis can alleviate or perhaps even bring gender-based oppression to an end. Moreover, ectogenesis has the advantage of being less ethically troubling than gestational surrogacy and uterine transplantation, which MacKay considers practices that are harmful to women and that embody oppressive social ideologies. According to her, gestational surrogacy is “morally and legally fraught”<sup>2</sup> and “there are important race, class and cultural issues”<sup>3</sup> at play in its praxis. MacKay also condemns uterine transplantation, due to the risks associated with the procedures necessary to first transplant and subsequently remove the uterus. She sees this practice as an “unacceptable outgrowth of patriarchal pressure upon women” and a “patently unnecessary”<sup>4</sup> means of becoming a parent. Hence, she concludes: “we have a moral imperative to develop ectogenesis as a means of assisted gestation”.<sup>5</sup> The gist of MacKay’s arguments—and the key reason why she welcomes ectogenesis as an alternative to ‘natural’ gestation, gestational surrogacy and uterine transplantation—is that ectogenesis has the potential to end gender-based oppression, for it is “connected to female biological functioning”.<sup>6</sup> Ectogenesis, argues

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<sup>1</sup> MacKay, K. (2020). *The ‘tyranny of reproduction’: Could ectogenesis further women’s liberation?* *Bioethics*. 1-8. <https://doi.org/10.1111/bioe.12706>

<sup>2</sup> *Ibid.*: 4

<sup>3</sup> *Ibid.*

<sup>4</sup> *Ibid.*: 5

<sup>5</sup> *Ibid.*

<sup>6</sup> *Ibid.*: 2

MacKay, can end gender-based oppression by “separating ‘mother’ from female biological reproductive labour”.<sup>7</sup>

MacKay’s views on ectogenesis, gender-based oppression<sup>8</sup> and assisted reproduction are very important from an egalitarian and a feminist perspective, which I share. Political, technical or other kinds of projects that can lead to the liberation of oppressed groups, such as women, should be, from such perspectives, welcome. It is for this political commitment towards, and scholarly engagement with, ending group-based forms of oppression that MacKay’s and other scholars’ work on ectogenesis is of value. Hence, my response to MacKay and my arguments in this article are not motivated by a reluctance to espouse, or disagree with, her aim of women’s liberation. Nor are they driven by scepticism of ectogenesis simpliciter, i.e. by independent ethical reasons to oppose this technology.<sup>9</sup> Rather, my contention is that—without a broader programme to end or mitigate gender-based oppression—ectogenesis is unlikely to fulfil the liberating potential that MacKay attributes to it. My argument, and this article, is structured as follows. Firstly, I question whether the relationship between gender-based oppression and women’s biology, to wit the capacity to reproduce, is as strong as MacKay makes it out to be. Secondly, I argue that MacKay’s defence of ectogenesis as a means to end gender-based oppression is problematic insofar as it follows a strategy modelled on the ideal of assimilation, one that I believe must be rejected. Moreover, it is based on the assumption that social norms will change for the better due to the introduction of ectogenesis. I then

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<sup>7</sup> Ibid.

<sup>8</sup> I am borrowing this expression from MacKay. MacKay does not define what she means by ‘gender-based oppression’, but, extrapolating from her article, it seems that this expression refers to the social oppression of women qua women (or people identifying as women qua women).

<sup>9</sup> This article does not aim to discuss the ethical reasons that have been advanced in favour of and against ectogenesis: I am not concerned here with establishing whether ectogenesis is an ethically desirable technology. Rather, I wish to focus on a particular aspect of the broader debate on ectogenesis, namely on the idea that ectogenesis has a liberating potential. In so doing, I aim to contribute to the broader debate on this technology as this view represents one of the central aspects of such a broader debate.

challenge MacKay's view that ectogenesis is necessarily better than gestational surrogacy and uterine transplantation, as many of the problematic issues that MacKay herself sees as features of these practices will not disappear with ectogenesis. Finally, I conclude by arguing that MacKay's narrow focus results in sidestepping broader structural issues that pose a challenge to ending gender-based oppression.

### **Gender-based oppression and female biology**

Following a tradition that she attributes to Simon de Beauvoir and Shulamith Firestone, MacKay argues that gender-based oppression can be located in women's biology and, she adds, in the "stubborn conceptual link between the social role of 'mother' and female reproductive functioning".<sup>10</sup> It is in interventions aimed at severing this link that she sees scope for liberation. With ectogenesis, 'the person who gestates and births children', 'woman' and 'mother' will not need to be the same. In disentangling these figures, argues MacKay, ectogenesis liberates women: they will no longer be identified with their reproductive capacity and the social roles attached to them. According to MacKay, the root cause of gender-based oppression is that the social category of 'mother' "has come to stand for female biological features" and for a number of "assumptions around gendered behaviours, attitudes, characteristics, and socio-political status, especially within the family".<sup>11</sup> The association between these social categories and women's biology is responsible for harming "all those who claim the identity 'woman'"<sup>12</sup> in two ways. Firstly, it is harmful because women who experience infertility blame themselves, due to the "pressure to become mothers in pronatalist

