Upholding Women's Autonomy in Pregnancy: Responding to the Challenges of New Reproductive Technologies

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ABSTRACT

This thesis examines how certain innovations in reproductive technology should be conceptualised and regulated to ensure the autonomy of pregnant women is upheld. In the reproductive ethics literature, there is a central tension between seeing new reproductive choices as empowering and autonomy-enhancing, and as potential threats to the agency and liberty of pregnant women. Recognising that such choices are always made within a particular social, economic and political context, the thesis approaches these issues by looking carefully at the particular circumstances of the reproductive technologies under examination (namely, prenatal testing, maternal-fetal surgery, and gestational surrogacy), and analysing how challenges to women's autonomy would best be met in each case. The focus on ethical issues occurring *during* pregnancy, rather than technologies enabling conception, adds an additional layer of complexity, as the thesis recognises that pregnant women's choices are inevitably informed by the perception of the fetus as a developing entity that might have 'interests' and needs of its own. The thesis proposes that a broadly feminist and relational view of reproductive autonomy should be taken as a starting assumption when evaluating how certain technologies should be implemented. At the same time, however, it is necessary to be realistic about the social and ethical challenges particular technologies might bring. I argue that top-down approaches aiming to apply a singular notion of (reproductive) autonomy to very different kinds of reproductive contexts overlook the moral complexity of pregnancy, which is additionally bolstered by prevailing social views of maternal duties and future children's best interests. Attention to context, both in the sense of the particular social circumstances and the existing medical possibilities, is crucial for a realistic assessment of the implications of new technologies for pregnant women's autonomy.

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FOREWORD

Autonomy is often seen as one of the most important considerations in medical ethics and law. Being able to make our own choices in the context of health care, and being confident that these choices will be respected, is highly significant for affirming our self-worth. It can also go some way towards alleviating the anxiety and uncertainty sometimes associated with the experience of receiving medical care. As a Master's student focusing on the field of bioethics, I found myself somewhat dissatisfied with the prevalent notion of autonomy therein. Under the influence of feminist criticism and considerations from the social sciences, I began to see it as a narrow and limited ideal that should be supplanted with other, more nuanced ones, if not completely discarded. I expected writing a dissertation on the concepts of vulnerability and dignity in bioethics would both clarify and support my intuitions about the problems with autonomy.
What eventually happened was an experience familiar from my previous years studying philosophy – I ended my research with the realisation that things were much more complicated than they seemed. My tentative conclusion was that, in spite of significant objections, the concept of autonomy was still highly valuable, although in need of some rethinking and re-evaluation. Driven by this, I sought out the opportunity to spend some more years thinking about these subjects through doing a PhD. I chose to focus on reproductive autonomy as I was still very interested in the feminist perspective and what could be called 'women's issues'. Researching this area showed me that the notion of reproductive autonomy too turns out to be more complicated and layered, but also richer and more exciting, than I initially imagined. This time around, however, such a conclusion feels much more encouraging. It is my sincere hope that this thesis will make the reader equally curious about the moral dilemmas explored within it.

CHAPTER ONE: INTRODUCTION

1.1 Thesis structure and overview of chapters

This thesis is based around four papers (three single-authored, one written in co-authorship), which deal with issues around upholding women's[1] autonomy in the context of various pregnancy-related situations. The three single-authored papers, which form the core of the thesis, explore the contexts of prenatal testing, maternal-fetal surgery and surrogacy. They each examine possible concerns related to autonomy, and how these should be best addressed. The fourth paper focuses on the notion of maternal-fetal conflict and its historical, legal and ethical significance. It too touches on major themes explored within this thesis, namely (i) the effect of new reproductive technologies on pregnant women's autonomy, and (ii) the moral implications sometimes drawn from the increased visibility of the fetus.

This chapter sets out the philosophical and methodological approach adopted throughout the thesis. It outlines the scope and limitations of the arguments presented and approach employed, as well as clarifying some of the terminology used. Chapters Two and Three situate the thesis within the wider context of bioethical (and to some extent legal) literature on autonomy in reproduction and pregnancy. The chapters focus, respectively, on the classical 'procreative liberty' framework of reproductive freedom, and the alternative, more nuanced accounts of reproductive autonomy that have arisen

[1] The decision to use the term 'pregnant women' throughout the thesis is explained in more detail in section 1.3.1 below.

in response. The papers are then presented in Chapters Four to Seven, each prefaced and followed by introductory and concluding notes linking them to the rest of the thesis. Chapter Eight sets out the main arguments of the thesis as a whole, before drawing together the topics and issues discussed to form a conclusion. Finally, the Appendix contains PDF copies of published papers from the thesis, as well as a co-authored paper on a related topic.[2]

1.2 Philosophical approach and methodology

In terms of its philosophical approach, this thesis adheres to the Anglo-American tradition of contemporary bioethics, broadly understood. This tradition is informed crucially in its approach and style of argumentation by analytic-style moral philosophy. Emphasis is thus placed on analysing the notions used in debates and evaluating the strength of arguments, while aiming to use clear and approachable language. While I am hesitant to subscribe to any particular ethical theory, the style of debate and key concepts of this broad tradition have undoubtedly influenced both the sources selected and arguments presented in this thesis.[3] Further, in line with this kind of 'mainstream'

[2] This paper, which was published in *Bioethics* in July 2021 [Mullock, A. K., Romanis, E. C., & Begović, D. (2021). Surrogacy and uterus transplantation using live donors: Examining the options from the perspective of 'womb-givers'. *Bioethics*. DOI: 10.1111/bioe.12921], provides a comparison of surrogacy and uterine transplantation as competing options for the prospective 'womb-giver'. I became involved in writing this paper towards the end of my PhD, and therefore have not included it in the main body of the thesis. However, I append it because the topics explored in it are relevant and continuous with many of those examined within the thesis, as well as covering some of the same arguments.

[3] I will further explain the chosen methodology in section 1.2.1 below. However, the following quote summarises the essence of this approach well: "Philosophers bring an interest in clarity and transparency, simplicity and economy of expression, and systematicity. And perhaps most distinctly, philosophers bring these interests together in order to grasp in thought the essential aspects of a practice, and understand these essentials in the light of previous aspirations (its history) and future goals." Khushf, G. (2004). Introduction: Taking stock of bioethics from a philosophical perspective. In G. Khushf, *Handbook of bioethics: Taking stock of the field from a philosophical perspective* (pp. 1-28). Dordrecht: Springer. p.2.

bioethical approach, as well as my educational background in philosophy, the thesis consists wholly of theoretical research. It does not include any empirical components but is based on the analysis of arguments within existing literature and building on these, or critiquing them and offering new ones.

In this sense, the conclusions of both the papers on their own and the thesis as a whole share the perceived limitations of philosophical bioethics as a discipline. Criticism of 'traditional' (in particular American) bioethical scholarship has been raised for decades, notably by social scientists,[4] who have pointed out that the key ideas and values of contemporary bioethics are not neutral or universal, but reflect social and political ideals such as individualism and rationality. It is argued that taking these ideals as a starting point uncritically can lead to the misunderstanding or marginalisation of phenomena that do not fit this framework. It is also argued that the theoretical and philosophical approach to bioethics ignores the complex realities of the issues under investigation, which can only be captured properly through social scientific methods. In response to such worries, the so-called 'empirical turn' in bioethics has arisen in recent years,[5] attempting to integrate different methodologies and promote interdisciplinarity, though a plurality of approaches within this broadly construed subdiscipline is also recognised.[6] While I have not sought to carry out empirical bioethics in this research

[4] For a notable example of such a critique see: Fox, R. C., & Swazey, J. P. (1984). Medical morality is not bioethics—medical ethics in China and the United States. *Perspectives in Biology and Medicine*. *27*(3), 336-360. More positively, some scholars have proposed ways in which bioethics could be transformed to become more reflective and critical by incorporating insights from the social sciences and collaborating with those conducting empirical research: De Vries, R., Turner, L., Orfali, K., & Bosk, C. (2006). Social science and bioethics: the way forward. *Sociology of Health & Illness*. *28*(6), 665-677; Hedgecoe, A. M. (2004). Critical bioethics: beyond the social science critique of applied ethics. *Bioethics*. *18*(2), 120-143.
[5] Borry, P., Schotsmans, P., & Dierickx, K. (2005). The birth of the empirical turn in bioethics. *Bioethics*. *19*(1), 49-71.
[6] Ives, J., & Draper, H. (2009). Appropriate methodologies for empirical bioethics: it's all relative. *Bioethics*. *23*(4), 249-258.

project, I am mindful of the criticisms described above and sympathetic towards approaches to reproductive issues in particular that attempt to integrate ethical analysis with empirical findings. In line with this I have relied on empirical work, both within bioethics and from other disciplines, where this is appropriate to the discussion.

One of the papers in the thesis focuses on a current proposal for legal reform. Thus, it includes an overview of the relevant legal context for this issue – namely the history of surrogacy legislation in the UK, and some critical considerations about its adequacy. This research was undertaken at a UK-based university, with supervision and input from scholars working primarily on issues within the legal system of England and Wales. Therefore I have also limited my focus in exploring legal issues to this particular jurisdiction, although I have included references to work analysing and comparing laws in different countries where this was required (Paper Two). Although my principal interests have been more theoretical, in line with my general approach and focus on conceptual clarity, I believe that it is important to examine how particular concepts are used in the legal sphere, and not only within ethical debate.[7] To this end I have examined carefully how, for example, *exploitation* or *labour* (in the context of surrogacy) is understood in current legislation.

Despite not starting from a specific ethical theory or methodology, this thesis nevertheless is grounded in several key commitments, which I will now set out. Through this, I also provide a brief overview of the main concepts analysed by the papers within the thesis.

[7] Brassington, I. (2018). On the relationship between medical ethics and the law. *Medical Law Review*. *26*(2), 225-245.

1.2.1 Importance of concepts used, and the need for clarity and consistency

'Conceptual analysis' is often recognised as the key method (if there is one) in analytic philosophy, from which traditional Anglo-American bioethics is partially derived.[8] However, this term does not have a universally accepted definition. A classical description of the method of conceptual analysis states that it is meant to produce "definitions of concepts that are to be tested against potential counterexamples that are identified via thought experiments."[9] Yet, this is arguably too conservative a description to encompass even most contemporary research in theoretical philosophy, let alone applied ethics. My research is therefore based on a more simplified version of this method, which still remains in the spirit of 'mainstream' philosophical bioethics – namely, that of insisting on a clear understanding and consistent use of the key concepts employed in the analysis of a particular ethical problem, as a way of resolving potential misunderstandings and drawing out the implications of framing the issue in a particular way.

Following this approach, each of the papers in the thesis addresses a distinct ethical question, through focusing on one or more *concepts* that are crucial to the discussion at hand. This approach aims to clarify how the main participants in certain ethical debates use and understand these notions. It further seeks to better illuminate possible inconsistencies or instances of 'talking past each other', which preclude coming to a

[8] Jonsen, A. R. (2004). The history of bioethics as a discipline. In G. Khushf, *Handbook of bioethics: Taking stock of the field from a philosophical perspective* (pp. 31-51). Dordrecht: Springer. p. 36
[9] Margolis, E., and Laurence, S. (2019). Concepts. *The Stanford Encyclopedia of Philosophy (Summer 2019 Edition)*. Retrieved from https://plato.stanford.edu/archives/sum2019/entries/concepts/ (accessed 4 January 2021).

shared understanding and constructive discussion. Early on in the research I identify a clear difference between 'procreative liberty' and 'reproductive autonomy', despite the fact that these notions are often used synonymously with each other (or with other variants such as 'procreational autonomy' and 'procreative autonomy').[10] Paper One (Chapter Four in the thesis) focuses on (reproductive) *autonomy* in the prenatal testing debate, as well as examining objections based on the notion of *eugenics*. Paper Two (Chapter Five) interrogates the notion of (fetal) *patienthood*, and questions the potential for recognising *competing interests* of the fetus and pregnant woman, respectively, in the context of maternal-fetal surgery. Paper Three (Chapter Six) seeks to clarify how we understand *exploitation* in the debate around regulating surrogacy, and specifically allowing payment for it, as well as examining what it would mean to regard surrogacy as a form of *labour*. Finally, Paper Four (Chapter Seven) examines, from a variety of perspectives, the notion of *maternal-fetal conflict*. My contribution to the paper focuses once again on fetal patienthood and the possible consequences of recognising fetal interests as separate from those of the pregnant woman whose body it inhabits. I also consider the implications of the *visibility* of the fetus that is afforded by developments in medical technology for how it is viewed in ethical discussions.

1.2.2 Commitment to feminist and socially sensitive approaches to autonomy

While I would not claim that this thesis is a work of feminist bioethics (for similar reasons as I believe it does not fully belong to any other ethical theory), my approach

[10] For examples see: Harvey, M. (2004). Reproductive autonomy rights and genetic disenhancement: Sidestepping the argument from backhanded benefit. *Journal of Applied Philosophy*. *21*(2), 125; Eijkholt, M. (2011). Procreative autonomy and the Human Fertilisation and Embryology Act 2008: Does a coherent conception underpin UK law?. *Medical Law International*. *11*(2), 93-126; Scott, R. (2005). The uncertain scope of reproductive autonomy in preimplantation genetic diagnosis and selective abortion. *Medical Law Review*. *13*(3), 293; Wellman, C. (2005). *Medical law and moral rights*. Law and Philosophy Library, vol. 71. Dordrecht: Springer Science & Business Media.

and argumentation have undoubtedly been influenced by accounts of autonomy that stress its relational and social nature, and that take the interdependence of human beings as a starting point.[11] I have also relied strongly on feminist accounts of (reproductive) autonomy that take a critical approach to focusing on individual choice in reproduction, without exploring the wider context in which these choices are made.[12] In that sense, the thesis is heavily informed by work done in feminist ethics, even though it may not fall within any particular tradition or model within these fields.

1.2.3 Interdisciplinarity: drawing from research in humanities and social sciences

A central tenet of my research outlook has been to ensure that my theoretical work is informed by empirical work, where appropriate and helpful for the topic at hand. Issues around autonomy and reproduction are dealt with by researchers from various disciplines, so a research approach from one or two of these angles will necessarily be limited. As mentioned above, this thesis consists of theoretical research, but due to the nature of the subjects explored in the papers, it relies on empirical work where appropriate. For instance, in Paper Two I look at empirical studies of how pregnant women engage with the prospect of maternal-fetal surgery to inform my conclusions about the (un)acceptability of recognising the fetus as a patient in the context of such interventions. In Paper Three I draw on sociological research of surrogacy as labour to

[11] See for example: Donchin, A. (2001). Understanding autonomy relationally: toward a reconfiguration of bioethical principles. *The Journal of Medicine and Philosophy*. *26*(4), 365-386; Mackenzie, C., & Stoljar, N. (2000). Introduction: autonomy refigured. In *Relational autonomy: Feminist perspectives on autonomy, agency, and the social self* (pp. 3-31). Oxford University Press; Meyers, D. T. (1989). *Self, society and personal choice*. New York: Columbia University Press; Nedelsky, J. (1989). Reconceiving autonomy: Sources, thoughts and possibilities. *Yale Journal of Law & Feminism*. *1*(3), 7-36.

[12] See for example: Donchin, A. (1985). *Procreation, power, and personal autonomy: Feminist reflections;* Mills, C. (2011). *Futures of reproduction: Bioethics and* biopolitics (Vol. 49). Springer Science & Business Media; Nelson, E. (2013). *Law, policy and reproductive autonomy*. Oxford: Hart Publishing.

inform my argument about the exploitation of surrogates and how this should be addressed by legal reform. The thesis strives to draw upon literature from various fields, and even though the overall methodological approach is that of philosophical bioethics, the conclusions are informed by research on similar topics from disciplines such as sociology, anthropology, history and socio-legal studies.

1.3 Scope and limitations of the thesis

As explained in the previous section, this thesis is not presented in the form of a monograph, but is based around a set of individual papers unified by a common theme, yet focusing on different ethical issues and contexts. As a consequence of this, it does not offer a theory of reproductive autonomy, nor does it produce a definitive answer to the question of what autonomy is. Rather, it seeks to illuminate certain aspects of autonomy and, based on this, explore how it can most efficiently be upheld in the context of different pregnancy-related interventions and ethical dilemmas. In line with accounts of autonomy offered by feminist philosophers and (bio)ethicists, which are explored in more detail in Chapter Three, I broadly understand autonomy as the *capacity* to make free, uncoerced and informed decisions in accordance with one's preferences on a particular issue, or overall system of values and beliefs.[13] However, I do not subscribe to a particular theory of autonomy (or reproductive autonomy) through which to view, and attempt to resolve, moral dilemmas in a top-down manner.

[13] Such an account has notably been developed by Diana Meyers in *Self, Society and Personal Choice* [*op. cit.* note 11], focusing on what she calls 'autonomy competency' as a set of skills allowing persons to exercise what we normally consider to be autonomous choices and live in accordance with their beliefs and values. See also contributions in Mackenzie, C., & Stoljar, N. (Eds.). (2000). *Relational autonomy: Feminist perspectives on autonomy, agency, and the social self*. New York, Oxford: Oxford University Press.

This approach was not so much a preliminary decision, but developed through the research process, based on my examination of various accounts of (reproductive) autonomy, as well as the insights and gained in researching and writing the papers.

While my research includes discussion of the maternal-fetal relationship, it does not attempt to reach any normative conclusions about the moral responsibilities (if any) of pregnant women to their fetuses. This is because I am here primarily interested in women's autonomy and potential pressures upon it and, furthermore, due to independent reasons against accepting a conflict view of pregnancy, on which pregnant women and fetuses can have separate and potentially differing interests.[14] I take the primacy of the woman's wishes and choices as a beginning assumption in debates about autonomy in reproductive decision-making, as this position is not only consistent with most legal systems, but also aligns well with feminist commitments and ethical views about bodily autonomy.[15]

I will also not aim to engage with metaphysical debates about the relationship between the pregnant woman and the fetus, such as, for example, whether the fetus should be considered a part of the woman's body or a separate organism. In recent years, there has been backlash against the standard view of pregnancy according to which women are 'fetal containers.'[16] I take the opinion that this does not carry much normative

[14] See the discussion in Chapter Seven on this point.
[15] Jackson, E. (2001). *Regulating reproduction: Law, technology and autonomy*. Oxford and Portland: Hart Publishing; McLean, S. A. M. (1998). The moral and legal boundaries of fetal intervention: whose right/whose duty. *Seminars in Neonatology*. *3*(4), 249-254; Cao, K. X., Booth, A., Ourselin, S., David, A. L., & Ashcroft, R. (2018). The legal frameworks that govern fetal surgery in the United Kingdom, European Union, and the United States. *Prenatal Diagnosis*. *38*(7), 475-481.
[16] See for example Baron, T. (2019). Nobody puts baby in the container: The foetal container model at work in medicine and commercial surrogacy. *Journal of Applied Philosophy*. *36*(3), 491-505; Kingma, E. (2019). Were you a part of your mother?. *Mind*. *128*(511), 609-646.

weight with regard to the arguments explored in this thesis. This is because, regardless whether the fetus is taken to be an organ in the pregnant woman's body or a separate organism, what makes ethical dilemmas about pregnancy distinctive is primarily to do with its cultural imaginary. Considerations about the metaphysical status of the fetus also do nothing to affect the physical fact of its dependence on, and containment within, the pregnant woman's body,[17] which remains a key source of the primacy of women's autonomy and bodily integrity in pregnancy.

1.3.1 Notes on terminology

In line with the general philosophical approach of the thesis, which is outlined in the next section, I have tried to refrain as far as possible from using overly complicated or technical language. However, there are a few decisions on terminology used in this thesis which require a brief discussion. Within the thesis I sometimes use certain terms in a way that is not 'standard' ('reproductive technology' and, to some extent, 'maternal-fetal surgery'), as well as terms that have faced independent objections ('pregnant women'). Therefore, I will now briefly try to explain why I use these terms in the ways I do, and why this is significant as well as appropriate for the purposes of this thesis.

1.3.1.1 '(New) reproductive technology'

It is arguable that when speaking of 'new reproductive technologies', or 'reproductive technology' in general, most people would commonly think of interventions fitting broadly under the umbrella of 'assisted reproduction'. This term predominantly refers

[17] Purdy, L. M. (1990). Are pregnant women fetal containers?. *Bioethics*. *4*(4), 274.

to forms of assisted *conception*, or other events occurring before conception[18] (embryo fertilisation and screening, in vitro or artificial insemination, gamete or sperm donation, to name a few examples), which raises the question as to whether the kinds of technologies discussed in this thesis, and the ethical dilemmas associated with their introduction and use, are most appropriately described as reproductive technology. I argue that, while it might initially seem strange to speak of prenatal testing, maternal-fetal surgery, and even surrogacy[19] as reproductive technologies, there is still a plausible justification for using this terminology, for the following three reasons.

Firstly, in discussions of 'reproductive autonomy', this term is usually used to encompass issues occurring not only before, but *during* and also *after* pregnancy.[20] This thesis will ultimately argue that reproductive autonomy, in the classic sense of making decisions about whether and how to reproduce,[21] should be differentiated to some extent from the sense of autonomy pertinent to issues arising in the context of pregnancy (autonomy in pregnancy). Still, this broad sense of talking about reproduction and reproductive issues is appropriate because it fits well with the existing debates that the thesis addresses and partakes in.

Secondly, the term '*assisted* reproduction' is often used to refer specifically to *conception* that is aided by third parties, whether in terms of directly donating their genetic

[18] It is sometimes also used to refer to interventions taking place during labour, such as ultrasound or episiotomy. See for example Burrow, S. (2012). Reproductive autonomy and reproductive technology. *Techné: Research in Philosophy and Technology*. *16*(1), 31-44.
[19] Roach Anleu, S. L. (1990). Reinforcing gender norms: Commercial and altruistic surrogacy. *Acta Sociologica*. *33*(1), 63.
[20] For example, in 2009 a special issue of *Bioethics* (*Volume 23, Number 1, January 2009)* was devoted to "rich discussion about reproductive autonomy", covering topics such as autonomy in childbirth, postnatal parental autonomy, gender-sensitive approaches to new reproductive technologies, prenatal screening, and others. See: McLeod, C. (2009). Rich discussion about reproductive autonomy. *Bioethics*, *23*(1), ii-iii.
[21] See for instance the discussion in Jackson, *op. cit.* note 15, pp. 1-11.

material or assisting with the medical aspects in a professional capacity. I argue, however, that the cases discussed in this thesis also 'fit the bill' in that sense despite not being related to conception specifically, as each of the practices in question involves a multitude of agents beyond the pregnant woman. These include medical professionals such as doctors, nurses, fertility specialists, surgeons, genetic counsellors, but also partners and family members, genetic material donors, intended parents and non-profit counsellors (surrogacy), and other actors. Each of these cases therefore involves some level of 'assistance' from and, crucially, *dependence on* others to ensure that the interventions in pregnancy have the desired outcomes.

Finally, the 'technology' aspect of the practices discussed is probably evident in the cases of prenatal testing and maternal-fetal surgery, but possibly less so when it comes to surrogacy. While gestational surrogacy[22] will typically involve some form of artificial conception and preparatory fertility treatment for the surrogate,[23] the pregnancy itself may not involve much more technological intervention than an average pregnancy would in this age (assuming of course the availability of proper medical care). Depending on the arrangements made between the surrogate and the couple (usually referred to as 'intended parents') whose baby she carries, it might not even involve any form of testing/screening beyond routine ultrasound scans. Thus, it seems like the issue here relates more to the social arrangement of the pregnancy rather than particular ethical problems opened up by a technological possibility arising.[24] It could be argued

[22] Gestational surrogacy does not involve any genetic connection between the intended parents and the surrogate – all the genetic material comes either from the intended parents or egg/sperm donors. Traditional surrogacy, on the other hand, involves the fertilisation of the surrogate's own egg, making her a biological parent. See Human Fertilisation & Embryology Authority. *Surrogacy*. Retrieved from https://www.hfea.gov.uk/treatments/explore-all-treatments/surrogacy/ (accessed 5 January 2021).
[23] Ibid.
[24] Roach Anleu, *op. cit.* note 19.

that the same issues are as likely to occur around gestational surrogacy arrangements, as with genetic or traditional surrogacy arrangements, in which there is no particular technological element even to the conception of the child.