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<sup>10</sup> MacKay (op. cit. n. 1): 3

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

societies”.<sup>13</sup> Secondly, it is harmful insofar as infertile women either cease to be worthy of being considered women in their and society’s eyes or come to regard themselves as ‘bad’ women for failing to fulfil their biological destiny.<sup>14</sup> Hence, MacKay concludes:

I take these arguments as evidence that the situation of woman, and identity claims of being a woman, are still very much determined by biology, and specifically one’s ability to fulfil female reproductive function.<sup>15</sup>

This is also the core of her defence of ectogenesis, the key benefit of which lies in disentangling the social role of ‘mother’ from women’s capacity to gestate and birth children, i.e. female biology. Herein, then, is where MacKay sees the ‘emancipatory potential’ of ectogenesis.

My scepticism towards MacKay’s analysis concerns the weight that she attributes to ectogenesis as a means to end gender-based oppression. She seems to be convinced that there exists a causal relationship between female biology and social roles. However, even granted that MacKay’s reconstruction of the aetiology of gender-based oppression holds water, such a reconstruction falls short of revealing what strategies should be pursued to end gender-based oppression.<sup>16</sup> In other words, to establish that ectogenesis will end gender-based oppression, as MacKay contends, two conditions need to be obtained. Firstly, one needs to show that there exists a causal relation between women’s capacity to gestate and birth children and gender-based oppression. Secondly, and more importantly: even if the first condition holds, arguing in

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<sup>13</sup> Ibid.

<sup>14</sup> MacKay does not explain whether her arguments apply only to women who are infertile for biological reasons or also to women who actively decide not to have children. Additionally, it must be noted that MacKay does not provide evidence for her arguments beyond frequently referring to an article by Carolyn McLeod and Julie Ponesse on women’s response to infertility with self-blame. McLeod, C., & Ponesse, J. (2008). Infertility and moral luck: The politics of women blaming themselves for infertility. *IJFAB: International Journal of Feminist Approaches to Bioethics*. 1(1), 126-144.

<sup>15</sup> MacKay (op. cit. n. 1) : 4

<sup>16</sup> Moreover, MacKay’s analysis does not engage with the idea that the gestational aspects of reproductive labour can be enjoyed—precisely by the very same women that could be liberated from them.

favour of ectogenesis as means to end gender-based oppression relies on a bet as to how oppressive social norms will evolve once biological differences have been removed.<sup>17</sup>

With respect to the first condition, MacKay's article fails to provide convincing evidence. Biological differences do not only affect the way in which we, humans, reproduce. These differences influence mortality and morbidity rates, such as those captured by the well-documented 'male-female health-survival paradox'<sup>18</sup>: the phenomenon whereby women can have poorer health in their lifespan but tend to live longer than men.<sup>19</sup> They also influence the age-related onset and progression of common illnesses such as cardiovascular diseases, hypertension and kidney diseases.<sup>20</sup> More importantly, considering the focus of MacKay's article, there are documented differences in strength<sup>21</sup> and athletic performance: men seem to be able to jump higher<sup>22</sup> and run faster<sup>23</sup> than women; they have greater cardiac output and

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<sup>17</sup> I am indebted to Lorenzo Del Savio for bringing this issue to my attention.

<sup>18</sup> Angela Saini, in her book *Inferior*, aptly describes this phenomenon as “females get sicker but males die quicker”, see Chapter 2 of: Saini, A. (2017). *Inferior: How science got women wrong and the new research that's rewriting the story*. London, UK: 4th Estate.

<sup>19</sup> Oksuzyan, A., Juel, K., Vaupel, J.W., & Christensen, K. (2008). Men: Good health and high mortality. Sex differences in health and aging. *Aging Clinical and Experimental Research*. 20(2), 91-102. Gorman, B.K., & Read, J.G. (2006). Gender disparities in adult health: An examination of three measures of morbidity. *Journal of Health and Social Behavior*. 47(2), 95–110. Verbrugge, L.M. (1985). Gender and health: An update on hypotheses and evidence. *Journal of Health and Social Behavior*. 26(3), 156–182.

<sup>20</sup> Carrero, J.J., Hecking, M., Chesnaye, N.C., & Jager, K.J. (2018). Sex and gender disparities in the epidemiology and outcomes of chronic kidney disease. *Nature Reviews Nephrology*. 14(3), 151–164. Kuznetsova, T. (2018). Sex differences in epidemiology of cardiac and vascular disease. *Advances in Experimental Medicine and Biology*. 1065, 61-70. Saini (op. cit. n. 17).

<sup>21</sup> Janssen, I., Heymsfield, S.B., Wang, Z., & Ross, R. (2000). Skeletal muscle mass and distribution in 468 men and women aged 18-88 yr. *Journal of Applied Physiology*. 89(1). Miller, A.E.J., MacDougall, J.D., Tarnopolsky, M.A., & Sale, D.G. (1993). Gender differences in strength and muscle fiber characteristics. *European Journal of Applied Physiology and Occupational Physiology*. 66(3), 254–262.

<sup>22</sup> Kellis, S.E., Tsitskaris, G.K., Nikopoulou, M.D., & Mousikou, K.C. (1999). The evaluation of jumping ability of male and female basketball players according to their chronological age and major leagues. *The Journal of Strength & Conditioning Research*. 13(1), 40-46.

<sup>23</sup> McFarland, I.T., Dawes, J.J., Elder, C.L., & Lockie, R.G. (2016). Relationship of two vertical jumping tests to sprint and change of direction speed among male and female collegiate soccer players. *Sports*. 4(1), 11.

lung capacity<sup>24</sup> and they show better responses to physical injury.<sup>25</sup> These examples are not meant to provide an exhaustive review of the biological differences between women and men.<sup>26</sup> Rather, they are meant to show that biological differences between women and men go well beyond differences in their reproductive organs and capacities. Such differences have acquired social salience and have been re-described in social categories and, often, stereotypes. As Vicki Kirby hypothesises: it was culture all along.<sup>27</sup>

In discussing gender equality in the workplace, Iris Marion Young similarly emphasises the role of culture and socialisation in those differences. She criticises ‘group-conscious policies’ exclusively focused on mitigating the oppressive circumstances arising from women’s capacity to gestate and birth children, and argues:

Women suffer workplace disadvantage not only or even primarily because of their birthing capacity, but because their gender socialization and identity orients the desires, temperaments, and capacities of many women toward certain activities and away from others, because many men regard women in inappropriately sexual terms, and because women’s clothes, comportment,

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<sup>24</sup> Bode, F.R., Dosman, J., Martin, R.R., Ghezzi, H., & Macklem, P.T. (1976). Age and sex differences in lung elasticity, and in closing capacity in nonsmokers. *Journal of Applied Physiology*. 41(2), 129-135. Becklake, M.R., Frank, H., Dagenais, G.R., Ostiguy, G.L., & Guzman, C.A. (1965). Influence of age and sex on exercise cardiac output. *Journal of Applied Physiology*. 20(5), 938–947.

<sup>25</sup> Brown, T.N., Palmieri-Smith, R.M., & McLean, S.G. (2009). Sex and limb differences in hip and knee kinematics and kinetics during anticipated and unanticipated jump landings: implications for anterior cruciate ligament injury. *British Journal of Sports Medicine*. 43(13), 1049-1056. Nieves, J.W., Formica, C., Ruffing, J., Zion, M., Garrett, P., Lindsay, R., & Cosman, F. (2005). Males have larger skeletal size and bone mass than females, despite comparable body size. *Journal of Bone and Mineral Research*. 20(3), 529–535.

<sup>26</sup> Saini (op. cit. n. 18), provides an extensive and accessible review of many studies on sex differences and biological differences more generally.

<sup>27</sup> Kirby, V. (Ed.). (2017). *What if culture was nature all along?* Edinburgh, UK: Edinburgh University Press.

voices, and so on sometimes disrupt the disembodied ideal of masculinist bureaucracy.<sup>28</sup>

Women's capacity to gestate and birth children is part of the reason why they *can* be oppressed and why certain oppressive roles *can* be attributed to them. Despite this, it would be dangerously reductive to assume that the difference between men's and women's biology is exclusively the latter's capacity to gestate and birth children. Women and men differ, *biologically*, in many significant respects, and, more importantly, these differences have been socialised in a multiplicity of roles and characterisations that function to uphold oppressive structures and norms. As Young puts it: "gender determines women's oppression more significantly than biology".<sup>29</sup> Arguing in favour of ectogenesis as a means to end gender-based oppression downplays the role of other salient biological differences between women and men; of the socialisation of such differences; and, eminently, of the harms, beyond the pressure to become mothers and self-blame in pronatalist societies, that gender-based oppression cause to women.

### **Gender-based oppression and how to change social norms**

MacKay's prediction may be correct. After all, it is plausible to hypothesise that women's reproductive capacity plays a causal role in the genesis and upholding of gender-based oppression. Despite this, MacKay's argument in favour of ectogenesis is *normative*. That is, according to MacKay, ectogenesis is a morally desirable means to end gender-based oppression. This position is, in my view, particularly contentious when one examines the

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<sup>28</sup> Young, I.M. (1990). *Justice and the politics of difference*. Princeton, NJ: Princeton University Press.