Nonetheless, I argue that surrogacy can plausibly be included under this broad heading of reproductive technology, for two reasons. Firstly, it (at least the type under discussion) requires artificial fertilisation/insemination and fertility treatment for the pregnancy to be established. Secondly, and more significantly for the purpose of this thesis, the law reform under discussion in the UK arguably represents a step towards treating surrogacy as more akin to reproductive technology practices like gamete donation than adoption (which was the main model within the original legal framework).[25] It should be noted that arguments have been made that the new law can and should treat surrogacy more in line with other forms of assisted reproduction,[26] though this falls outside of the scope of this thesis and the paper dealing with surrogacy.

1.3.1.2 'Maternal-fetal surgery'

The authors discussing prenatal surgical intervention and therapy refer to the procedures in question variously as 'fetal surgery' and 'maternal-fetal surgery'. In the last decade or so, there has been a shift in the literature towards using the 'maternal-fetal' variant. This is because, to some extent (at least nominally), it addresses the concern that pregnant women are marginalised and forgotten when debating these

[25] Horsey, K., & Sheldon, S. (2012). Still hazy after all these years: the law regulating surrogacy. *Medical Law Review*. *20*(1), 67-89.
[26] Horsey, K. (2016). Fraying at the edges: UK surrogacy law in 2015. *Medical Law Review*. *24*(4), 608-621.

practices,[27] by acknowledging explicitly that the woman is at least as impacted in the surgery as the fetus, if not the only individual whose interests should be considered. I have chosen to use the term 'maternal-fetal surgery' throughout the thesis partly to remain in line with recent conventions in the literature, and partly for reasons that relate to the substance of the paper on this topic. Specifically, in this paper, I question the issue of fetal patienthood but take the patient status of the pregnant women as assumed, and therefore her involvement in the surgery as non-controversial.

1.3.1.3 'Pregnant women' vs. 'pregnant people/persons'

In recent years there has been a growing recognition of the specific challenges faced in the context of reproduction by people whose identity does not fit neatly within the binary categories of man/woman and male/female, such as transgender, non-binary or intersex individuals.[28] In addition to this, technological advances have made it possible for members of some of these groups (such as trans men who still have functioning female reproductive organs) to carry pregnancies. It is thus argued, especially in the reproductive justice literature, that more inclusive terms like 'pregnant people' (or 'pregnant persons') should be preferred to 'pregnant women', as they acknowledge that not all people who can or do get pregnant see themselves as women.[29] While these concerns are both legitimate and important, I have opted to use 'pregnant woman' in this thesis for reasons directly related to its subject and scope, as explained below.

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[27] Lyerly, A. D., & Mahowald, M. B. (2001). Maternal-fetal surgery: the fallacy of abstraction and the problem of equipoise. *Health Care Analysis*. *9*(2), 151-165.

[28] See for instance discussions in: Fischer, O. J. (2020). Non-binary reproduction: Stories of conception, pregnancy, and birth. *International Journal of Transgender Health*. 1-12; Karaian, L. (2013). Pregnant men: Repronormativity, critical trans theory and the re(conceive)ing of sex and pregnancy in law. *Social & Legal Studies*. 22(2), 211-230; Stritzke N., & Scaramuzza E. (2016). Trans*, intersex, and the question of pregnancy: Beyond repronormative reproduction. In S. Horlacher, *Transgender and intersex: Theoretical, practical, and Artistic Perspectives* (pp. 141-163). New York: Palgrave Macmillan.

[29] Ross, L., J., & Solinger, R. (2017). *Reproductive justice: An introduction*. Oakland, CA: University of California Press. pp. 6-8.

The context of reproduction and pregnancy worldwide is highly gendered, with the overwhelming majority of pregnant people identifying as women. While some people who become pregnant may not see themselves or normally live as women, it is likely that society would in most cases label them as such if they engage in gestation in the ways that women usually do (i.e. by becoming pregnant and delivering babies); certainly at the moment law and policy still do so in many cases.[30] This ties into deeply entrenched social expectations of women and the ideology of motherhood,[31] which most feminine-presenting people are likely subject to regardless of how they identify.

In addition to this, non-binary and especially trans pregnancies are also faced with some independent challenges,[32] which, while likely related to the concerns examined in this thesis, are not 'invisible' and normalised in the same way as the worries around prenatal testing, for example. It is precisely these seemingly invisible autonomy-related problems, however, that I wish to address in this thesis – namely, issues hindering choices in pregnancy which are not likely to be seen as obviously problematic. To some extent, the conclusions of this thesis will hopefully apply to all those experiencing pregnancy, but I cannot claim to speak to the experiences of those who are additionally marginalised by a gender identity not fitting within the traditional man-woman divide. I have thus opted to mostly use 'pregnant women' as shorthand for pregnant individuals; while this solution is imperfect in that it may miscategorise some people or obscure their interests, speaking more inclusively about 'pregnant persons' while not engaging

[30] See the case of *Re TT and YY* [2019] EWHC 1823 (Fam).
[31] Milne, E. (2020). Putting the fetus first—Legal regulation, motherhood, and pregnancy. *Michigan Journal of Gender & Law*. *27*(1), 149-211.
[32] Such as, for instance, experiencing gender dysphoria due to the hetero- and cis-normativity of the usual social treatment of pregnancy, or legal barriers to being recognised as a parent in their chosen gender. See Fischer, *op. cit.* note 28, and Karaian, ibid.

with the specific issues faced by those of them who are not also women would be a misrepresentation of the scope and limitations of the arguments made in this thesis.

1.4 Conclusion

This chapter outlined the structure of the thesis and laid out the approach taken in it. I have explained the philosophical approach I take and the key methodological commitments employed in this research, as well as setting out the limitations of the thesis. I have also outlined some terminological choices and explained the reasoning behind them and their appropriateness to the scope and subject matter of the thesis. The words we use matter, and so my first impulse as someone with a background in philosophy was to look carefully at the terms we use, what underlying meanings they carry, and how this sometimes shapes debates or pushes them in a certain direction.

The next two chapters situate the thesis within its ethical and legal background. Chapter Two explores an influential understanding of reproductive freedom and how it has impacted bioethics and law, and analyses the criticism of this framework, stressing the necessity of adopting a more nuanced approach. Chapter Three examines some notable examples of such approaches, ultimately arguing that ongoing developments in medical technology and practice necessitate a close examination of particular cases in order to determine how autonomy can be both threatened and upheld. The papers then offer such examinations, focusing on prenatal testing, maternal-fetal surgery and gestational surrogacy, respectively. The final paper on maternal-fetal conflict ties into these papers, laying out the general theme of challenges posed by new reproductive technology to the primacy of women's autonomy in pregnancy, which is elaborated in the conclusion.

CHAPTER TWO: THE PROCREATIVE LIBERTY FRAMEWORK

2.1 Introduction

This thesis, as a whole, aims to answer the question: With the development of new reproductive technologies, allowing greater medical control over the process of gestation, how can we ensure that the autonomy of pregnant women is upheld? In order to begin addressing this issue, it is necessary first to say something about the very concept of autonomy in reproductive matters.

As innovative reproductive technologies become available, or seem likely to soon be possible for individuals and couples seeking to have children, questions inevitably arise about whether the use of these technologies should be allowed or encouraged, and to what extent. We often ask the question of how individual procreative demands and desires should be balanced with upholding important social values, or with preventing possible harms. In effect, we attempt to judge to which extent the *reproductive autonomy* of individuals can be justifiably upheld, and in what circumstances it might be legitimately infringed upon or sacrificed for some 'greater good'.

Bioethics has long been concerned with respect for autonomy and individual freedom of choice in the context of medical decision-making. In the sphere of human reproduction, the classical problem was that of the right to abortion. In recent years, with the development of more advanced reproductive technologies, debates have expanded to encompass issues such as prenatal testing for, or treatment of, disease and disability, or

the potential selection of traits in offspring through genetic manipulation, to give a few examples. There is also a growing focus on the autonomy and freedom of the specific persons engaged in reproduction, rather than abstractly understood 'individuals'.

This chapter contains the initial ethical and legal background for my research. I begin exploring the concept of reproductive autonomy through examining the related (and sometimes interchangeably used) notion of *procreative liberty*, and discussing potential conceptual differences between the two. I introduce the latter notion primarily through the work of the legal theorist John A. Robertson, who wrote extensively on this topic and developed a prominent rights-based account of procreative liberty, which has become one of the most influential theories of autonomy in the reproductive concepts. I also give a brief overview of how procreative liberty has figured as a consideration in policy and law, using examples primarily from the law of England and Wales.[33]

I then introduce some strands of criticism that show the limitations of the procreative liberty framework. The next chapter addresses these in more detail through a discussion of the notion of (reproductive) autonomy and its role in bioethics. Ultimately, I suggest that a wider, relational conception of autonomy is needed to address significant contemporary issues in reproductive decision-making, and I argue that the concept of procreative liberty might be too narrow to accommodate this. The remainder of the thesis (papers and conclusion) then proceeds from this assumption, trying to apply this kind of more nuanced view of reproductive autonomy to various scenarios in the reproductive concepts.

[33] In general, where I have addressed legal issues within the thesis this has been in the context of the law of England and Wales. This is not only due to the context in which my research was done (as explained previously), but also because notable English legal cases and pieces of legislation have influenced ethical reasoning, demonstrating the possible practical implementations of bioethical ideas. See Brassington, *op. cit.* note 7.

It should be noted at the outset that the term 'reproductive autonomy' is often used interchangeably in the literature with a cluster of other terms, such as (most notably) 'procreative liberty', 'reproductive liberty', 'reproductive freedom' and 'procreational autonomy'.[34] Of course, this might raise the question of why we would want to insist on making a difference between these terms in the first place. If people have successfully debated reproductive matters while using the concepts synonymously, then there could be an argument for saying that their meanings actually do converge. I argue, however, that the interchangeable usage of these terms may actually conceal some important conceptual differences. The conflation of 'procreative liberty' and 'reproductive autonomy', in particular, points us towards different sets of concerns, one of these being, I will argue, narrower than the other, and therefore unable to encompass all the ethically relevant aspects of some of the problems discussed in reproductive ethics.

From examining the relevant key literature, I argue that a careful exploration of the notion of procreative liberty shows that a fuller sense of reproductive autonomy cannot be adequately captured by the concept as it is traditionally defined. Moreover, I submit that continuing to frame debates principally in terms of procreative liberty might lead to overlooking some important ethical issues. While procreative liberty may be important in its own right, for example as a legal or policy principle, recognising the wider scope of reproductive autonomy highlights the significant potential for this notion to expand such that it can be applied to more complex and structural issues. Ultimately, I argue that procreative liberty remains confined to a more narrow, individualistic and legalistic framework that does not seem to recognise structural

[34] See references in note 10 above. See also Nelson, *op. cit.* note 12, pp. 31-37.

impediments for members of certain social groups to make informed and uncoerced reproductive choices. It also does not encompass some choices which might nevertheless be of importance for men and women in the reproductive process.

2.2 Procreative liberty: the standard account

The works of John A. Robertson[35] are representative of the standard account of procreative liberty which features in mainstream bioethics. As he is also one of the most prolific authors on the subject, I will begin by outlining his views. Robertson defines procreative liberty as the liberty to reproduce (or not) in the genetic sense.[36] This is the most basic definition, but the concept is not limited to merely the freedom to decide *whether* to reproduce. Procreative liberty also involves decisions about *how* and *when* to reproduce.[37]

Robertson emphasises that not all interests which might occur within the reproductive process are encompassed by the notion of procreative liberty. Some choices relevant to the process of procreation do not fall under the scope of procreative liberty - for example, the choice of whether to give birth in a hospital or at home. The basic test used to determine whether something is a procreative interest is to question whether the availability of such an option would decide if reproduction occurs at all.[38] This would

[35] Most notably Robertson, J. A. (1996). *Children of choice: freedom and the new reproductive technologies*. Princeton: Princeton University Press.
[36] Ibid: 22.
[37] Robertson, J. A. (1988). Procreative liberty, embryos, and collaborative reproduction: A legal perspective. In E. H. Baruch, A. F. D'Adamo, J. Seager, *Embryos, ethics, and women's rights: Exploring the new reproductive technologies*. New York: Harrington Park Press. p. 179
[38] Robertson, *op. cit.* note 35, p. 23; see also Robertson, J. A. (2003). Procreative liberty in the era of genomics. *American Journal of Law & Medicine*. *29*, 448.

seem to rule out the liberty of choosing a home birth over delivery in hospital, but would encompass the liberty to employ a surrogate or seek a gamete donor where a woman is unable to conceive/carry the pregnancy on her own, for example.

It is difficult, however, to determine precisely the scope of decisions that this proposed right should extend to. This is an objection which is often raised in relation to the concept of procreative liberty. In some of his works, Robertson seems to imply that almost all parental preferences are part of procreative liberty if they are strong enough to ensure that reproduction would not occur if they could not be satisfied. For instance, he explicitly claims so in relation to preferences about a future child's genetic characteristics.[39] He defends the right of prospective parents to access information 'material to the decision to reproduce', such as information about a potential disability, but also about any 'undesired characteristic' of the future child (it is left open which characteristics fall within this remit). Even more strongly, Robertson concludes that an individual's "right to have offspring generally should entitle her [the individual] to have offspring only if she thinks that offspring will have particular characteristics."[40]

This definition seems to leave quite a lot of space for potential reproductive decisions that could be legitimately considered as part of procreative liberty. Robertson does mention the qualification that procreative liberty is only a presumptive, and not an absolute right, which means it can be infringed upon if its exercise could result in some

[39] Robertson, J. A. (2000). Reproductive liberty and the right to clone human beings. *Annals of the New York Academy of Sciences*. *913*(1), 200.
[40] Ibid: 201.

tangible harms.[41] Still, as Inmaculada de Melo-Martín has pointed out,[42] it is unclear which criterion we should use to judge whether a certain characteristic of the future child, for example, is so central to a reproductive decision to be part of procreative liberty, or whether it represents "only a preference as to offspring characteristics but not one that determines whether reproduction will occur."[43]

Why is procreative liberty so important that it is often considered to be a basic freedom, and sometimes even a (fundamental human) right?[44] The significance of procreative liberty for Robertson lies in the fact that control over reproduction is central to "personal identity, dignity and the meaning of one's life."[45] Despite acknowledging that the desire to procreate is partly socially constructed, he insists that it is nevertheless strongly tied to natural instinct, as well as being a central part of people's life plans and an opportunity for couples to express their love for one another. Procreative liberty has a 'presumptive primacy' in Robertson's theory, that is, it can only be justifiably limited when we can demonstrate that tangible harms might result from its exercise. It is, as he says at one point, a lens through which issues related to using new reproductive technologies ought to be viewed.[46] We should always start from the assumption that individuals will competently choose among options in order to promote their reproductive interests.

[41] Robertson, *op. cit.* note 39, p. 201.
[42] De Melo-Martín, I. (2013). Sex selection and the procreative liberty framework. *Kennedy Institute of Ethics Journal*. *23*(1), 3-5.
[43] Robertson, *op. cit.* note 39, p. 201.
[44] On procreative liberty as a right, see the discussion in section 2.3 below.
[45] Robertson, *op. cit.* note 35, p. 24.
[46] Ibid: 220.

It is precisely this point, however, that shows the possibly most significant limitation of the concept of procreative liberty. Viewing people's reproductive choices through this lens risks ignoring the fact that structural social conditions and norms may lead to some groups of individuals (or perhaps all of them, but in different ways) not having the resources and capabilities to recognise and protect their reproductive interests, even if this is technically permitted and encouraged. I submit that we need to take a broader look at what reproductive interests there are and how these would be promoted in the best way. One important question here is whether enhancing procreative liberty always contributes to truly promoting one's reproductive interests.

In what follows I will suggest, through examining some critiques of the notion of procreative liberty, that the answer to this question is negative, and that we should instead try to look beyond procreative liberty and use a more robust, expansive conception of reproductive autonomy. Before explaining some of these more substantive objections to procreative liberty, however, it is necessary to say something about the harm principle, which has largely shaped the debates in which procreative liberty is invoked, as well as legislation on reproductive issues (at least in the Anglo-American world). The negative and legalist nature of the concept of procreative liberty modelled after Mill's harm principle (explained below) has been a source of some criticism of this, so it is important to outline the principle briefly.

2.2.1 The harm principle

The standard, negative account of procreative liberty as freedom from outside interference with personal reproductive choices relies heavily on the harm principle as

formulated by philosopher John Stuart Mill.[47] We can see this, for example, where Robertson defines debates about procreative liberty as focusing on "whether particular exercises or classes of exercise of the right [to procreative liberty] pose risks of such harm to others that they might justly be limited."[48] Mill notably attempted to formulate a principle which could "govern absolutely the dealings of society with the individual in the way of compulsion and control",[49] where this compulsion can be enforced both by legal means and through 'moral coercion', i.e. the pressure of public condemnation. The harm principle states that "the sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of any of their number, is self-protection."[50] It is called the harm principle because, according to Mill, the only legitimate ground for limiting the freedom of individuals is the protection of other people from some harm (or evil), which may occur as a result of the individual's conduct. Thus, society is never justified in coercing an individual to act in a certain way when this would only be done *for their own good* - it is only our actions which concern others that can be legitimately open to outside regulation.

Mill's harm criterion has been historically very influential on the law in liberal societies.[51] O'Donovan argues that English law (and any reproductive rights that can be inferred within it) is based on the idea of non-interference and thus essentially Millian in its nature.[52] As the next section shall explore, some notable legal cases featuring

[47] Mill, J. S. (2008). On liberty. In J. S. Mill, *On liberty, utilitarianism, and other essays* (pp. 5-112). Oxford: Oxford University Press.
[48] Robertson, *op. cit.* note 38, p. 448.
[49] Mill, *op. cit.* note 47, p. 12.
[50] Ibid: 13.
[51] Epstein, R. A. (1995). The harm principle-and how it grew. *The University of Toronto Law Journal*. *45*(4), 369-417.
[52] O'Donovan, L. (2018). Pushing the boundaries: Uterine transplantation and the limits of reproductive autonomy. *Bioethics*. *32*(8), 492-493.

reproductive issues have involved the assessment of potential harms resulting from some exercise of procreative liberty. Also, policies proposed in this area are often judged on the ground of whether they might lead to some harmful effects, whether on individuals, or society more generally.[53]

2.3 The procreative liberty framework in the law

Concerning the legal aspect of procreative liberty, I refrain from engaging in extensive discussion about its status as a *right*, due to lack of space and as this is not directly relevant to the thesis. However, it is necessary to mention this consideration briefly for two reasons. Firstly, the putative right to procreative liberty as outlined in US law (which Robertson's theory relies on strongly) has been the subject of some significant feminist criticism. While these critiques were originally tied to US abortion law, their input transcends concerns about legislation in pointing to the importance of establishing a richer conception of reproductive autonomy.[54] Secondly, there have been attempts to use some version of procreative liberty as a human right in a few notable UK-based cases. These rights are also enshrined in English law by the Human Rights Act 1998.[55]

Robertson defines procreative liberty as a negative right. Essentially, this means that having procreative liberty in regard to something means that "a person violates no moral duty in making a procreative choice, and that other persons have a duty not to

[53] See Eijkholt, *op. cit.* note 10. See also Smajdor, A. (2014). How useful is the concept of the 'harm threshold' in reproductive ethics and law?. *Theoretical Medicine and Bioethics*. *35*(5), 321-336.
[54] These are explored in more detail below in section 2.4.
[55] Human Rights Act 1998.

interfere with that choice."[56] Specifically, he describes the right to procreate as a constitutionally protected right,[57] on the basis of the fact that in the US there can be no legal interference from the state with the right of reproduction within marriage.[58] The right to procreation without interference (at least by married persons using natural means of reproduction) is however not explicitly referred to within the United States' Constitution. Rather, the existence of such a constitutional guarantee of procreative liberty is inferred from a number of notable cases in which the idea has been invoked,[59] and as derivable from other, more basic rights guaranteed by the Constitution, such as the right to marry and raise children, the right to privacy, or the right to equal treatment before the law.

Procreative liberty is sometimes also considered to be a human right, or at least implied by certain commonly recognised human rights.[60] Article 12 of the Universal Declaration of Human Rights guarantees a human right to privacy and protection from arbitrary

[56] Robertson, *op. cit.* note 35, p. 23.

[57] Ibid.

[58] He however also argues that this right could potentially come to encompass: a) not only married couples but unmarried ones and single people, as well as various collaborative reproduction arrangements; and b) not only couples who are able to have biological children without assistance, but also those who need to employ technological means to conceive. Ibid: 32-33, 119-120, 149-151.

[59] Significant cases include *Skinner v Oklahoma* [316 U.S. 535 (1942) (United States Supreme Court)] in which an act allowing sterilisation in some instances was deemed unconstitutional due to its clashing with the Fourteenth Amendment, which contains a narrowly defined right to privacy applied to the areas of "family, marriage, motherhood, procreation, and child rearing." 'The right to have offspring' was explicitly mentioned as part of the verdict in this case. A later case, *Eisenstadt v Baird* [405 U.S. 438 (1972) (United States Supreme Court)], applied the individual right to privacy to a procreative matter (in this instance, the right to access contraception), emphasising the freedom of individuals to make their own decisions whether to have children. The right to privacy was also invoked in the watershed case of *Roe v Wade* [410 U.S. 113 (1973) (United States Supreme Court)] where the personal liberty outlined in the Fourteenth Amendment was again cited as the basis for a woman's right to decide whether or not to terminate her pregnancy. In general, while notable cases have called upon various justifications of the right to procreative liberty, it is most commonly seen as consisting of two option rights (to procreate and to avoid procreation), constitutionally guaranteed by respect for civil liberty. (NB these case descriptions are partly adapted from the discussion in Wellman, *op. cit.* note 10, pp. 121-132.)

[60] Wellman, *op. cit.* note 10.

interference with it,[61] while Article 16 states that adult men and women possess the right to marry and found a family.[62] The liberty to procreate, or produce offspring, seems to lie at the core of the human right to establish a family.[63] The European Convention of Human Rights also contains some articles which could be used as grounds for defending certain procreative decisions as exercises of basic rights. Two are of particular relevance to reproductive issues. Article 8 (the right to respect for private and family life), states that: "[t]here shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others."[64] Article 12 (the right to marry) specifies that: "Men and women of marriageable age have the right to marry and to *found a family*, according to the national laws governing the exercise of this right."[65] (my italics)

They are also important as they have been invoked in the following cases in English law. A notable case often cited in the procreative liberty/reproductive autonomy literature is *Evans v Amicus Healthcare*[66] (and at a later instance *Evans v United Kingdom*[67]). In 2001 Natalie Evans and her partner at the time froze embryos obtained through IVF in order to store them for use at a later point, due to Evans being diagnosed with ovarian cancer

[61] United Nations General Assembly. (1948). *Universal declaration of human rights*. Retrieved from https://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/eng.pdf (accessed 4 January 2021).
[62] Ibid.
[63] Wellman, *op. cit.* note 10, p. 135.
[64] Council of Europe. (1950). *European Convention for the Protection of Human Rights and Fundamental Freedoms, as amended by Protocols Nos. 11 and 14.* Retrieved from https://www.echr.coe.int/Documents/Convention_ENG.pdf (accessed 4 January 2021).
[65] Ibid.
[66] *Evans v Amicus Healthcare* [2003] EWHC 2161 (Fam)
[67] *Evans v United Kingdom* (6339/05) [2007] ECHR 264

and needing to have both her ovaries removed. The saved embryos would have enabled them to have a child genetically related to both sometime in the future. However, subsequently Evans and her partner split up, after which he requested that the embryos be destroyed. Evans wanted to use the embryos to have a child on her own, and promised her ex-partner that he would not have any responsibilities to this child. However, English law (in this case the Human Fertilisation and Embryology Act 1990,[68] or HFEA 1990 as I will refer to it from hereon) demands the written consent of both parties in order to start a pregnancy with frozen embryos, and Evans' ex-partner refused to give it. After the clinic denied her request to access the embryos, Evans took her case first to the High Court of Justice, then the Court of Appeal and House of Lords, and ultimately the European Court of Human Rights and its Grand Jury, where she lost her final appeal. This case is important because the alleged human rights violations were central, due to the fact that the HFEA 1990 clearly states that consent is required from both parties.[69]

Evans appealed to the European Court of Human Rights on the grounds that the 1990 HFE Act "violate[s] her rights under Articles 8 and 14 of the Convention, and the embryos' right to life under Article 2."[70] Article 2 concerns the right to life ("Everyone's right to life shall be protected by law"), while Article 14 guarantees the prohibition of discrimination when applying the Convention: "The enjoyment of the rights and freedoms set forth in this Convention shall be secured without discrimination on any ground such as sex, race, colour, language, religion, political or other opinion, national

[68] Human Fertilisation and Embryology Act 1990.
[69] Ford, M. (2008). *Evans v United Kingdom*: what implications for the jurisprudence of pregnancy?. *Human Rights Law Review*. *8*(1), 173.
[70] *Evans v United Kingdom*, *op. cit.* note 67.

or social origin, association with a national minority, property, birth or other status."[71] The Court judged that there was no violation of Article 2 (the embryos' alleged right to life) as states are allowed to settle the issue of when the right to life begins at their own discretion.[72] Evans argued that Article 8 had been violated because the withdrawal of consent for using the embryos by her ex-partner denied her the only chance to have a biologically related child, which frustrated her "life's overwhelming ambition" to have a child. She asked for the particular circumstances of her case to be considered and claimed that policies and principles adopted by the UK Government through the HFE Act "could be equally, or better, served either by allowing the parties to give an irrevocable consent at the moment of fertilisation or by allowing the man's withdrawal of consent to be overridden in exceptional cases". This was because such a policy would permit women to enjoy greater self-determination and control over their fertility.[73]

As concerns Article 14, Evans argued that there was an asymmetry in the treatment of women who are able to conceive naturally and women who need to use IVF, as the former are not subject to any control regarding the development of their fertilised eggs.[74] While the courts found that there was interference with her right here (both the House of Lords and in Europe), it was found that it was hard to determine whether more significance should be afforded to an interference forcing a person to procreate, or not allowing a person to procreate, and eventually it was decided to be the former.[75]

[71] Council of Europe, *op. cit.* note 64.
[72] *Evans v United Kingdom*, *op. cit.* note 67, paragraph 46.
[73] Ibid: 49-51.
[74] Ibid: 70.
[75] *Evans v United Kingdom*, *op. cit.* note 67.

Another notable case involving procreative liberty is *Dickson v the United Kingdom*,[76] which also appeared before the European Court of Human Rights. Kirk and Lorraine Dickson applied to the Court when they were not able to access artificial insemination due to the fact that Mr Dickson was in prison at the time. Mrs Dickson feared that by the earliest time he was released she would already be too old to get pregnant. Their application to the ECHR (after they were refused by the Secretary of State) was based on Articles 8 and 14 (the right to respect for private and family life, and the right to marry and found a family).[77] In this case, due to the circumstances of the persons involved, a lot of attention was given to judgments about the potential child's welfare or best interests (due to the fact, among others, that Mr Dickson was serving a prison term for murder). However, their complaint was upheld by the ECHR on the grounds that Article 8 had been breached in the original decision, as the complainants were denied "their rights to respect for their decision to become genetic parents"[78] by being prevented from accessing fertility treatment, and they were awarded some money in damages. The decision of the Court referred explicitly to the *Evans* case, and while the final judgment acknowledged the margin of appreciation individual states have in legislation concerning reproduction (with the concurring opinion explicitly denying that the Convention contains anything like 'a right to procreate') it was still recognised that this was a case where the rights of would-be parents were unduly interfered with by the State.[79]

[76] *Dickson v United Kingdom* [2007] ECHR 44362/04
[77] Ibid.
[78] Ibid.
[79] Ibid.

In *Y v A Healthcare Trust,*[80] a woman applied to have her husband's sperm retrieved and frozen for future use without his consent after he suffered a catastrophic brain injury rendering him permanently incapacitated, and her request was granted. This contrasts with the famous case of *Blood*,[81] in which Diane Blood needed to apply for permission to use the sperm collected from her husband immediately before his death to become pregnant, as the sperm was taken at a time when he was not in a position to give written consent (she was ultimately allowed to use the sperm but not within the UK). The judgment in *Y v A Healthcare Trust* is notable as it brings in a best interests assessment of the man lacking capacity, while this justification – that it was in the patient's best interests to retrieve sperm without his consent - was not used in Diane Blood's case. This decision thus seems to demonstrate a strong appreciation of the woman's procreative rights by the court.

UK legislation on contemporary forms of assisted reproduction is generally governed by the Human Fertility and Embryology Act 2008,[82] (from hereon HFEA 2008) which regulates treatment involving the use of human gametes and embryos. The Act represents an updated version of the HFEA 1990, along with some new amendments.[83] The 2008 Act includes explicit provisions on some technologies which were not available when the first Act was written and therefore not addressed within it, such as sex selection via prenatal genetic diagnosis (PGD) for non-medical reasons, creating 'saviour siblings' and 'designer babies' through embryo selection, and reproductive cloning. Importantly, some reproductive choices such as non-medical sex selection are

[80] *Y v A Healthcare Trust* [2018] EWCOP 18.
[81] *R v Human Fertilisation and Embryology Authority, ex parte Blood* [1997] 2 All ER 687
[82] Human Fertilisation and Embryology Act 2008.
[83] Ibid.

explicitly banned by this Act,[84] while they were previously only discouraged. The creation and implementation of the new Act was preceded by years of special committee discussions and some public consultations, with an aim to bring the 1990 Act 'up to date' with technological possibilities developed in the meantime, as well as to explore whether public attitudes had changed due to the increasing familiarity and availability of new reproductive technologies.[85]

In an analysis of the 2005 House of Commons Select Committee Report on reproductive technologies (one of the documents that was created in the process of preparing the new Act), James Mittra claimed that the committee was led in its discussions by an uncritical acceptance of the 'paradigm of procreative liberty',[86] resulting in an uncritical promotion of individual choice in controversial areas (such as embryo selection through preimplantation genetic diagnosis). The recommendations of the Committee were arguably more liberal than what was eventually provided by the Act,[87] as I will explain below. The 'liberty paradigm' identified (and criticised) by Mittra includes an undue emphasis on personal choices, which are presumed to always be politically neutral.[88] It also ignores the potential aggregative effects of individual decisions, especially the possible eugenic effects of trait selection were it to become widespread, failing to notice the eugenic rhetoric present in contemporary reproductive medicine with its emphasis on screening out 'bad genes' and achieving 'genetic progress'.[89] Finally, Mittra notes that

[84] Human Fertilisation and Embryology Act, *op. cit.* note 82.
[85] Mittra, J. (2007). Marginalising 'eugenic anxiety' through a rhetoric of 'liberal choice': a critique of the House of Commons Select Committee Report on reproductive technologies. *New Genetics and Society*. *26*(2), 159-161.
[86] Ibid: 171.
[87] Eijkholt, *op. cit.* note 10, p. 94.
[88] Mittra, *op. cit.* note 85, p. 164.
[89] Ibid.

framing the discussion in terms of procreative liberty obscures the "[b]arriers to authentic reproductive autonomy and choice" that can emerge in clinical encounters and the broader social context, where the power asymmetry in favour of clinicians might impede the patients from making truly autonomous choices.[90]

This paper, however, was published before the Act was finalised, and its eventual version turned out to be less permissive. In light of this, Marleen Eijkholt examined how (or to what extent) the principle of 'procreative autonomy' was used in the 2008 Act, in contrast to the documents leading up to it.[91] She analysed the parts of the document which refer to specific, often contested technologies (reproductive cloning, sex selection, designer babies and saviour siblings) in order to determine how the principle of procreative liberty figures in the decisions of the agency, and whether these provisions suggest a coherent principle underlying the entire 2008 Act.[92] Her argument is that there actually is no coherent conception of procreative liberty underpinning the Act, and that instead its conclusions are based on pragmatic considerations, including concerns about technologies that the public considers repugnant, such as reproductive cloning and non-medical sex selection.

Eijkholt first surveys existing accounts of procreative liberty in order to see what the scope of a corresponding legal principle might be. The accounts she takes as representative are those put forward by Julian Savulescu, Ronald Dworkin, and John A. Roberston.[93] These accounts align on the essential meaning of 'procreative liberty' but

[90] Mittra, *op. cit.* note 85, pp. 172-173.
[91] Eijkholt, *op. cit.* note 10.
[92] Ibid: 95.
[93] Ibid: 96-98.

vary in terms of how inclusive the principle based on them would be. Savulescu is taken to represent the most extreme, liberal-libertarian position where 'anything goes' as long as the result is not an individual whose life is so bad that non-existence would be preferable to it;[94] Dworkin is seen as occupying a middle ground which allows for some, non-harm-based limitations to individual freedom in reproductive matters;[95] while Robertson's 'modern traditionalist' approach turns out to be the most restrictive of the three,[96] despite being quite liberal in itself. Eijkholt concludes that the provisions of the Act cannot be neatly matched to any of the proposed conceptions of procreative liberty. This is due to the fact that some of them (for example the provisions concerning non-medical sex selection and reproductive cloning) are overly restrictive and go beyond the harm framework, taking public opinion into account as a valid consideration when deciding whether to ban a certain technology.[97] In sum, the 2008 Act is found to permit quite substantial infringement upon personal choice and preferences, and is judged to be mostly pragmatic in nature, lacking a clear underlying ethical framework.[98]

Even though they disagree on the desirability of a principle of procreative liberty guiding law, both authors' analyses clearly show us the limitations of such a framework, as it would ultimately require legislators to exclude consideration of public opinion and so-called 'symbolic harm' when judging whether a reproductive technology should be made available for use (and under what circumstances). I will now give an overview of the (broadly taken) feminist challenge to the procreative liberty framework, coming from both bioethics and legal studies, and based on a similar fundamental

[94] Eijkholt, *op. cit.* note 10, p. 96.
[95] Ibid. 96-97.
[96] Ibid: 98.
[97] Ibid.
[98] Ibid.

dissatisfaction with the narrow scope of this notion and thus, its limited potential to enhance autonomy in practice.

2.4 The limitations of the procreative liberty framework

Robertson's influential conception of procreative liberty has been met with several lines of criticism. The necessity of establishing a difference between the more negative and narrow conception of procreative liberty, as opposed to the seemingly more inclusive notion of reproductive autonomy, was raised by feminist legal scholars in the early 1990s. Rhonda Copelon argued that focusing on the negative aspect of the right of privacy as a basis for promoting women's reproductive autonomy is inadequate. On the basis of an examination of US legal decisions in the 1970s and 80s (after *Roe v Wade*), she showed that the negative liberal idea of privacy has within it "the tendency to constrain as well as to expand reproductive rights."[99] She argued that, instead of limiting ourselves to the private and negative right of choice, we should look at the necessary conditions for true reproductive autonomy and how these may be realised in practice. To attain the kind of social transformation needed to ensure true autonomy, we must move on from the negative right of privacy to a concept of self-determination, as a positive right grounded in principles of equality.[100] Dorothy Roberts focused on the racial dimension of the attack on reproductive rights, showing that Black women are disproportionately punished by the state for actions that are considered to be

[99] Copelon, R. (1990). Losing the negative right of privacy: Building sexual and reproductive freedom. *New York University Review of Law & Social Change*. *18*(1), 41.
[100] Ibid: 49.

irresponsible or harmful behaviour in pregnancy, and arguing that a more positive and progressive concept of privacy is needed to ensure that racial equality is upheld.[101]

Pine and Law argued for a 'feminist concept of reproductive freedom', which consists of three components: freedom from state control (non-interference), government neutrality regarding reproductive choices, and the establishment of "a social context that affirmatively supports and enhances human freedom to make reproductive choices."[102] It should be noted that these contributions were made in the particular context of abortion rights in the US and their gradual erosion despite the decision in *Roe* (thirty years later, it is unfortunately obvious that these discussions are not only still relevant but were highly prescient). However, I would argue that their conclusions can be applied to the notion of reproductive autonomy more broadly, especially in their focus on the importance of social support to enable the realisation of such rights.

Contemporary discussions of procreative liberty/reproductive autonomy move beyond the abortion debate and often focus on newer (or still developing) technologies, which might raise different concerns related to free choice, coercion and public pressure, to name a few issues. This point has been taken up in various bioethical texts.[103] Among others, feminist theorists have notably outlined limitations of the concept of procreative liberty, claiming that at its core lies a notion of autonomy that is too abstract and

[101] Roberts, D. E. (1991). Punishing drug addicts who have babies: Women of color, equality, and the right of privacy. *Harvard Law Review*. *104*(7), 1419-1482.
[102] Pine, R. N., & Law, S. A. (1992). Envisioning a future for reproductive liberty: strategies for making the rights real. *Harvard Civil Rights-Civil Liberties Law Review*. 27(2), 414.
[103] See as a notable example O'Neill, O. (2002). *Autonomy and trust in bioethics*. Cambridge, UK: Cambridge University Press. See also Purdy, L. M. (2006). Women's reproductive autonomy: medicalisation and beyond. *Journal of Medical Ethics*. *32*(5), 287-291.

individualistic, and which obscures the specific challenges faced by women.[104] Other authors have criticised the notion from a communitarian standpoint, which, similarly to the feminist critique, calls for a more relational and socially situated conception of autonomy.[105] Some have pointed out possible troublesome connections between the notion of procreative liberty and the controversial ideals of liberal eugenics and procreative beneficence.[106] On the other hand, certain contributors accept the importance of procreative liberty more generally, but criticise its application to particular cases, such as prenatal genetic diagnosis (PGD) sex selection for non-medical purposes.[107]

In *Procreation, Power and Personal Autonomy: Feminist Reflections*, Anne Donchin summarised various feminist responses to Robertson's modern traditionalist approach to procreative liberty. She begins from the question whether it makes sense to speak of the right to reproduce as a basic good.[108] Some have noted that reproductive freedom should be derived from the more basic principle of self-determination. So the right to reproduce would not be a basic, but only a derivative good. A basic good would be one which every individual needs in order "to sustain a distinctively human life regardless of their specific circumstances."[109] Donchin also calls into question Robertson's understanding of the relationship between means and ends in assisted reproduction.

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[104] Donchin, A. (1985-2014). *Procreation, power and personal autonomy: Feminist reflections* [unfinished manuscript]. Chapter 4, p. 18. Retrieved from: https://scholarworks.iupui.edu/handle/1805/7231 (accessed 14 December 2020).
[105] Callahan, D. (2003). Principlism and communitarianism. *Journal of Medical Ethics*. *29*(5), 287-291.
[106] Mittra, *op. cit.* note 85. See also Kerr, A., Cunningham-Burley, S., & Amos, A. (1998). Eugenics and the new genetics in Britain: examining contemporary professionals' accounts. *Science, Technology, & Human Values*. *23*(2), 175-198.
[107] For instance, Inmaculada de Melo-Martin has claimed that sex selection as a special case does not fit into the procreative liberty harm-based framework, as inspired by Mill and advocated by Robertson. See De Melo-Martín, *op. cit.* note 42.
[108] Donchin, *op. cit.* note 104.
[109] Ibid.

Robertson, as we have seen, believes there to be no relevant difference in value between natural and medically assisted reproduction. Donchin reminds us that the use of different technologies, as well as the involvement of medical professionals in assisted reproduction, inevitably shapes and changes the meaning of these practices. Also, some methods of assisted reproduction, such as contract surrogacy, introduce distinctive relationships between the parties involved in them.[110]

Donchin also criticises Robertson's claim that procreative liberty is central to personal identity because he does not take into account the background conditions which make certain choices possible (or impossible). This is connected to broader debates about the notion of personal autonomy generally used in bioethics, which the next chapter discusses in more detail. Respect for autonomy is traditionally seen as a key bioethical principle.[111] Yet some authors have, in the last few decades, attempted to scrutinise its content and to show that it might carry some underlying assumptions about the type of subject which possesses this autonomy. In response to what is seen as an overly individualist, atomistic and isolated notion of an autonomous person, some feminists proposed to substitute it with the notion of *relational autonomy*, which was perceived as more fitting for the real-life circumstances of choice and decision-making.

Laura Purdy[112] has also reflected on the inadequacy of reducing reproductive autonomy to procreative liberty in the sense used by Robertson and others. She takes this criticism as a starting point for an analysis of the need to promote the specific reproductive

[110] Donchin, *op. cit.* note 104, ch. 4, p. 19.
[111] Beauchamp, T. L., & Childress, J. F. (2013). *Principles of biomedical ethics: seventh edition*. New York: Oxford University Press.
[112] Purdy, *op. cit.* note 103.

autonomy of *women*, which is often held back by oppressive and sexist cultural norms. Importantly, she defines reproductive autonomy as encompassing "the *power to decide* when, if at all to have children" (my italics) along with "many - but not all - of the choices relevant to reproduction."[113] This suggests a dimension of reproductive autonomy that is not shared with procreative liberty as described above - namely, autonomy seems to imply a *capacity* for making free and informed choices, and not just the (formal) liberty to do so without interfering influences. Purdy also mentions *prerequisites for autonomy* like education and health care, which are often not available in societies where views of women as inferior prevail.[114] The capacity to make autonomous reproductive choices seems not to be reducible, on this account, to quite minimal criteria like those provided for Mill's harm principle - that a person is of legal age and capable of taking care of herself.

Robertson responded to some of these critiques in his work.[115] He admits that fears that reproductive technologies might, in practice, lead to the exacerbation of class and gender differences are not wholly unsubstantiated. Yet he counters these charges by claiming that a) new reproductive technologies also expand women's freedom, for example by giving poor women the option to earn money by donating reproductive material or working as surrogates; and b) even if, due to persistent social inequality, not everyone will be able to access these technologies, this does not mean that it would be justified to curb the liberty of those who can afford to use them.[116] While he acknowledges the value of some of the critiques directed at this account, as well as the

[113] Purdy, *op. cit.* note 103, p. 287.
[114] Ibid.
[115] Robertson, *op. cit.* note 35, pp. 220-235.
[116] Ibid: 225-231.

reality of people's ambivalent attitudes to reproductive technologies,[117] his replies to critics can be summarised along the following lines: while the implications of some reproductive choices may be troubling (and while they may indirectly result in some undesirable consequences), individual freedom of choice should always have presumptive trumping power over other considerations, unless there are some demonstrable harms following directly from these choices.[118] However, taking in mind the above mentioned criticisms from feminist legal studies and bioethics, which clearly demonstrate the need for a richer and more socially sensitive and informed notion of autonomy at the core of reproductive freedom, I would argue that this response is not satisfactory. This is because, as the discussion in this chapter has shown, the procreative liberty framework is too narrow to encompass many contemporary dilemmas and issues that arise in reproductive decision-making; but also, as will be argued in the next chapter, because of the problematic underlying conception of reproductive autonomy, and the autonomous individual, in Robertson's account. The next chapter is thus devoted to exploring these concerns in more detail and looking at proposed conceptions of reproductive autonomy that could alleviate them.

2.5 Conclusion

This chapter set out that the notion of *reproductive autonomy* encountered in bioethics and law is often influenced by the *procreative liberty* framework of thinking about reproductive rights. Far from being a neutral and unproblematic starting point for

[117] Robertson, *op. cit.* note 35, pp. 234-235.
[118] Ibid.

discussions about the ethics of reproductive decision-making, however, this framework has been shown to have some serious limitations. Moreover, the sometimes synonymous usage of 'procreative liberty' and 'reproductive autonomy' (and other variations) creates conceptual confusion, as notions that have the potential to be more expansive are co-opted into the narrow and negative rights-based framework of procreative liberty. I have argued that refocusing our attention on autonomy, rather than liberty and choice, would allow more constructive discussions to take place. Although there might be many valid criticisms directed at such a notion of reproductive autonomy, it must nevertheless be recognised that it remains an important concept. It is undeniable that reproduction represents a crucial part of many people's lives and that the ability to determine whether, when and with whom to reproduce is vital to human integrity and well-being. The next chapter elaborates these concerns by presenting alternative, richer and more expansive accounts of reproductive autonomy, as possible better models to apply to the context of decision-making in pregnancy.

CHAPTER THREE: REPRODUCTIVE AUTONOMY RECONSIDERED

3.1 Introduction

As set out in the previous chapter, when speaking about reproductive autonomy there is often a danger that this will be interpreted as a purely negative liberty or right to non-interference in one's procreative choices. The lasting influence of the procreative liberty framework and the conflation of this concept with more expansive notions of autonomy in reproduction are commonly encountered in the literature. But this legalistic ideal is clearly unsatisfactory, for several reasons pointed out by Robertson's critics: chiefly, the abstraction of both reproduction as a set of practices and the people who partake in these from their broader cultural and political environment,[119] and the marginalisation of the gendered context of reproduction and the related social expectations placed upon pregnant women.[120]

Those who are unsatisfied with this conception of reproductive autonomy have responded in various ways, which I will examine in more detail in section 3.3. Roughly speaking, it could be said that, on one side, some authors take the shortcomings of reproductive autonomy (as it is commonly understood) as a basis to propose alternative, richer conceptions that are better for fit for purpose. Others, however, are skeptical of the concept on the whole, and reject it as they consider it illusionary or

[119] Copelon, *op. cit.* note 99; Roberts, *op. cit.* note 101. See also Mills, C. (2013). Reproductive autonomy as self-making: procreative liberty and the practice of ethical subjectivity. *The Journal of Medicine and Philosophy*. *38*(6), 639-656.
[120] Nelson, *op. cit*. note 12; Purdy, *op. cit.* note 103.

impractical. However, before presenting and examining these accounts it is necessary to say a bit more about the broader context in which they have appeared. These theories do not arise in response only to the procreative liberty framework and associated understandings of reproductive freedom, but also as a reaction to prevalent conceptions of autonomy in general in philosophy and bioethics. I will therefore first briefly present some of the major theories of autonomy in bioethics, in order to give the background for their criticism which has ultimately influenced alternative approaches to reproductive autonomy. I do not aim to give a comprehensive overview of these theories, as this is far beyond the scope of this thesis. Rather, I outline them as a means of setting the stage for a discussion of the concerns about autonomy as it is traditionally understood, which is then applied to the sphere of reproduction.

3.2 Autonomy as a philosophical concept and bioethical principle

The most prominent account of autonomy in bioethics is probably the one underpinning the principle of respect for autonomy, as articulated by Beauchamp and Childress in their influential book *Principles of Biomedical Ethics.* This principle is understood as the justification behind "the requirement to secure a patient's voluntary and informed consent to a medical procedure or treatment."[121] Beauchamp and Childress offer a 'three-condition theory' of autonomy,[122] according to which autonomous action presupposes intentionality (the plan of an outcome and the series of steps which need to be taken to reach that outcome), understanding (at least to a sufficient degree) and

[121] Beauchamp & Childress, *op. cit.* note 111, p. 107.
[122] Ibid: 104

non-control (again, it is required for there to be a sufficient level of freedom from internal or external compulsion).[123]

The principle of respect for autonomy, then, demands respect for autonomous agents through acknowledging "their right to hold views, to make choices, and to take actions based on their values and beliefs."[124] The principle goes beyond a demand for noninterference, implying a duty to foster autonomy by treating others respectfully and building up their capacities for autonomous choice.[125] I will not here go further into the details of Beauchamp and Childress' principlist theory, or about the objections to their conception of autonomy and entire framework. Still, it is important to note that their account (in line with the major philosophical theories that I will now present) conceptualises autonomy principally in terms of self-government or self-determination.