<sup>29</sup> Young, I.M. (1985). Humanism, gynocentrism and feminist politics. *Women's Studies International Forum*. 8(3), 173-183.

assumptions that underlie it. Let me provide an analogy to explain the origin of my scepticism. Another form of oppression that can be traced back to biological features, and the socialisation thereof, is oppression based on people's (non-white) skin colour and traits: i.e. 'ethnicity-based oppression' or 'racism'. Now imagine that there is a technology, whitening<sup>TM</sup>, that could transform people of colour's skin and traits in a way that makes them resemble the skin colour and features of a non-oppressed group: white people. Imagine, further, that whitening<sup>TM</sup> is defended as a means to end ethnicity-based oppression.<sup>30</sup> It is plausible to imagine that most people would not welcome this possibility, regardless of its practical efficacy. Whether it would be desirable to end ethnicity-based oppression by changing people's biological features is indeed a different question from whether this could work in practice. It would be entirely possible to respond that firstly, it is the oppressive social norms that need changing, not people's biological features; secondly, this approach subscribes to an ideal of liberation as assimilation<sup>31</sup> that is particularly contentious.

One of the core disagreements among feminist scholars rests on how to achieve women's liberation and end, in MacKay's words, gender-based oppression. A way to do so—one that many feminist scholars and egalitarians more broadly have pursued—is to focus on the characteristics that oppressed groups, e.g. women, share with the dominant group, e.g. (white) males. This is what Young defines as the 'ideal of assimilation', which focuses on the essence that people share beyond contingent characteristics and differences. Following this view, women and men, but also people of colour, disabled people, immigrants, people with low socio-economic status and other oppressed groups share core characteristics that gestate

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<sup>30</sup> There are existing discussions on cosmetic surgery and gender-based oppression too. See for instance Chambers, C. (2008). *Sex, culture, and justice: The limits of choice*. Pennsylvania, PA: Penn State University Press, especially Ch. 5 in Part II.

<sup>31</sup> This is mostly resisted in Young's *Justice and the Politics of Difference*, where she defends an idea of justice that does not define "liberation as the transcendence of group difference". Young (op. cit. n. 28) : 157

normative salience: they should be all treated equally by virtue of their ‘shared humanity’.<sup>32</sup> In the words of Anne Phillips: “[w]hat matters is that we are all human beings”.<sup>33</sup> This, Phillips adds, “is a powerful ethical ideal”,<sup>34</sup> as:

It seems to offer the crucial resource against racism, xenophobia, misogyny, ultranationalism – the many hatreds of the ‘other’ that dwell obsessively on the differences between us – and treat these as incompatible with living peacefully side by side.<sup>35</sup>

To end gender-based oppression and to be treated in the same way as the dominant group, i.e. men, women need to be as close as possible to this group. They need to obliterate their difference, such as their capacity to gestate and birth children, and work towards a society where gender (and biological difference) has become obsolete. Ectogenesis is in this sense the whitening<sup>TM</sup> of gender-based oppression. This is what, following MacKay’s defence of ectogenesis, liberation should look like.

I am reluctant as to the desirability of pursuing liberating ends in this manner. Firstly, the ideal of assimilation lends support to the belief that being different from the dominant group—having different reproductive organs and a distinctive capacity to gestate and birth children—is a problem that needs solving. It pathologises difference and reframes such a capacity as a deviance from the norm. Secondly, and relatedly, it lends support to the belief that the characteristics of the dominant group are qualitatively better than those of the oppressed group. In the case of gender-based oppression, it frames the characteristics of roughly half of the

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<sup>32</sup> Phillips, A. (2015). *The politics of the human*. Cambridge, UK: Cambridge University Press.

<sup>33</sup> Ibid.: 11

<sup>34</sup> Ibid.

<sup>35</sup> Ibid.: 11

human population as deviant from the norm. The focus on women's biology as the root of gender-based oppression—and on the need to end such oppression by changing the way women procreate—constructs men's biology and their role in procreation as what prevents them from being socialised in ways that are oppressive. But this does not necessarily hold true: the oppression that follows from being identified as a 'mother' (or as a 'father': the breadwinner, who has the duty and responsibility of providing for the family) has to do with the social norms around these roles and the socialisation of biological difference. Finally, following this ideal, the oppressed group will be late joiners of political projects. As Young puts it: "assimilation always implies coming into the game after it is already begun, after the rules and standards have already been set".<sup>36</sup> Thus women or other oppressed groups risk being unable to participate actively in the creation of rules, norms and institutions. Even if assimilation ends oppression, it leaves open the possibility of passive and limited participation and involvement. Contra to the ideal of assimilation, liberating projects can start with an appreciation of the value that women, and their biological and social roles, have. This contrasting ideal seeks to assert "the distinctive value of womanhood against patriarchal denigration".<sup>37</sup> Following Young,<sup>38</sup> while the ideal of assimilation and 'the politics of difference'<sup>39</sup> represents two ideals that need not be mutually exclusive: they represent two distinct ways to pursue liberating projects. But the latter treats female biology, the roles that women occupy in society and their distinctive lived experiences, as strengths rather than liabilities. It calls for a rethinking of the social norms and structures in ways that take into account rather than seek to silence difference. As a result, it supports political projects that challenge the mainstream by bringing in new values and experiences, that of the oppressed group. It is this politics of difference and this approach to

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<sup>36</sup> Young (op. cit. n. 28): 164

<sup>37</sup> Young (op. cit. n. 29) : 180

<sup>38</sup> Ibid.

<sup>39</sup> Young (op. cit. n. 28)

pursuing liberating projects that I share, and that motivates my scepticism towards ectogenesis as a solution to gender-based oppression. Ectogenesis favours a project of liberation that seeks to obliterate difference rather than focusing on the limitations that such a difference brings to women, and how their agency and possibility for self-expression is curtailed by the social role attached to them.

### **Gestational surrogacy and uterine transplantation**

In addition to taking issue with MacKay's defence of ectogenesis as a desirable means to end gender-based oppression, I doubt as to whether the assumptions underlying her discussions of ectogenesis as an alternative to assisted reproduction hold water. MacKay argues that ectogenesis should replace gestational surrogacy and uterine transplantation as a less ethically troubling and politically contentious practice. She deems gestational surrogacy 'bad' for women at both ends of surrogacy agreements: commissioning women and gestational surrogates. According to MacKay, gestational surrogacy is bad for commissioning women as it is "the result of and contribute[s] to the maintenance of pronatalist social pressures to produce genetically related offspring".<sup>40</sup> Pronatalism and pressure on women to become mothers are the forces that similarly motivate MacKay's critique of uterine transplantation (UTx). She argues:

[T]he procedure of UTx is an unacceptable outgrowth of patriarchal pressure upon women to have specific experiences of motherhood (e.g. pregnancy).

UTx is very risky, for both woman and foetus, and is patently unnecessary to being a parent. [...] Arguments supporting the pursuit of UTx are founded

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<sup>40</sup> MacKay (op. cit. n. 1) : 4

on the notion that gestating genetic offspring is a central life good for women, in turn resting on the idea that female reproductive function is central to one's identity as a woman and to a woman's value.<sup>41</sup>

Both in the case of gestational surrogacy and uterine transplantation, then, MacKay's claims infer the following: firstly, that women who engage in these practices are the nuts and bolts of pronatalism rather than agents meaningfully engaged in their procreative projects. Secondly, and more importantly, she contends that ectogenesis would bring about significant changes to the status quo by liberating women from such a pressure to procreate. Granted, social ideologies that encourage the begetting and bearing of children and that conceptualise women as 'natural' mothers play a role in shaping their preferences and decisions to reproduce.<sup>42</sup> This, however, is not exclusive to the begetting and bearing of children: social ideologies concerning beauty standards or women's role as carers—be that for children, husbands or older relatives—are pervasive and contribute to the shaping of women's preferences, decisions and behaviours.<sup>43</sup> But from this, it does not follow that these practices are necessarily 'bad for women' or that women are merely passive agents in forming these preferences and in undertaking these activities. Such a framing of women's reproductive decisions as the product of false consciousness underplays the role of women's agency in these matters. This notwithstanding and regarding MacKay's claim that ectogenesis would change this: it is unclear as to how and whether such a technology would liberate women from oppressive ideologies concerning parenthood. Ectogenesis enables the artificial gestation of human foetuses. But in order to obtain these foetuses, couples (or single reproducers) would first need

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<sup>41</sup> Ibid. : 5

<sup>42</sup> And to do so in a certain way: i.e. by creating genetically related and healthy children.