While in bioethics autonomy is mostly spoken about in the context of the principle of respect for autonomy, within philosophy more broadly there is a main division between Kantian and non-Kantian conceptions.[126] On the Kantian view, autonomy is the ability that rational agents possess to formulate universal moral principles, which originate in the agent's own will. The pure autonomous will is not constrained by any internal or external factors, which means that autonomy is not compatible with any of the physical or social forces that determine agents in real-life circumstances.[127] Non-Kantian or procedural theories of autonomy attempt to identify the formal conditions for an

[123] Beauchamp & Childress, *op. cit.* note 111, pp. 104-105.
[124] Ibid: 106.
[125] Ibid: 107.
[126] Stoljar, N. (2007). Theories of autonomy. In R. E. Ashcroft, A. Dawson, H. Draper, & J. R. McMillan, *Principles of health care ethics: Second edition* (pp. 11-19). Wiltshire, UK: John Wiley & Sons. p. 11.
[127] Ibid: 11-12.

agent's desires and decisions to be autonomous. They do not say anything about the content that autonomous preferences, acts and decisions need to have.

There are three main kinds of procedural theories. Endorsement accounts require an agent to identify with their preferences or desires in order for their actions resulting from these desires to be called autonomous. This is the kind of theory offered by Harry Frankfurt, who claims that our first-order desires are autonomous only insofar as they are endorsed by our second-order desires, while Gerald Dworkin understood autonomy as the possibility of critical reflection on our first-order preferences. The second kind of procedural theory builds upon this account by adding a historical criterion, namely that an agent is autonomous with respect to her desires "only if she does not resist its development when attending to the process of its development or would not have resisted had she attended to the process."[128] The third approach focuses on authenticity, positing that self-knowledge or self-discovery are necessary for autonomy. However, this account introduces the problematic requirement to distinguish between apparent and 'real' desires, and it is unclear how to do so.[129] The first two accounts also have their own drawbacks, mostly related to cases where agents adopt some desires uncritically or through oppressive socialisation. This has led to the emergence of a third group of theories, so-called substantive approaches which move beyond internal conditions for autonomy, to focus on the external and relational constraints on the desires and preferences we form.[130]

[128] Stoljar, *op. cit.* note 126, p. 13.
[129] Ibid: 14.
[130] Ibid.

On neo-Kantian accounts, normative competence (the "capacity to identify norms and apply them to one's own decision-making processes"[131]) is necessary for autonomy. Somebody who has been socialised into a sadistic world view, for example, may really have and endorse certain sadistic desires, but this still does not mean that they are acting freely. This raises both practical and conceptual issues, about the responsibility of these persons and the existence of an objective morality, respectively.[132] Finally, on psychological accounts of autonomy, it is the social context which is emphasised, in order to show the incompatibility of autonomy with oppression. Psychological impairments which are caused by external, social factors (such as lack of self-confidence and self-trust) can seriously undermine an agent's autonomy.[133]

The final category of approaches seems to be particularly relevant to the health care context, as it is well known that patients can feel disempowered within medical structures due to their lack of expertise and their already vulnerable state. It is, I think, even more obviously pertinent in the area of reproduction, where there are strong social expectations, and pregnant women or mothers-to-be experience a lot of pressure. In such circumstances it is extremely important to evaluate autonomy using a richer criterion which takes into account broader social factors and how they might translate to inner constraints, as the authors whose works will now be presented have attempted to do.

[131] Stojlar, *op. cit.* note 126, p. 14.
[132] Ibid: 15.
[133] Ibid.

3.3 Alternative approaches to (reproductive) autonomy

In the past few decades many bioethicists, especially those approaching their subject from a feminist standpoint, have focused on the notion of *relational autonomy* as a way of overcoming some of the difficulties associated with the more traditional model of autonomy as individual self-determination.[134] On the traditional conception, autonomy is commonly conceptually linked with the idea of *independence*.[135] However, feminist critics have attempted to provide a model of autonomy which does includes *dependence* and *interdependence* as important features of people's lives. These broadly understood relational conceptions seem to translate well to the medical context.[136] Their adequacy should not be surprising since, as Donchin pointed out, not only are our social context and relationships to others crucial to the choices we make in any sphere of life (including medical), but they have special significance in the health context because of patients' vulnerability and dependence on the professionals in charge of their care.[137]

The application of these conceptions to the health care context is, of course, not limited to the reproductive sphere – but where they have been applied to the gendered dimensions of the patient experience, the most prominent examples that arise are inevitably related to issues around conception, pregnancy and childbirth. Donchin argued that one of the main reasons to retain the value of autonomy lies in the practical

[134] Meyers, *op. cit.* note 11, Nedelsky, *op. cit*. note 11. See also the contributions in *Relational autonomy: Feminist perspectives on autonomy, agency, and the social self*, eds. Catriona Mackenzie and Natalie Stoljar, Oxford University Press (2002).
[135] O'Neill, *op. cit.* note 103, p. 28.
[136] They have been particularly influential in nursing ethics, see for example: MacDonald, C. (2002). Nurse autonomy as relational. *Nursing Ethics*. *9*(2), 194-201; Ells, C., Hunt, M. R., & Chambers-Evans, J. (2011). Relational autonomy as an essential component of patient-centered care. *IJFAB: International Journal of Feminist Approaches to Bioethics*. *4*(2), 79-101.
[137] Donchin, *op. cit.* note 11, p. 367.

gains from appealing to it and its underlying emancipatory aims in practice, citing in particular how appealing to autonomy has helped challenge "restrictions on women's reproductive freedom, such as forced caesareans, incarceration of pregnant women suspected of drug use, and denial of access to abortion services."[138]

I will now say something about these alternative views of reproductive autonomy through examining a few representative examples. These alternative approaches could be roughly divided into two 'camps'. On one side, there are those authors who believe the reproductive autonomy can be rethought and reformed in such a way to fit the purposes of feminist theoretical and political goals. Others however argue that the ideal of autonomy is an unrealistic one, and should be abandoned or supplanted with other more appropriate concepts. I will present some notable examples to illustrate the diversity of approaches to autonomy in the reproductive context, before moving on to examine particular cases in the papers.

3.3.1 Reforming reproductive autonomy

Attempts to enrich or reform the notion of reproductive autonomy can be found in the accounts of many of the relational theorists and critics of procreative liberty mentioned already.[139] Anne Donchin also explored this concept extensively in her manuscript[140] and in other works[141] as have Mackenzie and Stoljar in their edited volume and

[138] Donchin, A. (1995). Reworking autonomy: Toward a feminist perspective. *Cambridge Quarterly of Healthcare Ethics*. *4*(1), 54.
[139] See for example Nedelsky, *op. cit.* note 11; Nelson, *op. cit.* note 12.
[140] Donchin, *op. cit.* note 104.
[141] Donchin, *op. cit.* note 12; see also Donchin, *op. cit.* note 138.

contribution to it.[142] For reasons of space and relevance, however, I will focus here on a few recent accounts that are firmly grounded in the terrain of bioethics, and that have some substantial overlap with the topics explored in the papers.

A notable recent attempt to reform the notion comes from Catherine Mills, who explicitly starts from criticising, and then attempting to improve upon, the rights-based conception introduced by Robertson and discussed in the previous chapter. According to her, despite its shortcomings, the concept of procreative liberty has an essential positive dimension - "the freedom to make oneself according to various ethical and aesthetic principles or values."[143] Mills draws on Foucault's notion of 'a practice of liberty' in order to make this point. She criticises Robertson's rights-based account of procreative liberty, on the grounds that it reduces reproductive autonomy to a wholly negative conception of non-interference. However, this is not realistic as many reproductive choices (especially those involving use of various technologies) require the collaboration of other actors (such as doctors or fertility specialists).[144]

Robertson and other authors following him on the topic of procreative liberty often emphasise the importance of reproductive activities for personal identity. As mentioned above, Mills thinks it untenable to assign such importance to procreative liberty and yet reduce it to solely the 'moment of choice'. She offers a different reading of the notion, which she understands as "a capacity for and practice of self-formation."[145] This could be one way of moving towards a more robust notion of reproductive autonomy - by

[142] Mackenzie & Stoljar, *op. cit.* note 11.
[143] Mills, *op. cit.* note 119, p. 640.
[144] Ibid: 644.
[145] Ibid: 648.

rejecting the negative version of procreative liberty and seeing reproductive freedom as more about self-formation and self-expression. On the other hand, some authors claim that reproduction is not at all about self-expression, but that reproductive autonomy is simply the capacity for personal autonomy exercised in the reproductive sphere.[146] However, this view does not seem to be incompatible with the idea of reproductive choices having a significant role in self-expression, if this is to be taken as the authenticity and self-determination usually associated with autonomy.

Certain authors have suggested that autonomy as self-determination, even if enriched by taking into account the effects of social or psychological conditions, is actually not the appropriate way to use this concept in the health care domain. Quill Kukla (writing as Rebecca Kukla) suggested that the prevailing view of autonomy, which is tied strongly to issues of informed consent, creates a distorted picture on which distinct *choices* are the main points at which we need to worry about respecting patients' autonomy.[147] Using the example of prenatal health care, a set of practices including self-monitoring, scheduling and attending check-ups, taking certain substances (such as vitamins) and avoiding others (for example tobacco and alcohol), Kukla shows that by the time the patient arrives to making the kind of 'momentous decision' like choosing whether or not to take a prenatal test for a certain disease, their mind is in an important sense already made up - they view this choice as a part of the larger web of practices they have engaged in and which they have internalised as the responsible and proper course of action.[148]

[146] O'Neill, *op. cit.* note 103, p. 52.
[147] Kukla, R. (2005). Conscientious autonomy: displacing decisions in health care. *The Hastings Center Report*. *35*(2), 36.
[148] Ibid: 41.

Most of these practices are not the kinds of choices that patients would be accepted to sign an informed consent form for - they are seen as routine actions, yet they importantly shape the patient's attitudes and subsequent decisions. Because they believe that most healthcare choices fit better with this picture than the model of discrete and momentous choices made by individuals weighing the pros and cons, Kukla suggests that in considering autonomy in healthcare we should move away from self-determination and focus on a different concept, that of *conscientious autonomy*, which involves acting out of a commitment to normative standards (norms, values, principles, etc) that we adopt,[149] but which will in practice often include deference to experts and allowing others to make certain decisions for us.[150]

3.3.2 Rejecting reproductive autonomy

Some authors challenge the idea that the availability of more choices promotes reproductive autonomy, on the grounds of empirical evidence from the practitioners and patients actually participating in such decision-making. In discussing a case of ovarian tissue cryopreservation for a young female child, due to her facing medical treatment that could prevent her from having biological offspring in the future, Jayne Lucke states boldly that 'reproductive autonomy is an illusion'. Patients are, she argues, rarely presented with balanced and adequate information, and various social constaints on women's reproductive autonomy often go unnoticed.[151] In the somewhat similar context of egg freezing for social reasons, Angel Petropanagos has argued that the

[149] Kukla, *op. cit.* note 147, p. 38.
[150] Ibid: 39.
[151] Lucke, J. C. (2012). Reproductive autonomy is an illusion. *The American Journal of Bioethics*. *12*(6), 44-45.

choice to attempt to delay one's reproduction and 'preserve' fertility in this way may not be as voluntary as it seems, due to both the social norms and biological realities constraining women's decisions about having children.[152]

Similar worries about the tenability of reproductive autonomy and choice arise with respect to decisions about pregnancy, and not only fertility. Sandelowski and Barroso speak about the 'travesty of choosing' in the context of prenatal diagnosis. They argue that the traumatic psychological effects of receiving such a diagnosis (and being compelled to make a decision about the continuation of pregnancy relatively quickly), and the sense of 'loss' of the desired future child experienced by couples in this situation, contribute to the feeling of not really having a choice. The choice to terminate the pregnancy, in that sense, is not necessarily felt as wanted and deliberate but forced or ambivalent.[153] Victoria Seavilleklein argues, with regard to routine prenatal screening, that the language of choice employed in this context is inadequate, as the idea that more information equals more powers in itself constructs a framework in which women will be seen as 'irresponsible' or 'irrational' if they decide to forego such screening.[154]

Kristin Zeiler has offered an influential empirically based critical examination of reproductive autonomy in the context of preimplantation testing of embryos for certain diseases. Pre-implantation genetic diagnosis (PGD) is often argued to represent an enhancement of procreative liberty, as it enables prospective parents to avoid having a

[152] Petropanagos, A. (2010). Reproductive 'choice' and egg freezing. *Cancer Treatment and Research*. *156*, 223-235.
[153] Sandelowski, M., & Barroso, J. (2005). The travesty of choosing after positive prenatal diagnosis. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*. *34*(3), 307-318.
[154] Seavilleklein, V. (2009). Challenging the rhetoric of choice in prenatal screening. *Bioethics*. *23*(1), 74.

child that suffers from a debilitating or deadly hereditary condition, eliminating the uncertainty that these people would otherwise be faced with. Zeiler questions the premise that the availability of PGD really does further reproductive freedom using results that suggest that an increase in available choices can actually hamper people's capacity to choose freely. For this purpose she introduces the distinction between autonomous *persons* and autonomous *actions*.[155] An autonomous person has the capacity for certain (autonomous) choices or actions, which they may or may not exercise depending on the situation. Autonomy can be further explained as the power of a specific person for self-determination, as well as the exercise of that power.[156] This positive conception presupposes the absence of both external and internal interferences in order for there to be genuine reproductive autonomy.

What does it mean for a technology to expand reproductive freedom? Is greater freedom simply a matter of having more options to choose from? Zeiler challenges the assumption that increased choice is desirable in itself, by exploring some of its negative consequences. She calls this criticism 'the paradox of increased choice'.[157] Interviews with health care professionals from several countries are used to back up the idea that sometimes, increased choice is actually perceived as constraining freedom of choice - in the sense of the freedom to choose not to have PGD.

These and similar critiques of reproductive autonomy are based on considering practical issues with how certain information is presented to women when they are

[155] Zeiler, K. (2004). Reproductive autonomous choice—a cherished illusion? Reproductive autonomy examined in the context of preimplantation genetic diagnosis. *Medicine, Health Care and Philosophy*. *7*(2), 176.
[156] Ibid: 176.
[157] Ibid: 179.

expected to make critical decision with regards to conception and pregnancy. Such worries are also well illustrated by some cases in English law which I will now briefly outline. These highlight again the practical significance of how information is framed and choices are presented for women's autonomy with regard to reproduction.

3.3.3 Legal responses to reproductive autonomy

As set out in the previous chapter, in the UK matters concerning procreation by technological means are regulated by the HFEA 2008. However, broader issues of autonomy in reproduction and pregnancy feature in both statute and case law. As particularly significant for the issues explored in this thesis and papers, I will outline some of the most important cases that have to do with *informed consent* and autonomous decision-making in pregnancy, and with *responsibilities to the fetus*. I will then briefly say something about the law of surrogacy with relation to how it concerns the position of surrogates primarily.

In terms of decision-making in pregnancy and childbirth, a highly influential recent case is that of *Montgomery v Lanarkshire*.[158] Nadine Montgomery was due to have a vaginal delivery, but had concerns about this as she was both diabetic and of small stature, and she was carrying a large fetus. Her obstetrician failed to disclose the risk of possible shoulder dystocia in vaginal delivery in those specific circumstances, and when this complication did indeed occur, Montgomery's newborn son suffered further issues, eventually being diagnosed with cerebral palsy. In response, she sued for negligence on

[158] *Montgomery v Lanarkshire Health Board* [2015] SC 11 [2015] 1 AC 1430.

the grounds that if the obstetrician had disclosed the full risks of the vaginal delivery, she would have opted for a caesarean delivery. The UK Supreme Court ruled in her favour.[159] This case clearly has very broad implications for issues of informed consent, disclosure and negligence in English medical law, which then also apply to decisions about labour or other intervention on pregnancy. It is also highly significant in safeguarding the autonomy of pregnant women and their right to be properly informed of the possible consequences of obstetric intervention or lack thereof.

Montgomery has been referred to as a watershed decision in stressing the importance of patient autonomy and broadening the scope of what is considered to be information that may be material to patients' choices. Another recent case, incidentally also to do with the context of pregnancy and reproduction, further challenged the limits and practicalities of informed consent. In *Mordel v Royal Berkshire NHS Foundation Trust*,[160] Edyta Mordel successfully sued in negligence after she gave birth to a child with Down's syndrome. She argued that she was not informed properly about prenatal testing options and results which led to the child being born with Down's, and that if she had found this out in the course of pregnancy she would have chosen to terminate. The case apparently involved some kind of breakdown of communication between the midwife and sonographer in charge of Mordel's prenatal care and the patient herself. Issues of language notwithstanding,[161] the ruling in this case emphasised that informed consent is a process and that healthcare providers have a responsibility to ensure patients'

[159] Chan, S. W., Tulloch, E., Cooper, E. S., Smith, A., Wojcik, W., & Norman, J. E. (2017). Montgomery and informed consent: where are we now?. *BMJ (Clinical research ed.)*. *357*, j2224.
[160] *Mordel v Royal Berkshire NHS Foundation Trust* [2019] EWHC 2591 (QB).
[161] Mordel was not a native English speaker but had her examinations and prenatal information provided in English; she claimed that she had misunderstood the sonographer's record of her having 'declined' Down's syndrome ultrasound and blood testing at a routine scan, as actually confirming a negative result.

decisions are informed, and that it is necessary to ascertain exactly when consent is obtained. This is arguably highly important for the pregnancy context.

While these cases have explicitly upheld the right of patients to make informed decisions, in the very positive sense of obliging healthcare professionals to disclose sufficient information to ensure these decisions are maximally informed, a looming worry remains that the autonomy of the pregnant woman may end up being marginalised in favour of fetal needs of welfare. Recent infringements on women's reproductive rights, for example in the United States[162] and Poland,[163] demonstrate that, wherever there is a perception of potential conflicts between women's autonomy and fetal interests, there is the danger of women's choices being sidelined.

In English law, the primacy of pregnant women's interests is upheld by the explicit lack of legal personhood afforded to the fetus. In the *Paton* ruling[164] it was explicitly stated that: "The foetus cannot, in English law, [...] have a right of its own at least until it is born and has a separate existence from its mother."[165] In *Re F (In Utero),*[166] it was determined that an unborn child could not be made a ward of court, as due to its lack of legal personhood it could not be the proper subject of such a care order. Yet in the case of *Re MB*,[167] where a woman refused to consent to a Caesarean section due to an intense phobia of needles, the court were willing to override her refusal on the basis that her

[162] Aiken, A. R. A. (2019). Erosion of women's reproductive rights in the United States. *BMJ. 366*, l4444. https://doi.org/10.1136/bmj.l4444
[163] Lewandowska, M. (2020, November 4). Poland's abortion ban: a crushing blow to reproductive rights. *The BMJ blog*. Retrieved from https://blogs.bmj.com/bmj/2020/11/04/polands-abortion-ban-a-crushing-blow-to-reproductive-rights/ (accessed 6 January 2021).
[164] *Paton v British Pregnancy Advisory Service Trustees* [1979] WB 276.
[165] Ibid.
[166] *Re F (In Utero)* [1988] Fam 122.
[167] *Re MB* [1997] 8 Med LR 217.

fear was at odds with her ultimate desire to have a healthy child. This suggests that medical paternalism and worries about fetal welfare still have a strong influence.

Besides the common law, matters regarding women's decisions in pregnancy are regulated by statute to some extent. While the Abortion Act[168] does not entail a positive right to access a termination,[169] it does provide relatively wide scope for deciding whether or not to continue with a pregnancy (at least in the first two trimesters). Less permissive, unsurprisingly, is legislation concerning collaborative reproduction, which developed under the strong influence of the Warnock report and the HFEA 1990. A case in point is the Surrogacy Arrangements Act 1985,[170] which has recently been the subject of a proposal to reform aspects of surrogacy law,[171] and which currently only permits altruistic surrogacy arrangements and payment for reasonable expenses. While this is not an unusual way of regulating surrogacy, as very few countries actually permit commercial surrogacy,[172] it does arguably put some constraints on the decisions that can be made by both surrogates and intending parents.[173]

It should be noted that in the legal context, the notion of reproductive autonomy (and patient autonomy in general) is intimately linked with that of bodily integrity, which plays a significant role in cases like *Evans* and *Montgomery*. This will be explored in more detail in Chapter Eight.

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[168] Abortion Act 1967.
[169] Brazier, M., & Cave, E. (2016). *Medicine, patients and the law: sixth edition*. Manchester: Manchester University Press.
[170] Surrogacy Arrangements Act 1985.
[171] Law Commission and Scottish Law Commission. (2019). *Building families through surrogacy: a new law. A joint consultation paper*. Retrieved from https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2019/06/Surrogacy-consultation-paper.pdf (accessed 23 April 2020).
[172] Igareda González, N. (2019). Regulating surrogacy in Europe: Common problems, diverse national laws. *European Journal of Women's Studies*. *26*(4), 435-446.
[173] This will be discussed in more detail with relation to the autonomy of surrogates in Chapter Six.

3.4 Conclusion

While dissatisfaction with a simplified and individualistic procreative liberty framework has been widespread in feminist and other accounts, there is no consensus on how this should best be responded to. As this chapter has shown, while some authors take the critique of procreative liberty as a starting point for developing alternative theories of reproductive autonomy, others question the very plausibility of this concept. Challenges from medical practice and law such as those outlined in the previous section show the difficulties of implementing even these more nuanced accounts of autonomy in reproductive decision-making, leaving us with the difficult dilemma of whether it is indeed an illusionary standard that should be abandoned, or an ideal that deserves to be upheld and developed further. This is a question that is far beyond a work of this format and scope, however, it is one I have kept in the back of my mind throughout the research. In the papers that form the next four chapters, I have attempted to go some way towards answering it in particular contexts of decision-making in pregnancy. I have retained the basic assumption of what I have called 'reform' views of reproductive autonomy, that it is at its core a capacity for making deliberate and informed choices, in line with one's own values and beliefs, in the reproductive context,[174] using this as a starting point to investigate how such autonomy can be upheld in particular contexts of reproductive decision-making.

What the alternative accounts of reproductive autonomy such as those outlined in this section (as well as others presented later) most insist on is the significance of *contextual*

[174] Nelson, *op. cit.* note 12; Donchin, op. cit; Mills, *op. cit.* note 119.

factors in determining possible threats to autonomy and how these should be addressed to ensure women's decision-making is respected in pregnancy and reproduction more generally. I adopt this broad approach and attempt to encompass the notion of 'context' in two different ways: as the social, cultural, economic and political context in which any decision about reproduction or pregnancy is made; but also, the scientific or medical context of particular situations in which ethical autonomy-related problems might arise (retaining the awareness that these two are almost always connected). One of the main points this thesis makes, on the conceptual plane, is that it is not helpful to allow the procreative liberty framework, or indeed any single theoretical notion of reproductive autonomy, to dominate and shape our discussions about all the issues that occur in reproductive decision-making. This argument is built up throughout the papers by exploring potential challenges for reproductive autonomy in various contexts, and focusing on the particular context of pregnancy and how women's autonomy can best be upheld by ethical guidelines and regulation.