<sup>43</sup> Haslanger, S. (2012). *Resisting reality: Social construction and social critique*. New York, NY: Oxford University Press USA. Chambers (op. cit. n. 30).

to provide the genetic material necessary to create the embryos to be eventually artificially gestated, i.e. sperm and oocytes. Alternatively, they would need to source this genetic material from donors. With ectogenesis, women's involvement in procreation would be less prominent than their current involvement, in that they would not need to gestate and birth children. However, it would still be significant considering the life-constraining measures, the potential physical harms, and the psychological burdens that hormonal stimulation and oocyte retrieval cause. Ectogenesis would not liberate women from any involvement in procreation. Procreation would still be heavily gendered, if only for the considerably burdensome involvement in supplying genetic material to create embryos. Without a comprehensive programme to tackle social norms and ideologies concerning procreation and parenthood, the pressure to gestate and birth children, albeit artificially, would still be placed on women. Ex hypothesis, if social norms and ideologies do not change, such a pressure might just turn into a pressure to create children via ectogenesis. One could even argue that, since ectogenesis makes it easier for women to have children, women could experience even greater pressure to become mothers as they would not need to gestate and birth their children. MacKay's argument in favour of ectogenesis is hence based on a risky bet, one that assumes that social norms will change for the better once ectogenesis has replaced women in gestating children.

In addition to being bad for commissioning women, argues MacKay, gestational surrogacy is bad for women carrying out the gestational labour as they "suffer violence of mental, physical and structural kinds".<sup>44</sup> Pregnancy is "dangerous and difficult work".<sup>45</sup> Women who want to undertake such work should be permitted to do so. However, continues MacKay:

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<sup>44</sup> MacKay (op. cit. n. 1): 4

<sup>45</sup> Ibid.: 5

[W]omen ought not to have to undertake gestational work for the fulfilment of other people's procreative desires. The labour involved in gestational surrogacy, as well as the dangers to the woman doing this work, the restrictions on the woman's freedom, and the mental and physical stresses cannot be justified *if* we have an alternative such as ectogenesis.<sup>46</sup> (emphasis in original)

The ethics and politics of gestational surrogacy (and sex work, saliently) divide feminist scholars.<sup>47</sup> MacKay sides with the camp, within these discussions, that emphasises the oppressive, demeaning and exploitative character of the practice. Importantly, this perspective has been disputed or at least problematised.<sup>48</sup> Scholars have, for instance, discussed whether banning such a practice would be in the best interests of women who currently engage in surrogacy agreements;<sup>49</sup> whether gestational labour should be considered an exceptional form of labour;<sup>50</sup> and whether women's decision to enter in surrogacy agreements cannot be deemed as autonomous,<sup>51</sup> among other issues. Due to space constraints, I cannot enter into these discussions here. Rather, my aim is to question MacKay's assertion that ectogenesis would end the oppression of *the kind of* women who engage in gestational surrogacy as surrogate women.

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<sup>46</sup> Ibid.

<sup>47</sup> Discussions on the ethics of UTx are similarly fraught with disagreements; see for instance: Lotz, M. (2016). Commentary on Nicola Williams and Stephen Wilkinson: 'Should Uterus Transplants Be Publicly Funded?' *Journal of Medical Ethics*. 42(9), 570–571. Wilkinson, S., & Williams, N.J. (2016). Should uterus transplants be publicly funded? *Journal of Medical Ethics*. 42(9), 559–565.

<sup>48</sup> Lewis, S.A. (2019). *Full surrogacy now*. London, UK: Verso Books. Parry, B. (2015). Narratives of neoliberalism: 'clinical labour' in context. *Medical Humanities*. 41(1), 32–37.

<sup>49</sup> Wilkinson, S. (2016). Exploitation in international paid surrogacy arrangements. *Journal of Applied Philosophy*. 33(2), 125–145. Panitch, V. (2013). Global surrogacy: Exploitation to empowerment. *Journal of Global Ethics*. 9(3), 329–343.

<sup>50</sup> Parry, B. (2018). Surrogate labour: Exceptional for whom? *Economy and Society*. 47(2), 214–233. Del Savio, L., & Cavaliere, G. (2016). The problem with commercial surrogacy. A reflection on reproduction, markets and labour. *BioLaw Journal-Rivista Di BioDiritto*. 7(2), 73–91. Wilkinson, S. (2016). Exploitation in International Paid Surrogacy Arrangements. *Journal of Applied Philosophy*. 33(2), 125–145.

<sup>51</sup> Macklin, R. (1988). Is there anything wrong with surrogate motherhood? An ethical analysis. *Law, Medicine and Health Care*. 16(1–2), 57–64.

Scholars such as Bronwyn Parry have challenged the stereotypical portrayal of the gestational surrogate as a poor, vulnerable and easily exploited woman.<sup>52</sup> Women who carry out gestational surrogate labour are often financially worse-off than the commissioning parents, residents of comparatively poorer countries, and with less monetary, cultural and institutional means available to support them.<sup>53</sup> With ectogenesis, gestational surrogates would not need to undertake gestational labour for third parties. At the same time, women for whom gestational surrogacy currently represents the only option to have genetically related children would be able to have children without involving third parties *in the gestating process*. If, as MacKay contends, gestational labour is ‘dangerous and difficult’ and should be undertaken only to fulfil one’s own procreative desires *then* ectogenesis represents a better alternative to gestational surrogacy as it frees gestational surrogates from undertaking this labour for third parties. This view, however, rests on two implicit assumptions that I believe to be mistaken. The first is that gestational labour is an exceptional form of labour. The second is that the type of women who are currently hired as gestational surrogates will *not* be hired by formerly commissioning women to carry out the non-gestational aspects of reproductive labour, such as for instance child-rearing and domestic labour.