The next four chapters contain the papers that constitute the major part of this PhD. While each of the papers deals with a different topic, they are united by the overall theme of upholding autonomy in pregnancy. To make the connection between the papers more explicit, each of the papers will be prefaced by a note clarifying the main motivation behind the paper (and in the case of Chapter Seven – the joint paper – also outlining my contribution to it). Each paper will also be followed by a brief section discussing its impact since publication where relevant, or will reflect on research that has appeared in the meantime and which discussed related issues. The conclusion then sets out the main themes and arguments coming out of the thesis as a whole, outlining some potential research questions to be addressed in the future.

CHAPTER FOUR: PAPER ONE

An introductory note to Paper One

As the first independent paper written as part of the thesis, this paper builds on earlier discussion of reproductive autonomy, applying one such nuanced conception to the prenatal testing debate. Prenatal testing for disability is often considered an ethically controversial practice. Technological innovations making it easier to perform and more accessible only exacerbate concerns about social pressure to test and terminate if faced with a negative result, leading to what some have called 'screening out disability'.[175]

A common objection is that prenatal testing represents a form of socially accepted 'new eugenics', preventing people with what are deemed to be 'undesirable traits' from coming into existence. While there have been arguments that the term 'eugenics' is unhelpful, as it is emotionally charged and thus stifles debate,[176] there are also persuasive arguments that contemporary forms of screening and testing were historically influenced by eugenic ideas,[177] and that it shares some of the key features of eugenic movements of the past.[178] Through addressing these so-called mentioned eugenic objections, this paper seeks to outline a conception that centres pregnant women's autonomy without allowing coercion to slip in under the pretence of informed choice.

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[175] Don't Screen Us Out. (2017). *Our concerns*. Retrieved from https://dontscreenusout.org/ (accessed 4 January 2021).
[176] Camporesi, S. (2015). "Stop this Talk of New Eugenics!"–Reframing the Discourse around Reproductive Genetic Technologies to Choose Disabilities as Practices of Ethical Self-Formation. *Western Humanities Review*. 125-147.
[177] Nakou, P. (2021). Is routine prenatal screening and testing fundamentally incompatible with a commitment to reproductive choice? Learning from the historical context. *Medicine, Health Care and Philosophy*. *24*(1), 73-83.
[178] Iltis, A. S. (2016). Prenatal screening and prenatal diagnosis: contemporary practices in light of the past. *Journal of Medical Ethics*. *42*(6), 334-339.

4.1 Abstract

Traditionally, two main rationales for the provision of prenatal testing and screening are identified: the expansion of women's reproductive choices and the reduction of the burden of disease on society. With the number of prenatal tests available and the increasing potential for their widespread use, it is necessary to examine whether the reproductive autonomy model remains useful in upholding the autonomy of pregnant women or whether it allows public health considerations and even eugenic aims to be smuggled in under the smokescreen of autonomy. In this article I argue that if we are serious about upholding women's autonomy in the context of prenatal testing, what is needed is a model based on a more robust conception of reproductive autonomy, such as the one defended by Josephine Johnston and Rachel Zacharias as 'reproductive autonomy worth having'. While Johnston and Zacharias put forward a basic outline of this conception, I apply it to the specific case of prenatal testing and show how it responds to objections levelled against the reproductive autonomy model. I argue that adopting this kind of conception is necessary to avoid fundamental challenges to women's autonomy when it comes to prenatal screening and testing.

Keywords: prenatal, screening, testing, reproductive autonomy, eugenics

4.2 Prenatal testing: Does reproductive autonomy succeed in dispelling eugenic concerns?[179]

4.2.1 Introduction

Prenatal testing and screening for genetic disease and disability[180] continues to be an area of controversy. The rapid development of prenatal testing techniques with a potential for broad use[181] makes the elaboration and evaluation of the rationales behind offering them a pressing matter. When it comes to prenatal testing, and especially screening programs supported by public funds, it is crucial that we are clear on its aims so that we can assess whether they are acceptable.

Two main models of justifying prenatal testing and screening[182] are recognised in the literature. On the public health model, the basic aim of prenatal testing is the reduction of the frequency of select birth defects, and thus the improvement of population-level health along with reduction of the burden of disease on society. The reproductive autonomy model is focused on providing women with crucial information that can help them make important reproductive decisions, such as whether to continue a pregnancy.[183] This model emphasises the value of choice based on adequate information, which is often seen as grounding the autonomy and empowerment of individuals in clinical settings.

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[179] Begović, D. (2019). Prenatal testing: Does reproductive autonomy succeed in dispelling eugenic concerns?. *Bioethics*. *33*(8), 958-964.
[180] Prenatal testing can be done for various reasons. In this paper I focus on testing for the presence of anomalies or genetic diseases in the fetus that are typically untreatable and may lead to disability. These tests are therefore performed essentially to provide prospective parents with information that might influence their decision whether to continue the pregnancy or not.
[181] An example that has received a lot of attention recently is non-invasive prenatal testing (NIPT).
[182] In the rest of the text I will refer to these simply as 'models of prenatal testing'.
[183] Lippman, A. (1986). Access to prenatal screening services: Who decides? *Canadian Journal of Women & the Law. 1*(2), 434-445.

It has been recognised that these models are best described as idealised paradigms.[184] The real-life application of prenatal testing usually involves some kind of compromise between, or amalgam of the two models.[185] It has been argued that the result of this compromise can be that public health aims, or even eugenic attitudes, are allowed to subvert the autonomy of women behind a smoke screen which talks about upholding women's autonomy and empowering women with information.[186] This does not sit comfortably in a society which, at least in principle, puts patient autonomy at the centre of healthcare.

In this paper I will argue that, if reproductive autonomy is reduced to purely having more choices at our disposal, the model turns out to be inadequate and liable to several objections, including that of allowing eugenic aims to dominate. Without a more robust conception of reproductive autonomy, prenatal screening and testing will continue to quietly ride roughshod over women's autonomy. I suggest that a more adequate conception can be found in what Johnston and Zacharias call 'reproductive autonomy worth having'.[187] I apply their more general proposal to the context of prenatal testing, showing how it can answer some pressing objections and provide a more promising basis for policy.

[184] Clarke, A. (1997). Prenatal genetic screening: Paradigms and perspectives. In Harper, P., & Clarke, A. (eds.), *Genetics, society and clinical practice* (pp. 119-140). Milton Park: BIOS Scientific Publishers.
[185] Lippman, *op. cit.* note 183.
[186] Ravitsky, V. (2017). The shifting landscape of prenatal testing: between reproductive autonomy and public health. *Hastings Center Report*. *47*(6), S34-S40; Wilkinson, S. (2015). Prenatal screening, reproductive choice, and public health. *Bioethics. 29*(1), 26-35.
[187] Johnston, J. & Zacharias, R. (2017). The future of reproductive autonomy. *Just Reproduction: Reimagining Autonomy in Reproductive Medicine, special report, Hastings Center Report. 47*(6), S6-S11.

4.2.2 What is the problem with reproductive autonomy?

Before considering a possible solution to the problem of reproductive autonomy in prenatal testing, we need to show what the problem involves. Of the two prominent rationales for prenatal testing discussed in the literature, the reproductive autonomy model is usually considered to be the more acceptable one. It certainly aligns better with the central place that bioethics, as well as Western society in general, assigns to patients' autonomy. It also has the advantage of escaping the associations with eugenics and disability discrimination that are commonly raised against the public health model.[188]

However, some authors have suggested that the reproductive autonomy model is more problematic than usually thought. One common criticism is that the reproductive autonomy model is used as a more palatable façade for the fact that prenatal testing is implemented with the ultimate aim of cutting healthcare costs by reducing the number of people born with disabilities.[189] According to such accounts, the rhetoric of 'choice' in this context simply masks the economic logic, and underlying assumptions about the value of certain kinds of lives over others, that actually govern prenatal testing policies. These worries are certainly highly relevant to the plausibility of the reproductive autonomy model being sustained in practice. However, another significant, and perhaps philosophically primary question is whether the reproductive autonomy model, when assessed on its own merits, provides a morally acceptable and theoretically sound basis

[188] Lippman, *op. cit.* note 183, pp. 437-438. See also Ravitsky, *op. cit.* note 186, S35.
[189] Ravitsky, *op. cit.* note 186. See also Paul, D. (1998). Genetic services, economics, and eugenics. *Science in Context. 11*(3-4), 488.

for policy. If the model turns out to have important flaws, we need to address these before insisting on its practical implementation.

In the next section I will address this worry by analysing an argument recently made by Stephen Wilkinson, according to which the reproductive autonomy model is susceptible to several pressing objections, making the public health model more defensible overall.[190] While his argument is quite persuasive, I suggest that we can come up with a more plausible version of the reproductive autonomy model that resolves these concerns. I go on to defend such a model in later sections of this paper.

4.2.3 Pure Choice vs. Public Health Pluralism

In order to show the inherent flaws of the reproductive autonomy model, Wilkinson compares two possible views on the goals of prenatal testing programmes. On the so-called Pure Choice View, the main and only aim of prenatal testing is to enable reproductive choice.[191] The second view is Public Health Pluralism, which contains a multitude of aims for prenatal testing, including but not limited to: improving population health, improving maternal and fetal health, cutting health and social welfare costs, and respecting autonomy and providing choice. These multiple goals include the explicit goal of reducing the prevalence of disability and disease in the new-born population,[192] opening this view to various charges that I will refer to as 'eugenic concerns'.

[190] Wilkinson, *op. cit.* note 186, pp. 28-29.
[191] Ibid: 26.
[192] Ibid: 27.

What I call 'eugenic concerns' refers to a cluster of arguments sharing the basic idea that some forms of prenatal testing are problematic because they appear to be based on the assumption that certain kinds of lives are less worth living than others. Some of these arguments explicitly use the term 'eugenics'[193], either to base the immorality of certain technologies on their being instances of eugenics (so-called 'direct eugenics arguments'),[194] or to point out morally relevant similarities of practices we engage in today with historic eugenic practices that we consider morally objectionable.[195] Other arguments that do not explicitly invoke this term can still be classified as counting among 'eugenic concerns'. One of these is the expressivist argument, according to which prenatal testing is morally problematic because it expresses a negative view of the lives of people affected by the conditions tested for, sending a hurtful or disparaging message to them.[196] While this hurtful message can be characterised in different ways, some people with disabilities arguably see prenatal testing and selective abortion as founded on "the assumption that any child with a disability would necessarily be a burden to the family and society, and therefore would be better off not being born."[197]

Arguments explicitly referring to 'eugenics' have been criticised on the grounds that there is substantial disagreement about the meaning of the term, and consequently on

[193] For a recent overview of eugenics-based arguments in reproductive ethics see Cavaliere, G. (2018). Looking into the shadow: the eugenics argument in debates on reproductive technologies and practices. *Monash Bioethics Review. 36*(1-4), 1-22.
[194] Wilkinson, S. (2010). *Choosing tomorrow's children: The ethics of selective reproduction*. Oxford, UK: Oxford University Press. p. 149.
[195] For an example of such an argument see Iltis, *op. cit*. note 178.
[196] Parens, E. & Asch, A. (2000). The disability rights critique of prenatal genetic testing: Reflections and recommendations. In E. Parens & A. Asch (eds.), *Prenatal testing and disability rights* (pp. 3-43). Washington: Georgetown University Press.
[197] Saxton, M. (2000). Why members of the disability community oppose prenatal diagnosis and selective abortion. In E. Parens & A. Asch (eds.), *Prenatal testing and disability rights* (pp. 147-164). Washington: Georgetown University Press, p. 147.

what counts as a case of eugenics.[198] Despite this, it is possible to single out some core eugenic ideas and attitudes.[199] While we may agree that eugenics is a problematic term, and that its rhetorical power provides a good reason to be cautious about its use in academic writing,[200] the emotionally charged nature also suggests it is likely to recur as a part of the popular debate.[201] Omitting it from academic discourse might therefore result in a failure to engage critically with arguments often made in the public sphere. As for the expressivist argument, while it has been criticized on its own terms,[202] it is difficult to deny that the fact states fund certain tests, and even encourage women to take them, sends out the message that this is the preferred course of action. When it comes to designing testing policy, the question of which conditions are tested for, why, and what this says about our valuation of life with a disability, is certainly not one that can be overlooked.

The explicit goal of "reducing the prevalence of disability and disease in the new-born population"[203] contained in Public Health Pluralism opens this view to concerns like these. The Pure Choice View does not appear to be vulnerable to these objections, as its only goal is the promotion of choice. However, Wilkinson suggests that eugenic aims and consequences could still occur within a programme such as Pure Choice. One

[198] Paul, D. (1998). Eugenic anxieties, social realities, and political choices. In D. Paul, *The politics of heredity: Essays on eugenics, biomedicine, and the nature-nurture debate*. Albany: State University of New York Press, 99-100. See also Buchanan, A. et al. (Eds.). (2000). *From chance to choice: Genetics and justice*. Cambridge: Cambridge University Press. pp. 30-46.
[199] Buchanan, A., et al., ibid, pp. 46-52; Paul, D. B. (2014). What was wrong with eugenics? Conflicting narratives and disputed interpretations. *Science & Education*. *23*(2), 268.
[200] Wilkinson, S. (2008). 'Eugenics talk' and the language of bioethics. *Journal of Medical Ethics. 34*(6), 470.
[201] As it has been the case within the debate on prenatal testing, see the campaign Don't Screen Us Out [*op. cit.* note 175].
[202] See for example Nelson, J. (2000). The meaning of the act: Reflections on the expressive force of reproductive decision making and policies. In E. Parens & A. Asch (eds.), *Prenatal testing and disability rights* (pp. 196-213). Washington: Georgetown University Press.
[203] Wilkinson, *op. cit.* note 186, p. 27.

argument supporting this is that eugenics is not necessarily authoritarian or coercive in nature, as some of its historical manifestations have not had these features,[204] meaning it is both theoretically and practically compatible with individual, freely made choices.

We could point out that the most striking historical examples of eugenics (Nazi mass killings, compulsory sterilisation in North America) did contain significant elements of coercion, but this doesn't mean that we wouldn't find the ideas behind them troubling even if they were not forced on anyone.[205] Also, even if we can dispute the compatibility of eugenic *aims* with reproductive freedom, it has been argued that eugenic *effects* can arise through an accumulation of individual, freely made and perhaps entirely value-neutral choices.[206] A contemporary example of this is seen in recent reports that Down's syndrome is 'virtually disappearing' in Iceland as a consequence of high percentages of women choosing to terminate after a positive result on a prenatal test.[207] When it comes to the expressivist argument, Wilkinson claims that in terms of the message sent out to people with disabilities, there is no big difference "between a screening programme which aims to reduce the prevalence of disability and one that merely aims to provide choice, if it is known that most people, when given a choice, choose to avoid disability."[208] This is obviously a relevant concern when we know that in the UK about

[204] Wilkinson, *op. cit.* note 194, pp. 150-155. See also Paul, *op. cit.* note 199, p. 267.
[205] Iltis, *op. cit.* note 178, p. 337.
[206] Duster, T. (1990). *Backdoor to eugenics*. New York: Routledge.
[207] Quinones, J., & Lajka, A. (2017). 'What kind of society do you want to live in?': Inside the country where Down syndrome is disappearing. *CBS News*. Retrieved from https://www.cbsnews.com/news/down-syndrome-iceland/ (accessed 14 December 2020).
[208] Wilkinson, *op. cit.* note 186, p. 28.

90% of women faced with a positive prenatal test for Down's choose to terminate,[209] while in some countries Down's is nearly becoming eradicated from the population.[210]

The vulnerability of Pure Choice to these eugenic concerns removes a key advantage over Public Health Pluralism. Wilkinson suggests that the Pure Choice model has other unpalatable implications that Public Health Pluralism deals with better.[211] One notable issue is how far 'providing choice' should extend. If providing choice is the sole rationale behind offering prenatal testing, Wilkinson asks, why shouldn't we give people more options beyond testing for serious diseases and disabilities – for instance, allowing non-medical sex-selective abortion? Wilkinson suggests that, if they wish to be consistent, proponents of Pure Choice cannot restrict the range of choices they are willing to support, and must accept reasons for screening and termination that may seem trivial or unacceptable.[212] Public Health Pluralism fares better when faced with this objection, because it can appeal to other values in order to justify making a difference between, for example, selection on the basis of sex or disability. Importantly, the aim of reducing disease and disability prevalence in the new-born population through screening provides a clear basis for making the aforementioned distinction.[213] Public Health Pluralism is also concerned with cutting costs, which could be another way to prioritise offering certain choices over others as part of screening programmes.

[209] Morris, J. K., & Springett, A. (2014). The national Down Syndrome cytogenetic register for England and Wales: 2013 annual report. *Queen Mary University of London: Barts and The London School of Medicine and Dentistry*. Retrieved from http://www.binocar.org/content/annrep2013_FINAL.pdf (accessed 14 December 2020).
[210] Quinones & Lajka, *op. cit.* note 207.
[211] Wilkinson, *op. cit.* note 186, p. 30.
[212] Ibid: 30.
[213] Ibid: 31-33.

To sum up, Wilkinson presents several important weaknesses of the Pure Choice view. Even if we do not accept all the particular points he makes, we are left with a strong overall case that even though it does not prioritise choice and autonomy, Public Health Pluralism appears to be the most defensible option to accept when deciding how to regulate prenatal testing and screening. However, I argue that we need not conclude from this that attempts to base screening policy on a reproductive autonomy model should be abandoned, and that a public health model should be accepted instead. In order to support my argument I will now delve a little deeper into the characterisation of the two models and offer some reasons why a reproductive autonomy model is preferable over a public health based one.

4.2.4 Should we opt for a public health model?

Wilkinson's arguments seem to leave us at a point where Public Health Pluralism appears to be the most defensible option. We can, however, question his characterisation of the two models. I will make two brief points, one about each of the models, then move on to explain why Public Health Pluralism, and any public health model in general should not be accepted.

One important feature of Public Health Pluralism is that it involves a multitude of goals including respecting autonomy and freedom of choice. This suggests that the model incorporates what we value about reproductive autonomy while avoiding the pitfalls of the Pure Choice view. However, we should pay attention to the exact wording of this goal: "respecting autonomy, requiring valid consent (where practicable), and providing

choice (where appropriate)."[214] This raises suspicion about how much autonomy is really valued on this model, and whether it will in practice be subsumed under the goals of public health. It seems that this model tries to be too inclusive and include goals that might pull in different directions, such as respecting autonomy versus assuring population, maternal or fetal health. Public Health Pluralism seems like a very sophisticated version of the public health model, but it is not clear how the inevitable conflicts between some of its goals would be resolved, and how much weight would be given to autonomy in such cases.

Similarly, it is doubtful whether the Pure Choice view that Wilkinson criticises is a representative version of the reproductive autonomy model.[215] Pure Choice is explicitly characterized in a very simple way, as a view on which prenatal screening has the one and only aim of 'providing choice'.[216] In a way, we could say that Wilkinson contrasts a highly complex and sophisticated version of the public health model with an oversimplified and uncharitable account of the reproductive autonomy model, making the initial setup unfair.

However, I would argue that while Pure Choice may be overly simplistic, Wilkinson's persuasive criticism of it points to a fundamental flaw in existing reproductive autonomy models – namely, that they are based on an inadequate notion of reproductive autonomy which is overly focused on the individual context of decision making and choice. Some authors have responded to Wilkinson by offering prenatal

[214] Wilkinson, *op. cit.* note 186, p. 27.
[215] Antina de Jong and Guido de Wert point out that it is difficult to find any authors advocating such a view in the literature, see: de Jong, A., & de Wert, G. M. (2015). Prenatal screening: an ethical agenda for the near future. *Bioethics*. *29*(1), p. 49.
[216] Wilkinson, *op. cit.* note 186, p. 27.

testing models that are slightly more complex than Pure Choice, having as their core goal "enabling individual pregnant women (and their partners) to make meaningful reproductive choices with regard to having or not having a child with a serious disorder or disability"[217] or "empowering couples with sufficient capabilities for making meaningful reproductive choices."[218] While these proposals represent a move towards putting the notion of capability or ability at the centre of the concept of reproductive autonomy, and stress the importance of enabling and empowering women and their partners in the prenatal testing process, they still avoid explicitly noting the social context of reproductive autonomy and the many constraints on autonomy that occur before testing or counselling even happens.

At this point someone might ask, should we give up altogether on creating a satisfactory reproductive autonomy model and instead adopt a model like Public Health Pluralism, while making sure to give reproductive autonomy a more significant place within it? I argue that this approach is not likely to lead us to an acceptable screening policy for at least three reasons.

Firstly, no matter how sophisticated or pluralist a public health model is, it will have to include the goal of 'reducing the prevalence of disability', even if this is couched in terms of 'improving population health' or 'cutting down healthcare costs'. Such a goal will then open the model to eugenic concerns, which point to the presence of troubling assumptions about the comparative value of different lives. Secondly, as Vardit Ravitsky has shown, explicitly endorsing a public health model is not only morally problematic

[217] De Jong & de Wert, *op. cit.* note 215, p. 50.
[218] Stapleton, G. (2017). Qualifying choice: ethical reflection on the scope of prenatal screening. *Medicine, Health Care and Philosophy*. *20*(2), 203.

but also likely to cause significant public backlash, as evidenced by the opposition to the introduction of NIPT in the UK when it was justified on economics grounds. Thus there are also pragmatic motivations to prefer the reproductive autonomy model.[219] Finally, an important fact that often gets left out of the discussion is that the primary users of prenatal testing are pregnant women, so any acceptable model would need to put their interests and needs at the centre. For these reasons, a better strategy than accepting Public Health Pluralism, or any public health model of prenatal testing, would be to try and come up with a better conception of reproductive autonomy to base the model on. In the next two sections I show how such a conception can be developed, taking the 'reproductive autonomy worth having' approach outlined by Johnston and Zacharias as a starting point.

4.2.5 Reproductive autonomy worth having

'Reproductive autonomy worth having' represents a response to the important limitations of the conceptions of 'choice' and 'autonomy' found in contemporary bioethical discussion on reproductive technologies. What are the limitations of the usual conception of reproductive autonomy that this approach seeks to correct? Briefly, according to the traditional understanding of autonomy in bioethics, autonomous agents are defined by referring to specific *capacities*, such as being able to deliberate about one's goals and act on this basis.[220] In the clinical context, autonomy is mostly associated with obtaining informed consent, and so seen more as a negative right – "to be free from unwanted or unauthorized medical interventions."[221] This approach

[219] Ravitsky, *op. cit*. note 186, S37-S38.
[220] Johnston & Zacharias, *op. cit.* note 187, S7.
[221] Ibid.

culminated in the development of a so-called 'procreative liberty' framework[222] which has however been shown to have its limitations.[223] While the negative-rights-based approach to reproductive autonomy has been vital in the historical context of the struggle for basic reproductive rights, such as access to contraception and abortion, the authors rightly point out that it can fail to acknowledge significant factors affecting reproductive decisions and capacities - namely "the contexts that shape and constrain reproductive decisions."[224]

Developing a richer account of reproductive autonomy requires us to move beyond conceptualising autonomy as the *ability* to make reproductive decisions in accordance with one's values, and compels us to pay attention to the *social prerequisites* that need to be fulfilled for this to be possible. Reproductive autonomy worth having goes a step further by giving the notion of *reproductive justice* a central place in its framework, urging bioethicists "to look beyond the clinical encounter to identify the financial, familial, cultural, and other pressures limiting people's reproductive options."[225] In the words of Johnston and Zacharias, reproductive autonomy worth having can only be attained if we identify and attempt to address the social constraints that impact people's being "truly able to act in accordance with their values and priorities."[226]

It is exactly this failure to take account of the external factors influencing reproductive decision-making that affects both the Pure Choice view as presented by Wilkinson and

[222] Robertson, *op. cit.* note 35.
[223] Purdy, *op. cit.* note 103; Mills, C. (2011). *Futures of reproduction: Bioethics and biopolitics.* Dordrecht: Springer.
[224] Johnston & Zacharias, *op. cit*. note 187, S9.
[225] Ibid: S10.
[226] Ibid.

other reproductive autonomy models that are overly focused on the notion of choice. Wilkinson rightly points out that 'free choice' can seem like a smoke screen when we know that people overwhelmingly choose in one way. This does not mean that we should not offer such choices, but that we have to be aware of the wider context in which they will be made. With a richer notion of reproductive autonomy such as the one outlined above, however, we can develop a model that takes into account these factors, instead of resorting to adopting a public health model that can be criticised with eugenics-based arguments.

While Johnston and Zacharias outline their approach to reproductive autonomy in the more general context of assisted reproduction and the fertility industry, I argue that this conception is highly relevant to prenatal testing. Women's right to terminate a pregnancy, and to access the necessary information to make this decision, should of course be upheld. But the pressures they are faced with and the social factors that generate them have to be taken into account in order to develop a satisfactory reproductive autonomy model of prenatal testing. While we must concede that these social pressures will affect any reproductive decision concerning disability, regardless of the particular prenatal testing model we adopt,[227] this gives us all the more reason to develop a model that acknowledges this reality and seeks to create the conditions for women's autonomy to be upheld also on this wider social scale.

In the following section I apply Johnston and Zacharias' proposal to prenatal testing. I argue that basing a prenatal testing model on this view of reproductive autonomy builds

[227] Wilkinson, *op. cit.* note 186, p. 33.

a more defensible approach that responds better to the objections examined previously in this paper.

4.2.6 Applying the conception to prenatal testing

As mentioned, Johnston and Zacharias introduce 'reproductive autonomy worth having' as a more general approach to reproductive ethics, and they do not draw out the implications of how their account should be applied to concrete bioethical issues. They mention that women are exposed to various pressures in the context of prenatal testing,[228] and that it is the job of bioethicists (among others) to identify and address these constraining factors. I agree that bioethicists should play a role in this, and I submit that a necessary first step in this process is clarifying the conceptual background of the policies that we wish to advocate for.

The suggestion of this paper is that the crucial advantages of the 'reproductive autonomy worth having' based model lie in its focus on the social context of reproductive decision-making, and the explicit commitment to reproductive justice. These features of the model, when applied to the case of prenatal testing, make it more defensible for a number of reasons:

1. The recognition that individual choices are always somewhat affected by the social context they are made in leads to a shifting of focus from 'reproductive autonomy' seen as reproductive choice to an ability that needs to be ensured in all areas of life, and which is affected by the person's social environment. This broader focus removes the

[228] Johnston & Zacharias, *op. cit.* note 187, S6.

unrealistic demand to judge whether individual reproductive decision are made due to 'eugenic preferences'[229] – which could also lead to stigmatization of people who make a particular choice. However, by approaching reproductive choices in this way we do not fall into the trap of neutrality and saying that 'anything goes' as long as it is chosen without coercion, which was one of the unpalatable consequences of the Pure Choice view. On the contrary, by looking at social trends and which traits are prone to being discriminated against, we can identify subtle forms of coercion and determine in which cases the option of testing will be likely to inspire pressures to choose in a certain way. With this knowledge, we can design policies accordingly – for instance, by making sure that women have access to support and counselling, and that the information is presented in an adequate, non-coercive way.

But this is not sufficient to make the model distinctive from existing proposals[230] or fully socially sensitive. Take again as an example the data that about 90% of people in the UK choose to terminate a Down's pregnancy, which points to this being a trait that most people wish to avoid, for various reasons. In this case, what should be the aim of prenatal testing on this model? If we take reproductive autonomy seriously, we surely do not want to direct women's choices, or blame and shame them for making their decisions the way they do. We can recognize that in terminating a pregnancy, women may simply be making a rational decision not to make their lives harder within their particular social circumstances by having a child that will need additional, costly and even lifelong support. We want to give women the necessary information to make these important decisions. At the same time, we must recognize how this fits into the broader

[229] Ravitsky, *op. cit.* note 186, S35.
[230] De Jong & de Wert, *op. cit*. note 215; Stapleton, *op. cit.* note 218.

picture of disability discrimination, insufficient support for individuals with disabilities and their families, and subsequent eugenic effects.

I suggest that therefore the aims of prenatal testing on a rich reproductive autonomy model should be twofold. The short-term, immediate goal is to enable women to make important decisions during pregnancy by giving them access to necessary services and informative, nondirective counselling. A key element of enabling women to make these decisions is to ensure that they are truly allowed to exercise their reproductive autonomy. This requires eliminating, as far as possible, pressures to choose in a certain way that arise within the process of testing itself: from the way information is presented, the way tests are advertised and worded, the duration and appropriateness of counselling, etc.

The long-term, broader but equally necessary goal is to reduce the general pressure on women to make certain reproductive choices, or even test for certain conditions, by creating the social prerequisites for people to be able to parent their diverse children. The overall goal therefore is to respect autonomy in reproductive decision making, with the awareness that this can only really be done on a small scale within the institution of prenatal testing itself. The bigger issue that bioethics and society at large must deal with is how to reduce the marginalisation and stigmatisation of people with disabilities and the consequential pressure to avoid having such a child, where a first crucial step is involving the people with these conditions in the conversation.[231]

[231] An example of such practice can be found in the following report of the Nuffield Council on Bioethics. (2017). *Report: the views of people with Down syndrome on NIPT*. Retrieved from https://www.nuffieldbioethics.org/publications/non-invasive-prenatal-testing/report-the-views-of-people-with-down-syndrome-on-nipt (accessed 4 January 2021).

Of course, this could be seen as hopelessly broadening the scope of reproductive autonomy, and this is where Johnston and Zacharias admit that the implementation of their proposal in practice is highly ambitious and leads to a very demanding role for the bioethicist (and other stakeholders involved). It is admittedly a difficult task to take on, but whichever model of prenatal testing we choose to employ should at least point in the direction of the desired long-term outcome, which leads to my second point in favour of this model.

2. The focus on empowering women in terms of making sure they are allowed to exercise their autonomy in their particular social circumstances explicitly points toward the desired implications of policies based on this model. In the context of prenatal testing, if we endorse a model based on reproductive autonomy worth having, this will send a message out to the public about the necessity of building societies in which choices about whether to get tested and how to act on the knowledge obtained will no longer be coerced by hostile conditions for people with disabilities. On the other hand, in the current social climate accepting a public health model of prenatal testing arguably implies that we are happy to continue towards a society where 'healthier' population outcomes are achieved by having fewer people born with disabilities, or where people are asked to think about the potential 'costs' their children might impose upon society. I suggest that a more acceptable goal for public health policy in this area is allowing women to have a less stressful experience of pregnancy, to have access to all the services and information necessary for making important reproductive decisions without being coerced or pressured, and to be confident that society will allow them to care for their child adequately even if it is born with a disability.

3. Finally, while it is admittedly difficult to translate this ambitious model of reproductive autonomy into prenatal testing practice and policy, a more socially sensitive outlook would allow policy makers to draw on already existing efforts and proposals to enhance autonomy and reduce directing decisions in certain other areas of reproduction. A good place to start may be looking at suggestions of social policies that will encourage reproductive autonomy at the individual level[232] or proposed tools for measuring reproductive autonomy in specific decision-making contexts[233], and seeing how these may be applicable to prenatal testing.

Some recent theoretical approaches that fit with the reproductive autonomy worth having approach to prenatal testing include Laura Purdy's critique of procreative liberty and emphasis on strengthening women's reproductive autonomy;[234] Catherine Mills's positive variation on procreative liberty and conception of reproductive autonomy as self-making;[235] and Tamara Browne's distinction between 'option and decision' reproductive autonomy and 'ultimate goal' reproductive autonomy,[236] to name only a few. Although of these only Mills's account deals directly with prenatal testing, these kinds of conceptions of reproductive autonomy could be fruitfully used in trying to construct even more sophisticated models of reproductive autonomy for testing and screening.

[232] See Ravitsky, *op. cit.* note 186, S38-S39.
[233] See Upadhyay, U. D., Dworkin, S. L., Weitz, T. A., & Foster, D. G. (2014). Development and validation of a reproductive autonomy scale. *Studies in Family Planning*. *45*(1), 19-41. for a reproductive autonomy scale regarding the decision whether to keep a pregnancy.
[234] Purdy, *op. cit.* note 103.
[235] Mills, *op. cit.* note 223.
[236] Browne, T. K. (2017). How sex selection undermines reproductive autonomy. *Journal of Bioethical Inquiry*. *14*(2), 195-204.

4.2.7 Conclusion

This paper argues that in a society that aims to put respect for patient autonomy at the centre of healthcare ethics and law, we need a radical shift in how we understand reproductive autonomy in order to ensure that prenatal testing and screening does not fall outside of this general approach. If we take the very narrow and simplified idea of 'pure choice' as the core of the reproductive autonomy model, then we must agree with critics such as Wilkinson that this model is more problematic than a public health justification. However, due to the moral and pragmatic reasons against accepting a public health model, I argue that a model of prenatal testing based on a richer notion of reproductive autonomy provides a more conceptually sound basis for prenatal testing. I have presented the basis for such a model that considers reproductive autonomy and prenatal testing in their social context. While this model is admittedly ambitious and demanding, it is necessary if we wish to base our prenatal testing policies on genuine respect for pregnant women's autonomy, with an awareness of the constraints and pressures involved and a long-term investment in removing these conditions.

It may be argued that even if we develop a theoretically sound reproductive autonomy model of prenatal testing, it might end up being used as mere rhetoric to cover up the actual ultimate goals, such as cutting costs or even the eradication of certain kinds of people from society. This is where bioethicists and other stakeholders need to be involved in oversight of practice and advocacy for respecting autonomy. But a solid theoretical model that explicitly centres reproductive autonomy while taking into account the external factors that endanger it is a necessary step in ensuring that women's autonomy in prenatal testing is taken seriously.

A note on Paper One within the thesis and broader literature

Looking at the literature on this topic that has appeared between the publication of this paper and the time of writing this (roughly two years) it can be observed that similar strands of argumentation have been appearing. Stapleton et al.[237] have recently called for a 'capabilities approach' to prenatal screening.[238] On their view, prenatal screening can be autonomy-enhancing to the extent it "protects central capabilities that are integral to a woman's dignity",[239] which may vary with the type of screening and specific circumstances it is performed in. Discussing expanded universal carrier screening, van der Hout, Dondorp and de Wert critically examine the professed aim of this type of screening programme to enhance autonomy, arguing that the 'public health'-like goal of prevention may be more appropriate to screening for certain kinds of conditions.[240] Both discussions support the view espoused in this thesis that examinations of autonomy in pregnancy, to be adequate, must be carefully tailored to the context of the practice under discussion instead of broad, sweeping claims.

The shift towards developing richer ways of understanding reproductive autonomy in prenatal testing supports the relevance of my paper to the developing debate, while the difference of the account I have defended to these outlined above demonstrates its original contribution in the literature. In addition, the paper was cited in a recently published article on a relevant topic and my argument was discussed in some detail.[241]

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[237] Stapleton, G., Dondorp, W., Schröder-Bäck, P., & de Wert, G. (2019). A capabilities approach to prenatal screening for fetal abnormalities. *Health Care Analysis*. *27*(4), 309-321.
[238] Stapleton, *op. cit.* note 218.
[239] Stapleton, G., et al., *op. cit.* note 237, p. 317.
[240] van der Hout, S., Dondorp, W., & De Wert, G. (2019). The aims of expanded universal carrier screening: Autonomy, prevention, and responsible parenthood. *Bioethics*. *33*(5), 568-576.
[241] Bayefsky, M. J., & Berkman, B. E. (2021). Implementing expanded prenatal genetic testing: Should parents have access to any and all fetal genetic information?. *The American Journal of Bioethics*. DOI: 10.1080/15265161.2020.1867933.

CHAPTER FIVE: PAPER TWO

An introductory note to Paper Two

My first paper proposed an alternative model of reproductive autonomy that, I argued, would be well suited to ensure that women are free to make their own decisions about whether or not to undergo testing in pregnancy, without coercion from either medical professionals or their broader social environments. The issue of maternal-fetal surgery, which this paper explores, is similarly situated within a wider social context that typically tends to focus on the welfare and health of the fetus/future child, taking for granted that pregnant women faced with this option will want to act in a certain way. This is arguably even more pronounced than in the prenatal testing context, as these interventions typically take place at a stage of pregnancy where the fetus is already established as a visible entity for the medical professionals, and possibly as an entity with independent morally relevant interests in the eyes of the prospective parents. Assumptions about the quality of life with a disability, and the imperative to 'do whatever it takes' to avoid or alleviate this outcome also loom in the background, inevitably shaping the moral framing of these interventions.

On the face of it, and certainly in the way the issue is presented to the wider public via the media, there seems to be nothing not to welcome about the prospect of maternal-fetal surgeries becoming more broadly available. However, as in the case of prenatal testing, it is important to keep in mind that these interventions disrupt the course of pregnancy as we know it, and so treating them as routine procedures with predictable results could lead to infringing on women's autonomy in the name of offering 'more choice', and the hope of having the 'best/healthiest child possible'.

5.1 Abstract

Maternal-fetal surgery (MFS) encompasses a range of innovative procedures aiming to treat fetal illnesses and anomalies during pregnancy. Their development and gradual introduction into healthcare raise important ethical issues concerning respect for pregnant women's bodily integrity and autonomy. This paper asks what kind of ethical framework should be employed to best regulate the practice of MFS without eroding the hard-won rights of pregnant women. I examine some existing models conceptualising the relationship between a pregnant woman and the fetus to determine what kind of framework is the most adequate for MFS, and conclude that an ecosystem or maternal-fetal dyad model is best suited for upholding women's autonomy. However, I suggest that an appropriate framework needs to incorporate some notion of fetal patienthood, albeit a very limited one, in order to be consistent with the views of healthcare providers and their pregnant patients. I argue that such an ethical framework is both theoretically sound and fundamentally respectful of women's autonomy, and is thus best suited to protect women from coercion or undue paternalism when deciding whether to undergo MFS.

Keywords: fetal surgery, maternal-fetal surgery, maternal-fetal conflict, autonomy, pregnancy, fetal patient

5.2 Maternal-fetal surgery: Does recognising fetal patienthood pose a threat to pregnant women's autonomy?[242]

5.2.1 Introduction

Despite the steady progress of prenatal diagnostic and testing procedures since the mid-20th century, prenatal *treatment* of the fetus is usually not an option upon diagnosis. Most women who receive a result indicating the presence of disease or disability in the fetus are faced with the choice of either terminating the pregnancy or preparing for the birth of a child with a medical condition.[243] The development of maternal-fetal surgery[244] (MFS) introduces a third possibility: treatment that can alleviate, or even eliminate, fetal medical issues before birth. While these procedures are highly significant in helping avoid the dilemma between pregnancy termination and having a child with a disease or disability, they also bring in a host of critical ethical issues.[245] As these treatments are further improved and introduced into medical care, it is necessary to consider which ethical framework best protects the interests of the pregnant woman, while also taking due regard for fetal welfare.

In this paper, I contribute to this discussion by examining some existing models of the maternal-fetal relationship in the context of MFS, evaluating their potential ethical

[242] Begović, D. (2021). Maternal-fetal surgery: Does recognising fetal patienthood pose a threat to pregnant women's autonomy?. *Health Care Analysis,* forthcoming.
[243] Lippman, *op. cit.* note 183, p. 437.
[244] In this paper I will use the term 'maternal-fetal surgery' to refer to these procedures. As noted below, the term 'fetal surgery' used to be more common, especially in medical literature. However, in the ethical debate there has been a move towards using the terminology of 'maternal-fetal surgery' in order to emphasise the point that the pregnant woman is also an important actor in this process. As this paper starts from the assumption that the pregnant woman is definitely a patient, and then questions whether the fetus can also be defined as one, I find this term to be the most appropriate for my discussion.
[245] Doyal, L., & Ward, C. (1998). Fetal surgery: Ethical and legal issues. *Seminars in Neonatology*. *3*(4), 255-265; Smajdor, A. (2011). Ethical challenges in fetal surgery. *Journal of Medical Ethics*. *37*(2), 88-91.

implications and how they respond to the problem of maternal-fetal conflict. To do this I pose, and attempt to answer, two main questions: 1. Who is the patient in maternal-fetal surgery: the pregnant woman, the fetus, or both? 2. Does recognising fetal patienthood pose a threat to pregnant women's autonomy in MFS? The goal is to propose an ethical framework that is conceptually sound and which, in its practical application, would ensure that pregnant women's autonomy is respected when making the decision whether to engage in MFS. A sound conceptualisation of MFS is necessary to identify the right ethical questions for further exploration, and to serve as professional guidance that may impact outcomes for pregnant women and their fetuses. While the law must continue to recognise only one patient within the context of MFS, I will argue that there are important ethical reasons why there should be some very limited scope for recognising the fetal patient when considering its outcomes and implications.

5.2.2 Maternal-fetal surgery: an emerging development

MFS encompasses a range of innovative procedures aimed at treating fetal illnesses and anomalies during pregnancy. This involves accessing the fetus through the body of the pregnant woman and performing a surgical procedure on it, after which it is returned to the uterus until birth. Examples of conditions that can be treated with MFS include urinary tract obstructions, diaphragmatic hernia, and congenital lung lesions.[246] MFS procedures vary in their invasiveness, with three basic types of techniques in use: open surgery involving an incision into the uterus through the abdominal wall (hysterotomy);

[246] Baumgarten, H. D., & Flake, A. W. (2019). Fetal surgery. *Pediatric Clinics of North America*. *66*(2), 295-308.

fetoscopic surgery which is a less invasive procedure with a smaller incision; and percutaneous fetal therapy delivered through a catheter.[247]

One of the most prominent applications of MFS has been in the prenatal treatment of spina bifida,[248] a neural tube defect occurring during pregnancy that can lead to issues such as paralysis of the legs, incontinence, hydrocephalus, and learning difficulties.[249] In the rest of the paper I will use this prominent and widely studied example of MFS as a template for discussing the ethical concerns arising in the general context of prenatal surgical interventions. The standard treatment for spina bifida used to be postnatal surgical intervention. However, studies, such as The Management of Myelomeningocele Study (MOMS) in the US, demonstrated that prenatal surgery for spina bifida performed before 26 weeks gestation has an overall positive effect on preserving neurological functions in the fetus and reversing existing anomalies.[250] The surgical technique used for this treatment is typically the invasive, open surgery variant of MFS.[251] In recent years there has been a move towards using fetoscopic techniques, but further clinical trials are required to determine their efficacy,[252] and there is currently a lack of

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[247] O'Connor, K. (2012). Ethics of fetal surgery. *The Embryo Project Encyclopedia*. Retrieved from https://embryo.asu.edu/pages/ethics-fetal-surgery (accessed 14 December 2020).

[248] More precisely, MFS has been used to treat a severe variant of spina bifida called myelomeningocele, in which a larger portion of the spinal canal is exposed. However, the surgical procedure is usually referred to simply as MFS for spina bifida.

[249] NHS UK. (2020). *Overview: Spina bifida*. Retrieved from https://www.nhs.uk/conditions/Spina-bifida/ (accessed 21 June 2020).

[250] Adzick, N. S., Thom, E. A., Spong, C. Y., Brock III, J. W., Burrows, P. K., Johnson, M. P., ... Gupta, N. (2011). A randomized trial of prenatal versus postnatal repair of myelomeningocele. *New England Journal of Medicine. 364*(11), 993-1004; Adzick, N.S. (2013). Fetal surgery for spina bifida: Past, present, future. *Seminars in Pediatric Surgery*. *22*(1), 10-17.

[251] American College of Obstetricians and Gynecologists. (2017). *Maternal–fetal surgery for myelomeningocele*. Committee Opinion No. 720. Retrieved from https://obgyn.duke.edu/sites/obgyn.duke.edu/files/field/attachments/co720.pdf (accessed 19 November 2020 – link differs from in paper); Moldenhauer, J. S., & Adzick, N. S. (2017). Fetal surgery for myelomeningocele: After the Management of Myelomeningocele Study (MOMS). *Seminars in Fetal and Neonatal Medicine*. *22*(6), 360-366.

[252] Maselli, K. M., & Badillo, A. (2016). Advances in fetal surgery. *Annals of Translational Medicine. 4*(20), 394.

standardised procedures and high-quality evidence to ascertain their purported advantages over the open surgical procedure.[253]

In the UK,[254] several successful prenatal interventions for spina bifida have been conducted in recent years.[255] In August 2018, NHS (National Health Service) England opened a public consultation on providing MFS for spina bifida in select medical centres,[256] and NICE (National Institute for Health and Care Excellence) announced the beginning of funding for open surgical repair in September 2019.[257] At the time of writing, an MFS programme for open spina bifida is available on the NHS through two Fetal Surgery Centres,[258] and as of May 2021, 32 MFS procedures have been successfully performed as part of a collaboration between British and Belgian institutions, even throughout the COVID-19 pandemic.[259] All procedures in the UK were done using the

[253] Verweij, E. J., de Vries, M. C., Oldekamp, E. J., Eggink, A. J., Oepkes, D., Slaghekke, F., ... & DeKoninck, P. L. (2021). Fetoscopic myelomeningocoele closure: Is the scientific evidence enough to challenge the gold standard for prenatal surgery?. *Prenatal Diagnosis*. DOI: 10.1002/pd.5940

[254] In this paper I will focus on the legal and practical context of England and Wales, albeit informed by scholarship and research from other countries, in particular the US. I hope however that the conclusions reached in the paper have broader ethical implications that could potentially be applied to other contexts and jurisdictions.

[255] BBC News. (2018). *Two unborn babies' spines repaired in womb in UK surgery first*. Retrieved from https://www.bbc.co.uk/news/health-45958980 (Accessed 21 July 2021); BBC News. (2019). *Essex baby's spine 'repaired' in the womb*. Retrieved from https://www.bbc.co.uk/news/uk-england-essex-47210922 (Accessed 21 July 2021).

[256] NHS England. (2018). *Open fetal surgery to treat fetuses with 'open spina bifida' (children): Public consultation guide*. Retrieved from https://www.engage.england.nhs.uk/consultation/open-fetal-surgery/user_uploads/open-spina-bifida-consultation-guide.pdf (accessed 21 July 2021).

[257] NICE. (2019). Procedure carried out on unborn babies with spina bifida could improve their neurodevelopment: Operations are set to start taking place in the NHS. Retrieved from https://www.nice.org.uk/news/article/procedure-carried-out-on-unborn-babies-with-spina-bifida-could-improve-their-neurodevelopment (accessed 21 June 2020).

[258] NICE. (2020). Fetoscopic prenatal repair for open neural tube defects in the fetus. Retrieved from https://www.nice.org.uk/guidance/ipg667/chapter/1-Recommendations (accessed 21 June 2020).