In her recent work on gestational surrogacy, Sophie Lewis argues that “a good way to ground thinking” about this practice is to shift from asking whether gestational surrogacy is harmful, to asking whether it is harmful *compared to what*.<sup>54</sup> According to Lewis, this question enables the unveiling of dangerous and exploitative practices associated with ‘natural’ pregnancies as well as with waged labour:

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<sup>52</sup> Parry, B. (2015). Narratives of neoliberalism: ‘clinical labour’ in context. *Medical Humanities*. 41(1), 32–37.

<sup>53</sup> Rudrappa, S. (2015). *Discounted life: The price of global surrogacy in India*. New York, NY: New York University Press. Cooper, M., & Waldby, C. (2014). *Clinical labor: Tissue donors and research subjects in the global bioeconomy*. Durham, NC: Duke University Press. Pande, A. (2014). *Wombs in labor: Transnational commercial surrogacy in India*. New York, NY: Columbia University Press.

<sup>54</sup> Lewis (op. cit. n. 48)

As with sex work, the question of being for or against surrogacy is largely irrelevant. The question is, why is it assumed that one should be more against surrogacy than against other risky jobs.<sup>55</sup>

Pregnancies can be dangerous, and surrogacy agreements can often be exploitative, especially if the hired gestational surrogate women are of low socio-economic status. But it is unhelpful to single out gestational labour and gestational surrogacy as exceptionally dangerous and difficult, for this directs the attention towards certain forms of labour rather than on the pervasively oppressive conditions that waged labour imposes on workers. As Parry argues, the expression ‘bodily labour’ should not just be employed to characterise forms of labour that involve ‘bodily parts’ or ‘reproductive organs’, such as sex work and gestational surrogacy.<sup>56</sup> Rather, all forms of labour are ‘bodily’, for they involve “sacrificing the fabric of one’s very being in the service of paid employment”.<sup>57</sup>

In addition, in many Western societies reproductive labour, beyond strictly gestational labour, is predominantly carried out by women. This means that women still bear most of the responsibilities and burdens associated with rearing children, such as feeding them, organising their schooling activities and so forth, and with other forms of domestic labour. With ectogenesis, women might very well be able to “become mothers in the same way that men do”<sup>58</sup> and without involving third parties, but someone would still need to carry out all the other activities that characterise reproductive labour. Considering once again current societal arrangements, the most likely candidates for all this are women: either the children’s mothers,

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<sup>55</sup> Ibid.: 42

<sup>56</sup> As Lewis unorthodoxly puts it: “Nine times out of ten, you can bet that the reason someone is declaring so vehemently against one specific microbranch of the contemporary economy is because it is a branch of productive labor that involves wombs and orifices as well as frontal lobes and hands”. Ibid. : 53

<sup>57</sup> Parry (op. cit. n. 52): 2018

<sup>58</sup> Cavaliere, G. (2020). Gestation, equality and freedom: Ectogenesis as a political perspective. *Journal of Medical Ethics*. 46(2), 76–82.

which would mean that ectogenesis is only partially liberating, or third parties, who, crucially, will likely be women of a worse-off social status than their employers. The risk is hence that former gestational surrogates will be employed to carry out the reproductive labour that former commissioning women could not or would not want to carry out on their own. This would mean on the one hand that reproductive labour would still be profoundly gendered; on the other, that ectogenesis would not be that liberating at all, precisely for the kind of women that hitherto acted as gestational surrogates<sup>59</sup>.

MacKay's discussion of ectogenesis as an ethically desirable alternative to gestational surrogacy and uterine transplantation thus fails for two reasons. Firstly, as it presupposes that the pressures that motivate women to engage in these reproductive practices will disappear with ectogenesis. Secondly, as it presupposes that the exploitative aspects of gestational surrogacy concern gestational waged labour rather than waged labour simpliciter and the background socio-economic conditions of gestational surrogates.