[259] Great Ormond Street Hospital for Children. (2021). *Surgery in the womb for spina bifida has stopped paralysis in dozens of babies*. Retrieved from https://www.gosh.nhs.uk/news/surgery-in-the-womb-for-spina-bifida-has-stopped-paralysis-in-dozens-of-babies/ (accessed 20 July 2021).

traditional open surgery variant, while the less invasive, fetoscopic variant is currently only considered as a research procedure.[260]

Alongside promising clinical outcomes and the possibility that surgical techniques could address a broader range of medical conditions prenatally, many important ethical and practical issues arise in the context of MFS. An evaluation of the MOMS trial outcomes acknowledged that the procedure carries non-negligible risks of adverse effects on the health of both pregnant women and fetuses, suggesting that the surgical technique needs to be improved.[261] At this point, both the open surgery and fetoscopic variant of MFS entail potential harms to the pregnant woman,[262] though the more invasive variant has been shown to pose significantly higher risks.[263] There are also risks to fetal outcomes and the remainder of the pregnancy. Physical damage can result to both the pregnant woman and the fetus, and the woman may also incur psychological harm, for instance when the procedure is not successful. Other important issues include the costs associated with these innovative procedures and ensuring their availability, as well as broader issues of research ethics and responsible innovation.[264]

So-called maternal-fetal conflict, occurring when clinicians have conflicting obligations to the maternal and fetal patient respectively, is often seen as the main ethical issue in

[260] University College London Hospitals. (2020). *Spina bifida open fetal surgery*. Retrieved from https://www.uclh.nhs.uk/our-services/find-service/womens-health-1/maternity-services/your-pregnancy/spina-bifida-open-fetal-surgery (accessed 4 January 2021).
[261] Adzick, N. S., et al., *op. cit.* note 250.
[262] Verweij, E. J., et al., *op. cit.* note 253.
[263] Lappen, J.R., Pettker, C.M., Louis, J.M. & Society for Maternal-Fetal Medicine. (2021). Society for Maternal-Fetal Medicine Consult Series #54: Assessing the risk of maternal morbidity and mortality. *American Journal of Obstetrics and Gynecology*, *224*(4), B2-B15.
[264] Doyal & Ward, *op. cit.* note 245.

MFS.[265] However, the very plausibility of such a conflict occurring depends on whether we accept fetal patienthood in the first place. To this end, I will now examine some existing models of the maternal-fetal relationship in MFS (in terms of who is considered to be a patient), and examine the arguments in favour of and against each.

5.2.3 Who is the patient in maternal-fetal surgery?

Determining the obligations owed to different parties in MFS requires first answering the question who or what exactly counts as a patient in this context. Two basic conceptualisations of the maternal-fetal relationship in the existing literature are the one-patient and two-patient model.[266] On the former, the pregnant woman is considered to be the sole patient, with the fetus fully dependent on her for its survival and development.[267] Adopting this model would mean that we need only consider the pregnant woman's decision about whether to engage in MFS. On the latter model, the fetus is recognised as a patient in its own right that can potentially have clinical interests distinct from those of the woman. The consequence of adopting this model could be a need to evaluate the interests of both patients when making decisions about MFS. Besides these basic two models, there are also some more sophisticated accounts that seek to overcome the tension between them, which I will discuss later in the paper, but that could be said to still fall somewhere in between these two camps.

[265] Chervenak, F. A., & McCullough, L. B. (1996). The fetus as a patient: an essential ethical concept for maternal-fetal medicine. *Journal of Maternal-Fetal Medicine*. *5*(3), 115-119.
[266] Lenow, J. L. (1983). The fetus as a patient: Emerging rights as a person. *American Journal of Law & Medicine*. *9*(1), 1-29.
[267] There are different ways of conceptualising this dependence. Some consider the fetus to be a body part or organ of the pregnant woman, while others view it as a sort of bodily property. A detailed discussion of the metaphysics of pregnancy however is beyond the scope of this paper.

5.2.3.1 One or two patients?

Some scholars, both in ethics and law, take the position that the fetus should be treated as part of the mother for the entire duration of the pregnancy up until birth, in which case there would be only one patient. This is also the approach adopted by many jurisdictions, such as the member countries of the European Union and the United States. In English law, some prominent court decisions have established that the fetus cannot be afforded legal personhood or any rights following from this: of particular significance are the cases of *Paton v British Pregnancy Advisory Service*, in which a husband unsuccessfully attempted to prevent the termination of his unborn child citing a right to life;[268] and *Re F (in utero)*, in which a local authority was denied their application to make the unborn child of a patient a ward of the court because the fetus has no status or rights of personhood in law allowing such an intervention.[269]

The one-patient model has the distinct advantage of being consistent with how the law generally regards patienthood in MFS. Besides consistency with the law, there are also strong ethical arguments for treating the pregnant woman as the only patient. A significant worry about conceptualising the fetus as a patient is that this will lead to women being sidelined when debating the ethical implications of MFS, as the fetus might eventually come to be seen as the primary patient, or the more important of the two.[270] Also, it seems conceptually and practically clear what we mean by saying that the pregnant woman is a patient in MFS. But it is less clear what it would mean for a fetus to be a patient, leading us to examine the two-patient conception of MFS.

[268] *Paton*, *op. cit.* note 164.
[269] *Re F (in utero)*, *op. cit.* note 166.
[270] Lyerly, A. D., Little, M. O., & Faden, R. R. (2008). A critique of the 'fetus as patient'. *The American Journal of Bioethics*. *8*(7), 42-44; Smajdor, *op. cit.* note 245.

It seems uncontroversial that pregnant women are patients in MFS, as their bodies are directly involved, and they are autonomous agents who are owed a duty of care. Fetuses certainly lack this key feature of autonomy. However, autonomy may not be *necessary for patienthood*, as we routinely speak of newborn babies or people in comas as patients, even though they are not autonomous. The fetus however, or more accurately the future child, stands to benefit directly from the surgical procedure, which cannot be said for the pregnant woman (except perhaps psychologically). When a newborn baby is treated for an illness, despite its complete lack of a developed sense of self, it seems plausible to speak of its clinical interests and the effects of treatment on its well-being. Could we make an analogy between this and the way clinicians regard fetuses? There is a significant (some would say crucial) difference in that the fetus exists *within* the woman's body, so it depends on the mother for its life in the most literal sense. Still, if women are ready to permit interventions on their body in order to access the fetus and perform surgery on it, it seems clinicians could be justified in treating that fetus as a kind of temporary patient?[271]

The two-patient view is often encountered in both public perceptions and the scientific literature, especially clinical,[272] but also ethical, as in this recent definition: "Surgical intervention *on behalf of a fetus* takes place, of course, inside a pregnant woman's body, hence the reason it is sometimes called maternal–fetal surgery. (...) The ethical issues of fetal surgery are complicated since any intervention is invasive, often experimental, and

[271] Romanis, E. C. (2020). Challenging the 'born alive' threshold: fetal surgery, artificial wombs, and the English approach to legal personhood. *Medical Law Review*. *28*(1), 103-108.
[272] For some examples see: Lin, T.Y., Sung, C.A., & Shaw, S.W. (2020). The application of clinical ultrasound in fetal therapy. Journal of Medical Ultrasound, 29(1), 1-2. DOI: https://doi.org/10.4103/JMU.JMU_134_20; Patino, M., Tran, T. D., Shittu, T., Owens-Stuberfield, M., Meador, M., Cortes, M. S., ... & Olutoye, O. A. (2021). Enhanced recovery after surgery: Benefits for the fetal surgery patient. *Fetal Diagnosis and Therapy*, *48*(5), 392-399.

involves two patients."[273] (my emphasis) This definition clearly shows in which sense the fetus might be seen not only as *a* patient, but as the *primary* patient, despite acknowledgment that it is confined to the woman's body and that these interventions may pose risks to her health and well-being. Such framing fuels some of the worries about recognising fetal patienthood that will be discussed later in this paper.

Something like a middle ground between the one- and two-patient models can be found in accounts that take as a starting point the biological interdependence of the pregnant woman and fetus, and then propose a sense of patienthood that remains accepting of and appropriate to this basic fact. One such account is the 'two-patient ecosystem model' advocated by Susan Mattingly.[274] This model of the maternal-fetal relationship stresses the biological unity and inseparability of the dyad. The fact that the fetus is *incorporated* in the pregnant woman in a very literal sense, on her account, will always trump any conceptual differentiation between the two. Mattingly suggests that it is precisely equivocation between the one- and two-patient accounts that leads to conceptual and practical confusion: "(...) treating the fetus as an independent patient but continuing to regard the pregnant woman as a compound patient incorporating fetus--has, I think, caused the physician's ethical dilemma to be misconstrued as a conflict between the duty to benefit the fetus and the duty to respect the woman's autonomy. (...) But fetal therapy is beneficial to the pregnant woman only on the old model, where she *includes* the fetus, while fetal harm is harm to another only on the new model, where the fetus is independent and exclusive of the woman."[275] (emphasis in original)

[273] ten Have, H., Patrão Neves, M. (2021). Fetal surgery. In: *Dictionary of Global Bioethics*. Springer, Cham. DOI: https://doi.org/10.1007/978-3-030-54161-3_257.
[274] Mattingly, S. (1992). The maternal-fetal dyad: Exploring the two-patient obstetric model. *The Hastings Center Report*. *22(*1), 13-18.
[275] Ibid.

According to her analysis, furthermore, recognising the fetus as a distinct patient actually strengthens the obligations doctors have towards pregnant patients: "Ironically, when the fetus is construed as a second independent patient, physicians' prerogatives to act as fetal advocates are actually diminished. This consequence flows not from any assumed superiority of maternal rights over fetal rights, but from differential professional duties to donors and recipients of medical benefits."[276] Mattingly ultimately suggests that the way forward is not to deny the possibility of fetal patienthood, but instead "challenge the orthodox view of the professional-patient relationship, which suppresses dependency relations among patients and posits them as strangers to one another",[277] suggesting a family-oriented model of illness and treatment which focuses on relationships, protection, dependence and care.

This account seems highly plausible, not only in how it characterises the maternal-fetal relationship starting from the biological nature of the unit, but also in its demonstration that both the standard one-patient and two-patient models are respectively too simplistic to successfully address the ethical and practical reality of medical decision-making in pregnancy. However, its immediate normative implications, especially for the MFS context, are not entirely clear. The ultimate conclusion Mattingly reaches seems to be that maternal and fetal patients should be treated together almost as a compound patient: "when the various possible models of the maternal-fetal dyad are consistently applied, they converge to reinforce the physician's customary ethical stance - working cooperatively with the pregnant woman for common, linked goals of infant, maternal, and family well-being."[278] This certainly should be, and seems to be, the usual goal of

[276] Mattingly, *op. cit.* note 274, p. 16.
[277] Ibid.
[278] Ibid.

maternal-fetal specialists involved in MFS,[279] but some would argue that wherever we have two patients, there is also the potential for conflict between their interests – and thus a way to resolve such conflicts is needed. I will now discuss an account which attempts to address precisely this problem, in various clinical contexts including MFS and prenatal therapy.

5.2.3.2 The case for a limited sense of fetal patienthood: Chervenak and McCullough's ethical framework

The standard two-patient model of the maternal-fetal unit in MFS posits that the fetus and the pregnant woman are two separate patients whose interests may conflict, leading to a situation where doctors may need to balance their obligations to each. This potential for separation can be addressed by stressing the unity of the maternal-fetal dyad, as Mattingly has done. Others, however, have suggested that a concept of fetal patienthood is necessary in order to resolve potential conflicts occurring, despite recognising that maternal and fetal interests are interwoven and independent.[280] A notable account is the 'fetus as a patient' framework developed by obstetric ethicists Chervenak and McCullough. On this conception, a human being becomes a patient when 1) it is presented to the physician for medical care, and 2) there exist clinical interventions that are "are reliably expected to result in a greater balance of clinical benefits over harms for the human being in question."[281] Whether a fetus is a patient

[279] Antiel, R. M., Flake, A. W., Collura, C. A., Johnson, M. P., Rintoul, N. E., Lantos, J. D., ... & Feudtner, C. (2017). Weighing the social and ethical considerations of maternal-fetal surgery. *Pediatrics*. *140*(6), e20170608. DOI: https://doi.org/10.1542/peds.2017-0608.
[280] Chervenak & McCullough, *op. cit.* note 265.
[281] Chervenak, F. A., McCullough, L. B., & Brent, R. L. (2011). The professional responsibility model of obstetrical ethics: avoiding the perils of clashing rights. *American Journal of Obstetrics and Gynecology*. *205*(4), 315; See also Chervenak, F. A., & McCullough, L. B. (2002). A comprehensive ethical framework for fetal research and its application to fetal surgery for spina bifida. *American Journal of Obstetrics and Gynecology*. *187*(1), 10-14; Chervenak, F. A., & McCullough, L. B. (2011). An ethically justified framework for clinical investigation to benefit pregnant and fetal patients. *The American Journal of Bioethics*. *11*(5), 39-49.

then does not depend on whether it possesses sentience, personhood, or some kind of intrinsic value; instead, this is determined in relation to the physician's ability to provide treatment and, crucially, by the pregnant woman's choice to present it for care. This assigns the fetus a kind of *dependent* moral status, distinct from the one possessed by the pregnant woman on the grounds of her personhood-relevant characteristics, and stemming wholly from its position as a patient, which is established when the criteria stated above are satisfied.

There are several advantages to this framework. As mentioned above, it aims to keep the thorny discussion about the moral status of the fetus outside of the debate on MFS, as the fetus is assigned only dependent moral status *as a patient*. This assignment is meant to shift the focus from the moral status of the fetus to the obligations owed to the respective patients by medical professionals, which is extremely important for practical purposes, especially for resolving situations of maternal-fetal conflict. This framework also assigns a crucial role to the pregnant woman, in that it is only her autonomous decision that can confer patient status upon the fetus. Despite positing the existence of a fetal patient, then, this framework also shows due regard for women's autonomy by specifying that it is the pregnant woman who enables patienthood, and therefore dependent moral status, to be conferred upon the fetus by choosing to present it for treatment – at least up to a certain point, as Chervenak and McCullough accept that the moral situation may change after the viability threshold is passed.[282] The doctor is seen to have only beneficence-based obligations to the fetal patient, while having both

[282] Chervenak & McCullough 2002, 2011, *op. cit.* note 281.

beneficence- and autonomy-based obligations to the pregnant woman, because of the aforementioned differences in their moral status.

Chervenak and McCullough's framework however also faces some pressing problems. Firstly, it focuses mainly on the application of the four-principles framework to balancing the differing obligations to the maternal and fetal patient in cases of conflict. While a highly influential bioethical account in its own right, the four-principles theory of Beauchamp and Childress has also faced various kinds of criticism, leading some authors to argue that Chervenak and McCullough's application of the framework here inherits some of these potential problems.[283] Due to the prima facie nature of the principles involved (autonomy and beneficence), and lack of clarity on how these should be balanced in potential cases of conflict, these authors argue that the fetus as a patient account does not provide sound guidance for solving these problems in practice.

Secondly, significant objections are based on the possible threats to women's autonomy and bodily integrity that may result from recognising the fetus as a patient. Chervenak and McCullough explicitly argue that, while the pregnant woman and the fetus are two patients, they are also inseparable and need to be considered together even if the respective obligations to each might differ. However, the worry here is that acknowledging that the fetus and the pregnant woman might have separate, sometimes even conflicting interests, could then justify *treating them as separate*, in the sense of acting in a way that will inevitably respect one set of interests but not the other.[284]

[283] Rodrigues, H. C. M., van den Berg, P. P., & Düwell, M. (2013). Dotting the I's and crossing the T's: autonomy and/or beneficence? The 'fetus as a patient' in maternal–fetal surgery. *Journal of Medical Ethics*. *39*(4), 219-223.
[284] Lyerly & Mahowald, *op. cit*. note 27; Lyerly, A. D., et al., *op. cit.* note 270.

This ties into the final concern of whether their account truly manages to avoid granting independent moral status to the fetus. Rodrigues et al. point out that the conceptual connection between the fetus and the future child it will become actually smuggles in some kind of independent value for the fetus.[285] Moreover, it is worth highlighting that the primacy of the pregnant woman – her ability to confer moral significance onto the fetus and waive it at any point – only applies before the viability threshold is reached, even though the fetus remains within her body after that. Therefore, it seems that, despite acknowledging the centrality of women's autonomy in making decisions MFS and developing a notion of patienthood that avoids assigning a fetus independent moral status, Chervenak and McCullough's theory ultimately inherits the most pervasive problems of the traditional two-patient model.

The two slightly modified accounts (the fetus as a patient and the ecosystem model) present improvements in that they look at the actual, lived nature of the maternal-fetal relationship as a basis for their ethical position, and also in that they probe more deeply into the concept of patienthood instead of assuming that is has a clear meaning. Still, both of these views entail some recognition of fetal patienthood, therefore making it necessary to examine whether there are other inherent dangers to accepting the existence of fetal patients in any sense.

[285] Rodrigues, H. C. M., et al, *op. cit.* note 283.

5.2.4 Arguments for and against accepting fetal patienthood

Clinicians arguably see themselves as having fetal patients, as evidenced by their interest in developing new surgical procedures to treat fetal anomalies[286] and demonstrated views of priorities when conducting the procedures.[287] Of course, this in itself is not a convincing argument for accepting the existence of fetal patients. The professional and personal interests of clinicians leading them to explore MFS may not necessarily be ethically grounded or justified.[288] Also, while medical research and practice might recognise fetal patients, the law may not align with this, making it impossible for pregnant women to be compelled to submit to any medical procedure for fetal benefit. On the other hand, if we recognised the fetus as a patient in its own right, this could lead to attempts at regulating pregnant women's behaviour to protect the fetus from harm. One reason to be sceptical of the two-patient framework thus is its divergence from existing legal standards, as they can be argued to be well-reasoned.[289]

In contrast to the legal position, in the practical and medical setting the terminology used in medical writing and in newspaper articles about the technology indicates that the fetus is often considered to be a patient in MFS (see previous examples from BBC reporting, using language of 'unborn babies' having surgery in utero). There seems to be a tension between how MFS is regarded in legal and ethical debates, and how it is perceived by the medical profession and presented to the public. This may create a confusing situation for those directly involved in the process, namely pregnant women,

[286] Howe, E. G. (2003). Ethical issues in fetal surgery. *Seminars in Perinatology*. *27*(6), 446-457.
[287] Antiel, R. M. et al, *op. cit.* note 279.
[288] Smajdor, *op. cit.* note 245.
[289] McLean, *op. cit.* note 15.

their partners and healthcare providers, as well as those trying to formulate ethical guidelines for the practice.

This is evident already from the terminology used to describe prenatal surgical procedures: in earlier writing on the subject, and indeed some more contemporary literature, the most commonly used term for these surgical interventions was 'fetal surgery'. Some have argued that such language obscures the fact that these procedures involve a direct, potentially risky intervention on the pregnant woman's body.[290] Such arguments may have contributed to a shift towards referring to these procedures increasingly as 'maternal-fetal surgery', at least in scholarship on the topic. While being mindful about the language used likely raises awareness of the crucial role of pregnant women in the process, it is not clear that this change in academic terminology has wide-ranging implications for the public perception of MFS. News reports about MFS still use phrases like 'surgery on unborn babies' or 'fetal repair'. This presentation of the issue suggests that, in the public eye at least, the focus is still very much on the fetus, while the risks of MFS to the health of pregnant women often go unmentioned.

A related objection is that recognising fetal patienthood could lead to women's interests being perceived as secondary to those of the fetus, or even ignored altogether. Lyerly et al. argue that seeing the fetus as a patient could lead to doctors seeing it as a separate patient, with interests separate from those of the pregnant woman. This, in turn, could lead to disregarding women's interests and their 'erasure' from MFS, not only

[290] Casper, M.J. (1998). *The making of the unborn patient: A social anatomy of fetal surgery*. New Brunswick: Rutgers University Press; Kukla, R., & Wayne, K. (2018). Pregnancy, birth and medicine. *The Stanford Encyclopedia of Philosophy (Spring 2018)*. Retrieved from https://plato.stanford.edu/archives/spr2018/entries/ethics-pregnancy/ (accessed 21 June 2020); Lyerly, A.D., et al., *op. cit.* note 270.

symbolically but also practically. There is also the concern that women will face pressure from physicians, or members of their family and social circle, to undergo these procedures, possibly at significant risk to their own health and wellbeing.[291] This is a highly important issue keeping in mind that harmful effects on women have still accompanied breakthroughs in MFS research.[292]

On the other hand, some also worry that women may, in certain cases, be prevented from going through with MFS in an unjustly paternalist way. If women are barred from pursuing MFS, despite feeling that this would be in the best interest of themselves and their future child, this may devalue their autonomy in the same way as expecting them to commit to extreme sacrifices for its well-being.[293] In either case, the worry is that women's agency will be sidelined, thus diminishing their ability to make autonomous choices about what will happen in the course of their pregnancy. It is therefore suggested that healthcare policy and practice should adopt an approach in which the pregnant woman is considered the sole patient whose autonomous choices and interests must be taken into account.

Any sound ethical framework for MFS should aim to prevent women from being pressured into the surgical procedure if they do not want it. However, I would argue that an acceptable model must also account for cases in which women wish to do something that might not be in their best interests physically, even potentially affecting their health and well-being in the long term. After all, pregnancy itself involves various risks to women's health, such as illnesses triggered by pregnancy, complications of

[291] Lyerly, A. D., et al., *op. cit*. note 270.
[292] Adzick, N. S., et al., *op. cit.* note 250; Adzick, *op. cit.* note 250.
[293] Smajdor, *op. cit.* note 245.

childbirth, and postpartum depression. Yet pregnant women are frequently willing to take on these risks in order to bring a child to life when it is what they want. An ethical framework that truly respects pregnant women's autonomy must acknowledge this potentially uncomfortable fact at its foundation. Thus in order to properly center women's agency and experience in the ethical analysis of MFS, it is also essential to consider how pregnant women seeking or undergoing MFS actually perceive the procedure, their role within it, and the status of the fetus.

5.2.4.1 The views of pregnant women and their partners partaking in MFS

Some qualitative studies conducted in recent years suggest that pregnant women involved in, or considering the possibility of undergoing, MFS or other types of prenatal therapy typically see the fetus as an ethically relevant entity, if not a person in its own right,[294] and are motivated to undergo such procedures by a desire to help the fetus, and thus their future child, have 'the best life it can'.[295] A few primary themes emerge in these studies. Firstly, they report consistent usage of the words 'child' or 'baby' to refer to the fetus by pregnant women and their partners,[296] suggesting that they see the fetus as a being in its own right, rather than as property or part of their own body. One of the studies explicitly asked the participants who they consider to be a patient in the context

[294] Harvey, M. E., David, A. L., Dyer, J., & Spencer, R. (2019). Pregnant women's experiences and perceptions of participating in the EVERREST prospective study; a qualitative study. *BMC Pregnancy and Childbirth*. *19*(1), 1-13; Sheppard, M., Spencer, R. N., Ashcroft, R., David, A. L., Everrest Consortium, Ambler, G., ... Hansson, S. (2016). Ethics and social acceptability of a proposed clinical trial using maternal gene therapy to treat severe early-onset fetal growth restriction. *Ultrasound in Obstetrics & Gynecology*. *47*(4), 484-491.

[295] Bartlett, V. L., Bliton, M. J., & Finder, S. G. (2018). Experience and ethics at the "cutting edge": Lessons from maternal–fetal surgery for uterine transplantation. *The American Journal of Bioethics*. *18*(7), 29-31; Bliton, M. J. (2005). Parental hope confronting scientific uncertainty: a test of ethics in maternal-fetal surgery for spina bifida. *Clinical Obstetrics and Gynecology*. *48*(3), 595-607; Crombag, N., Sacco, A., Stocks, B., De Vloo, P., Van Der Merwe, J., Gallagher, K., ... & Deprest, J. (2021). 'We did everything we could'–A qualitative study exploring the acceptability of maternal-fetal surgery for spina bifida to parents. *Prenatal Diagnosis*. DOI: https://doi.org/10.1002/pd.5996; Fry, J. T., & Frader, J. E. (2018). "We want to do everything": how parents represent their experiences with maternal–fetal surgery online. *Journal of Perinatology*. *38*(3), 226-232.