### **Ectogenesis and equality: A radical approach**

As discussed in the previous sections, the key issue with MacKay's defence of ectogenesis is that she contends that this practice can alleviate or even end gender-based oppression. In so doing, she places emphasis narrowly on one specific aspect of female biology and inwardly on women's self-blame rather than on societal norms and expectations of women. Similarly, MacKay's critiques of surrogacy and uterine transplantation fail to engage with broader issues pertaining to women's agency, power imbalances and gendered aspects of care labour. Granted, MacKay does not completely fall for the lure of techno-fixing social problems that

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<sup>59</sup> I am indebted to Claire Horn for bringing this to my attention.

characterises many liberal defences of ectogenesis, as I have argued elsewhere.<sup>60</sup> MacKay does not frame ectogenesis as a practice that—by virtue of replacing ‘natural’ gestation—can address all the social, economic and political ills that are associated with the practice. Rather, MacKay maintains that ectogenesis should be utilised ‘conceptually’ to “advance the separation of the female reproductive function from ‘woman’ and from ‘mother’”.<sup>61</sup> It is in this sense that her argument can be distinguished from other defences of ectogenesis that have been advanced in the literature on this practice.

Despite this, as I have argued in the previous sections of this article, MacKay’s discussion of ectogenesis as a (conceptual) means to promote gender equality presents several limitations. While MacKay frequently refers to Firestone’s seminal work<sup>62</sup> on ectogenesis, it becomes gradually evident that she only engages with one, and arguably not the central, aspect of Firestone’s arguments for ectogenesis. Firestone’s radical proposals of abolishing the family, rethinking production and reproduction, remaking society in ways that enable free and equal flourishing, and ending the capitalist accumulation of goods are notably absent from MacKay’s analysis. The problem is not that she is being apocryphal to the original source: feminist defences (and critiques) of ectogenesis and assisted reproductive technologies more generally need not pay lip service to the giants on whose shoulders they stand. Rather, the problem with MacKay’s approach and with her sidestepping Firestone’s discussion on women’s liberation is that ectogenesis was never supposed to work on its own. On the contrary: Firestone was wary of introducing ectogenesis into a society that had not changed its way of organising production and reproduction, for its potential to become another instrument to uphold oppressive practices.

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<sup>60</sup> Cavaliere (op. cit. n. 58) : 76–82

<sup>61</sup> MacKay (op. cit. n. 1) : 6

<sup>62</sup> Firestone, S. (2015). *The Dialectic of Sex* (2nd ed.). London, UK: Verso.

Ectogenesis was regarded as just a small part of a much broader political, social and ethical programme aimed at subverting hierarchies and re-organising society.

In MacKay's juxtaposition of Firestone with Peter Singer's and Deane Wells'<sup>63</sup> arguments for ectogenesis, the limitation of her analysis becomes evident. She states:

Ectogenesis reveals the possibility that what has hitherto been a major component of female reproductive function—gestation—might not involve a woman at all. [...] This argument extends what Singer and Wells called the 'sexual equality' argument. Their proposal, drawing on Firestone, was that ectogenesis held the potential to achieve equality between women and men [...].<sup>64</sup>

Singer and Wells argue that ectogenesis can promote gender equality and, in this particular respect, they do echo Firestone. The echo—and the similarities among these authors—however, ends there. Singer and Wells do not endorse a broader programme for ending gender-based oppression and furthering women's liberation. It is in this lack of a broader engagement that, similarly, lies the problem with MacKay's defence of ectogenesis. Without engaging with how care labour and waged labour are organised in contemporary Western societies; without analysing and critiquing the gendered nature of social reproduction; without appreciating the disparities among women in bearing the costs of such a division of labour; without, in short, confronting the politics of production and reproduction, ectogenesis will not bring about the changes that Firestone, MacKay, and many other feminists and egalitarians have hoped for. The focus on female biology, and especially on females' reproductive capacities, as well as on

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<sup>63</sup> Singer, P., & Wells, D. (2006). Ectogenesis. In S. Gelfand & J. Shook R. (Eds.), *Ectogenesis. Artificial womb technology and the future of human reproduction* (pp. 9-25). Amsterdam, NL: Rodopi.

<sup>64</sup> MacKay (op. cit. n. 1): 7

harms caused by self-blame, produce a narrow picture of the causes and symptoms of gender-based oppression. A broader scope is needed, one that enables conceiving of truly liberating political projects.

## **Conclusion**

In this article, I have discussed MacKay's defence of ectogenesis as a means to end gender-based oppression. The value of MacKay's work lies in the political perspective that she takes on this technology, one that focuses on women's liberation and gender-based oppression. Despite this, I have argued that her analysis is limited, for it focuses narrowly on women's capacity to gestate and birth children and places undue emphasis on biology. Moreover, MacKay's defence of ectogenesis is normatively problematic for its advancement of a certain view on how to end gender-based oppression, one that characterises difference as deviance. Finally, I have criticised her framing of ectogenesis as a less ethically contentious alternative to two existing reproductive practices: gestational surrogacy and uterine transplantation. My argument in this article has been that the problematic features of these practices will carry on undisturbed with the introduction of ectogenesis, as the locus of intervention should not (or not only) be female biology but social norms that uphold oppressive structures and practices.