[296] Bliton, ibid.

of prenatal therapy, and several expressed the opinion that the pregnant woman was not the sole patient, with just over half stating that they believe the unborn child's interests to be more important than the interests of its mother.[297] Secondly, an explicit commitment on part of the parents to 'do everything they can'[298] to help is frequently made, again implying that women and their partners perceive the fetus as having some interests of its own, or at least find it plausible to assess its well-being separately from their own. A majority of the participants in one study stated that they found it morally acceptable for a pregnant woman to submit to treatment for fetal benefit.[299] Finally, the themes of retaining hope despite the uncertainty that the procedure will yield a positive outcome, and being prepared for sacrifices to ensure the future child's better health (out of a sense of parental responsibility), are very prominent in the narratives of those interviewed.[300]

So far only a small number of these empirical studies have been conducted, and their conclusions have some limitations. The study samples are relatively small and obviously biased towards parents who are interested in the procedure. Also, since both MFS and empirical studies of it have so far been conducted only in a handful of countries, the views recorded in them are likely shaped by Western notions of pregnancy and parenthood, especially maternal responsibility towards the unborn child, which in turn have developed under the influence of new technologies.[301] One of the studies[302]

[297] Harvey, M. E., et al., *op. cit.* note 294.
[298] Bliton, *op. cit.* note 295; Crombag, N. et al, *op. cit.* note 295; Fry & Frader, *op. cit.* note 280.
[299] Harvey, M. E., et al., *op. cit.* note 294.
[300] Bliton, *op. cit.* note 295; Crombag, N. et al, *op. cit.* note 295.
[301] Casper, *op. cit.* note 290; Howe, D. (2014). Ethics of prenatal ultrasound. *Best Practice & Research Clinical Obstetrics & Gynaecology*. *28*(3), 443-451; Kirklin, D. (2004). The role of medical imaging in the abortion debate. *Journal of Medical Ethics*. *30*(5), 426.
[302] Bliton, *op. cit.* note 295.

features many of the participants using explicitly religious language in explaining their motivation to have the surgery, such as 'being on a journey' or 'being tested by God'. Such views may not reflect how the majority of women perceive MFS or pregnancy in general.

Despite these limitations, however, the studies arguably put forth as a plausible hypothesis that seeing the fetus as a central figure in MFS is not limited only to the views of medical professionals, but is also prevalent in the accounts given by pregnant women and their partners. This, along with the general fact that women are often willing to risk their health and welfare for the sake of the future child, implies that they perceive the procedure as not performed (solely) for their benefit, and indeed as not performed only *on them*. These findings suggest that the main actors in the process indeed perceive the fetus as a patient, at least in the temporary and specific context of the surgery being performed, which seems like something that should be acknowledged in ethical discourse and guidance on these procedures. In the rest of this paper I deal with what is probably the strongest objection to recognising any notion of fetal patienthood, namely, that this would lead to encouraging dangerous and pervasive views about maternal-fetal conflict.

5.2.5 Does accepting fetal patienthood encourage the conflict framing of pregnancy?

Maternal-fetal conflict is thought to arise when pregnant women behave in ways that are potentially harmful to their fetuses, for instance drinking or smoking excessively

during pregnancy, or not adhering to doctors' guidelines.[303] In the context of MFS, such conflict would occur if a woman refused to undergo surgery despite clear prospects for fetal benefit. In this situation, the beneficence-based obligations of physicians towards the fetus would clash with their beneficence- and autonomy-based obligations to the pregnant woman.[304] The two-patient model, as mentioned previously, is often criticised for obscuring the interests and jeopardising the autonomy of pregnant women in MFS. This infringement of autonomy would be most likely to occur in cases of maternal-fetal conflict, as on this model we might sometimes conclude that we should disregard pregnant women's autonomous choices to ensure fetal benefit, for example by compelling them to undergo the surgery against their wishes, or using the interests and well-being of the fetus as a potential argument in getting a pregnant woman to reconsider or change their mind about engaging in MFS.

On the other hand, it is difficult to see how a maternal-fetal conflict could even occur on the one-patient model. If we consider the pregnant woman to be the only patient in MFS then it is clear that only her interests should be considered. This model does *not* imply that the fetus is entirely irrelevant: instead, the idea is that the best way to support fetal well-being is by supporting pregnant women's choices.[305] This conclusion also seems to follow from adopting a dyad model. Mattingly proposes that we must focus on the biological unity of the dyad rather than focusing on the question of how many patients

[303] Bowden, C. (2019). Are we justified in introducing carbon monoxide testing to encourage smoking cessation in pregnant women?. *Health Care Analysis*. *27*(2), 128-145; Markens, S., Browner, C. H., & Press, N. (1997). Feeding the fetus: on interrogating the notion of maternal-fetal conflict. *Feminist Studies*. *23*(2), 351-372.
[304] Chervenak & McCullough (2002) *op. cit.* note 281.
[305] Bowden, *op. cit.* note 303, p. 137; Harris, L. H. (2000). Rethinking maternal-fetal conflict: gender and equality in perinatal ethics. *Obstetrics & Gynecology*. *96*(5), 786-791; Markens, S., et al., *op. cit*. note 303.

there are, as "literally, if not conceptually, the pregnant woman incorporates the fetus, so direct medical access to the fetal patient is as remote as ever."[306]

The notion of maternal-fetal conflict in general has been criticised for the inherent antagonism it posits within the maternal-fetal relationship, and its problematic assumptions about pregnant women's motivations and agency. It has thus been suggested that this conflict framing of pregnancy ought to be abandoned completely.[307] Adopting the one-patient model for MFS then seems to be both a plausible and elegant solution: the woman's autonomy is firmly centred within the ethical framework, and the focus on conflict is replaced by a commitment to ensuring that pregnant women considering MFS are provided with the best possible care and support in their decision-making.

While there are good reasons to reject the conflict framing of pregnancy in general, and accordingly adopt a one-patient model, I would suggest that the specific context of MFS presents some particular challenges. Despite significant progress in the last few decades, it still involves substantial risks to pregnant women, especially when more invasive surgical techniques are used (and these are still the dominant ones). The consequences for women's health can be long-term and impact future pregnancies.[308] Arguably these risks may be ameliorated as the technology develops further. However, as the positive effects of MFS become increasingly visible, it is only to be expected that pregnant women will feel an even more pressing need to 'do something', or even 'do

[306] Mattingly, *op. cit.* note 274, p. 16.
[307] Bowden, *op. cit.* note 303; Harris, *op. cit.* note 305; Romanis, E. C., Begović, D., Brazier, M. R., & Mullock, A. K. (2020). Reviewing the womb. *Journal of Medical Ethics.* DOI: 10.1136/medethics-2020-106160.
[308] Adzick, N. S., et al., *op. cit.* note 250.

anything', to ensure the well-being of the fetus and thus their future child. It is thus possible that the current situation in which the risks of the procedure to women are not yet eliminated, but the fetal benefits seem too high to refuse, might remain the status quo.

There are important reasons why the law should remain firm in treating MFS as it would any other potential intervention in pregnancy. The autonomy of pregnant women must be legally upheld against any recognition of fetal rights that could lead to the violation of pregnant women's bodily integrity.[309] However, I would argue that the ethical position on this issue can be more nuanced, to the extent that it may even diverge from the law at times. A sound ethical framework must take into account the particular moral situation at stake in MFS, and therefore there is a pressing need to develop an ethical framework which recognises the ethically relevant implications of the perspectives of pregnant women and medical professionals as participants in the process. Such an ethical framework is best placed to safeguard the autonomy of pregnant women, while giving due regard both to fetal clinical interests and women's interests in benefitting their future children.

Yet, simply saying that ethical accounts may need to be more nuanced than legal solutions does not seem like a very satisfactory solution. As we have seen so far, the problems with recognising fetal patienthood of any kind are numerous and pervasive, so any attempt at resolving this tricky moral issue will have to say something about this. In the remainder of the paper I will try to sketch out a way of understanding

[309] McLean, *op. cit.* note 15; Romanis, *op. cit.* note 271.

patienthood that does not lead to the problems associated with fetal personhood, and to show why such an understanding would be useful for the ethical context of MFS.

5.2.5.1 A potential way forward: fetal patienthood without the 'threat' of personhood?

While several valid criticisms have been levelled at the Chervenak and McCullough 'fetus as a patient' account, I would nevertheless argue that their central intuition - that the fetal 'patient' in MFS should be treated as having a degree of ethical significance – seems plausible. It is clearly in this context an entity that warrants attention, conscientiousness and care from both the clinicians involved in treatment and prospective parents – and this view also seems to align well with their perceptions and experiences, as noted in the qualitative literature cited above. But there are also clear problems with ascribing moral status to the fetus at any stage that could have overarching consequences for the ethics of abortion and women's autonomy in pregnancy. The central claim to address here, then, seems to be that the purported moral significance of the fetal patient in MFS also implies moral status, and thus rights, for the fetus.

Although it appears intuitively plausible, this argument seems to follow a strange trajectory. Normally, in arguments ascribing some kind of moral status or rights to the fetus, we would being by arguing that the fetus has some characteristic x (such as sentience, (potential) personhood, being a human, etc) that gives it moral significance, therefore grounding rights and corresponding protections. But it seems to me that on this view it is argued that such moral significance would actually proceed from the fetus being *treated as* a patient, being subject to care and treatment.

The question of who counts as a patient and why is much too broad to address here, although I will suggest that this is something we need to gain a better understanding of for this debate. I would argue however that, generally speaking, 'ordinary' patients (namely competent adult humans) have rights, interests to be respected, duties owed to them etc. not because they are patients, but because they are *persons*. This is because all patient rights are fundamentally grounded in some variant of respect for autonomy and the informed choice of the individual – otherwise there would be no requirement of competence or capacity. Those patients that are arguably, according to some theories at least, not persons (e.g. people in persistent vegetative states, or anencephalic infants) are still considered to deserve treatment that respects their dignity – but dignity as a concept is often linked to some kind of respect for humankind, or avoiding unnecessary suffering, again linking to personhood-like criteria (even if fulfilled only partially or potentially). Alternatively, others may advocate for such patients and demand respect for what they believe would have been their autonomous choices (for instance, family members). Legally speaking, at least in the UK, patient rights also stem from their legal personhood.

Because legal personhood is a more clear-cut concept, it is easier to understand why a fetus could not be a patient legally speaking than in the philosophical debate (though, as some have noted, this may eventually change with the development of new technologies[310]). Nevertheless, in both domains, patienthood (understood as the holding of patient rights) is grounded in personhood – in possessing those traits that would satisfy the legal (or philosophical) criteria for someone to be a person. Because

[310] Romanis, *op. cit.* note 271.

the moral status of the fetus is still a raging and unresolved debate, some, like Chervenak and McCullough, wish to avoid it altogether. But the sense of being a patient that they discuss still seems to be about there being certain obligations that a doctor has toward you. Is it possible to be a patient in any other sense?

I would argue that it is indeed possible for the fetus to be treated as a patient without having patient rights, and so without being a patient in the traditional sense. This is because we already have a 'traditional' patient – the pregnant woman – and the fetus can only receive treatment at her request, and with her consent. The reason doctors are able to successfully operate on fetuses is their anatomical similarity to newborn babies, and it is even possible that when performing such procedures they think of the fetus as a future child that they want to secure the best possible outcomes for. But this does not make the fetus a patient in the same way as a newborn or grown adult, as it does not have the corresponding rights or agency.

Rather than trying to keep the moral status of the fetus out of this debate, then, we should be clear in our attempts to grapple with this ethically that we do not take fetuses to be persons. It has been shown why fetuses being taken to have rights independent of the pregnant woman, and the resulting problem of maternal-fetal conflict, is both legally and ethically speaking a potentially dangerous idea,[311] and further work is necessary to establish the *ethical* boundary between fetuses and born-alive, fully formed humans. But when it comes to ethically assessing MFS, I argue that ignoring or sidestepping the intuitions of those most directly involved in these procedures – pregnant women and

[311] Romanis, E. C., et al, *op. cit.* note 307.

their doctors – is not a solution for the discomfort we feel about the possibility of fetuses being recognised as morally significant entities in certain contexts. We must make it clear that just because the fetus is something that can be treated as a patient does not mean it will therefore attain the rights patients normally have. Furthermore, it should always be stressed that the fetus becomes a patient only by extension on the mother's request - it is not a potential patient waiting to happen.

There are those who would argue that it is very difficult, or perhaps futile, to attempt to reconcile intuitions about fetal significance in MFS with upholding the convictions that fetuses are not persons and cannot have rights. Social science approaches track the shifts in how the fetus is perceived and engaged with, showing how the fetal patient is gradually constructed through interactions and changing narratives.[312] It is becoming increasingly accepted that neither personhood nor patienthood are static categories, and that they develop along with social practices and technological advances.[313] In this article I have attempted to suggest such a compromise by rejecting both the simple one-patient and two-patient models in favour of a more sophisticated account that takes seriously the potentially problematic implications on both sides of the debate. Further argumentation about the ethical criteria for personhood and the concept of patienthood itself seem to me necessary to advance the bioethical debate; but for our present purposes, there is hopefully some use in acknowledging the difficulties that come with settling on overly simplified solutions.

[312] Casper, *op. cit.* note 290; Williams, C. (2005). Framing the fetus in medical work: rituals and practices. *Social Science & Medicine*. *60*(9), 2085-2095.
[313] Antiel, R. M. (2016). Ethical challenges in the new world of maternal–fetal surgery. *Seminars in Perinatology*. *40*(4), 227-233.

5.2.6 Conclusion

The primary ways of understanding the maternal-fetal relationship in ethical literature are the one-patient and two-patient model. I demonstrate that when applied to MFS neither of these withstands scrutiny, and suggest that an ecosystem or dyad model is best suited to uphold pregnant women's autonomy. Yet I argue that to be the basis for a sound ethical framework, this model needs to incorporate some limited notion of fetal patienthood. We should be cautious about centering the fetus as this kind of discourse can easily slip into talk of fetal rights and conflicting interests between pregnant women and fetuses. But we also need to be mindful of how the actual participants involved in the procedure perceive this situation. For that reason, I would argue that the tension between the ethics and the law here might be unavoidable, and that it is not necessarily a tension that we should seek to avoid at all costs. The law must stay firmly on the woman's side as we do not want to recognise any form of fetal personhood for well-known reasons of upholding autonomy. But ethical discourse and the clinical guidelines it may influence should be open to the possibility of fetal patienthood in a limited sense, while also being sensitive to the developing state of MFS and the ethical implications of future advances in the technology.

Keeping in mind the current state of MFS, as well as public perceptions of the procedure and the reported motivations of participating parents, it is likely that there will be a growing emphasis on this option, encouraging its uptake in larger numbers. There is a pressing need for a strong ethical framework to inform everyday practice, especially as MFS enters mainstream healthcare and becomes more widely available, while the associated health risks of the procedure remain. Such an ethical approach must ensure

the affirmation of pregnant women's autonomy whether they wish to present their fetus as a patient or not, with the law acting as a safeguard to prevent any coercion from occurring. One of the first steps in constructing such an approach must be the recognition that pregnant women and clinicians are likely to see and treat fetuses as patients, and open up a broader conversation about the meaning of patienthood beyond a framework of respect for individual rights.

A note on Paper Two within the thesis and broader literature

The discussion of autonomy-related issues in maternal-fetal surgery in this paper highlights the complexity of ensuring women's decision-making is respected in a context where, arguably, a lot of women feel that they are not making a decision *solely for themselves*. This could be said to apply to prenatal testing as well, to some extent - in most cases, at least, in deciding whether to have a child with a disability, women are also making a decision about the future of their families, including their partners, existing children, and other potential caregivers. Still, in the particular context of MFS, having an inviolable right to make an independent decision about the further course of pregnancy may seem even more illusionary in a situation where the fetus may already feel like a part of the family – and a particularly vulnerable one at that.

Even more complicated issues could thus be expected to arise in the context of surrogacy, where in exercising their autonomy the women performing gestation (surrogates) may be expected to think not only of the well-being of the fetus/future child, but also the wishes and expectations of the commissioning parents. The proposed new law on surrogacy, which the next paper examines, recognises this potential for pressure to be placed on surrogates, and consequently the possibility that they will be exploited within the arrangement. The new legislation as a whole aims to create a 'smoother' and less ethically risky experience for all the parties involved. But, as I will argue, certain dimensions of exploitation or autonomy infringement may still end up being overlooked despite this commitment. As in the regulation and practical implementation of prenatal testing and maternal-fetal surgery, it is essential that future legislation and regulation of surrogacy take these potential pressures into account, to ensure that the autonomy of surrogates is adequately centred and upheld.

CHAPTER SIX: PAPER THREE

An introductory note to Paper Three

This paper deals with a specific ethical objection to surrogacy, namely that it is (potentially) exploitative, and examines how the proposed new legislation on surrogacy, currently under discussion in the UK, purports to address this worry. Arguments about exploitation in surrogacy usually focus on cross-border arrangements[314] which bring their own set of ethical and legal problems, having to do with the conditions of labour in poor countries, economic imperialism, etcetera. This paper deals exclusively with domestic arrangements in the UK and thus does not address the global/structural factors that have been written about. However, it draws on this existing literature by focusing on surrogacy as work, which was an approach initially developed to analyse international arrangements and their justifiability.[315]

Unlike the previous two papers in the thesis, which address contemporary medical decision-making issues but do so from a somewhat abstract perspective, the analysis in this paper focuses directly on an ongoing legal reform process. However, the discussion still builds on Papers One and Two, by employing a similar type of analysis to the notion of *exploitation* as was applied to their central concepts. I also address a significant gap in the reform proposal – namely, that despite giving concrete proposals on how payment for surrogacy should be regulated in the future, it does not fully specify what the service or work of surrogacy consists in.

[314] See for instance: Pande, A. (2008). Commercial gestational surrogacy in India: Nine months of labor. *A Quest for Alternative Sociology*. 71-88; Panitch, V. (2013). Global surrogacy: Exploitation to empowerment. *Journal of Global Ethics*. *9*(3), 329-343; Rudrappa, S. (2018). Reproducing dystopia: The politics of transnational surrogacy in India, 2002–2015. *Critical Sociology*. *44*(7-8), 1087-1101. Many of these focus on India which used to be a major hub for international surrogacy.
[315] Pande, ibid.

6.1 Abstract

It has been argued that, in light of changes in social attitudes and medical possibilities, the current legislation governing surrogacy in the UK should be updated. As part of this proposed reform, the Law Commissions of England and Wales and the Scottish Law Commission have produced a report discussing some potentially appropriate changes to the law. The report identifies the potential exploitation of surrogates as a key ethical issue, and the proposed measures are explicitly presented as responding to this concern. In this paper, I examine whether the proposed reform, and especially the measures in it relating to payment, can adequately address concerns about the exploitation of surrogates. As I intend to show, this analysis cannot be complete without a clear idea of what exactly the work of surrogacy consists of, and in what senses it can be exploitative. I ultimately suggest that, to effectively face the exploitation-related challenges of surrogacy, the reform must delve deeper into defining the nature of the services offered by surrogates and how these should be compensated. While the measures proposed acknowledge, and to some level address the potential asymmetries of power in the surrogacy agreement, more needs to be done to ensure the work of surrogates does not remain in a grey zone between an altruistic act and a paid service, as it is arguably this ambiguity that opens up space for unrecognised exploitation.

Keywords: Artificial Insemination and Surrogacy, Autonomy, Bills, Laws and Cases, Embryos and Fetuses, Women

6.2 UK surrogacy law reform: Can new legislation adequately address concerns about exploitation?

6.2.1 Introduction

In this paper, I examine whether the proposed reform of UK surrogacy law can adequately address concerns about the exploitation of surrogates. In a consultation report produced by the Law Commissions of England and Wales and the Scottish Law Commission, laying out the current state of surrogacy in the UK and proposals for legal reform (I will refer to this as 'the Report'), exploitation is identified as a key ethical issue to be addressed by the new legislation. To assess whether this is likely to be successful, we must first examine how exploitation in surrogacy is understood, and then explore which measures in the new law would target this and how. This paper focuses on the issues surrounding payment for surrogates, and the suggestion that, rather than being paid for 'expenses' related to pregnancy as is currently the case, surrogates may also be paid for the overall service they provide.[316] I shall argue that, while the Report represents a positive step towards a more explicit and careful discussion of the relationship between payment and exploitation, the issue of what the work of surrogacy consists in must be examined in more detail, to ensure it does not remain in a 'grey zone' between an altruistic act and a paid service.

Dealing with this issue is not only timely, but also crucial if the new legislation is to protect the interests of both surrogates and commissioning putative parents, and correct some of the shortcomings of the previous law. While exploitation in surrogacy has been explored widely, this paper contributes to the literature by bringing together

[316] Law Commission and Scottish Law Commission, *op. cit.* note 171.

recent approaches to labour exploitation in surrogacy arrangements and the analysis of a concrete contemporary proposal for legal reform, suggesting a practical application of these theoretical accounts to regulation.

6.2.2 Background to the Report and reform proposal

Before exploring the Report's recommendations concerning the exploitation of surrogates, it is necessary to briefly explain the background to these proposals. Surrogacy is currently regulated in the UK by two main pieces of legislation, the Surrogacy Arrangements Act 1985[317] and the Human Fertilisation and Embryology Act 2008[318].[319] The original legislation was introduced amid a climate of worries that surrogacy was inherently exploitative, especially if any payment was involved.[320] Thus the issue of exploitation, and its prevalent understanding at the time arguably influenced the conclusion that altruistic surrogacy is acceptable, but not its commercial variant, and limiting any payment to the surrogate to 'reasonable expenses'. In 1998 a Review Committee was established, led by Margaret Brazier, to produce a report on possible changes to surrogacy law. The resulting Brazier report[321] did not deal with the commercialisation of surrogacy as such,[322] but did discuss the issue of payment and continued to favour altruistic arrangements. However, these recommendations were

[317] Surrogacy Arrangements Act, *op. cit.* note 170.
[318] While the latter was slightly amended in 2008 with regards to surrogacy, allowing certain non-profit organisations to assist in setting up surrogacy arrangements, the bulk of the legislation is based on the original HFEA 1990.
[319] HFEA 2008, *op. cit.* note 82.
[320] Warnock Committee. (1984). *Report of the Committee of Inquiry into Human Fertilisation and Embryology*. Cmnd 9314.
[321] Brazier, M., Campbell, A., & Golombok, S. (1998). *Surrogacy: Review for health ministers of current arrangements for payments and regulation–Report of the review team*. Cm. 4068. The Stationery Office: London.
[322] Horsey & Sheldon, *op. cit.* note 25.

never adopted. 2008 amendments to the HFEA also did not make changes regarding payment provisions.

Arguments that the existing law is no longer fit for purpose have been advanced in recent years on the basis of judicial decisions in high-profile cases,[323] as well as empirical data about the realities of, and experiences with, surrogacy arrangements in the UK.[324] Based on such evidence of growing dissatisfaction with the existing law, coupled with increasing social acceptance of surrogacy, the Law Commissions of England and Wales and the Scottish Law Commission embarked on a three-year project to review current legislation and propose how it could be reformed. As part of this process, the Report, providing a detailed analysis of the current law and possible avenues for reform, was published in June 2019 and opened for public consultation until October of the same year. The Report details evidence that the number of surrogate births has grown in recent decades, alongside social and medical developments changing public perceptions of the family, parenthood, and reproduction in general. It argues that surrogacy is now seen as more acceptable than when the current legislation was drafted and came into effect, and that it should be amended and updated to reflect these changes.[325]

The Report recognises the potential exploitation of surrogates as a significant ethical and practical problem, often grounded in the economic and power imbalance sometimes observed between intended parents and surrogates, which is only

[323] Alghrani, A., & Griffiths, D. (2017). The regulation of surrogacy in the United Kingdom: the case for reform. *Child and Family Law Quarterly*. *29*(2), 165-186; Horsey, *op. cit.* note 26.
[324] Horsey, K. (2015). *Surrogacy in the UK: Myth busting and reform. Report of the Surrogacy UK Working Group on Surrogacy Law Reform*. Kent, UK: University of Kent.
[325] Law Commission and Scottish Law Commission, *op. cit.* note 171.

exacerbated by uncertainty about what is considered fair payment. The key suggestion of the Report in this regard is that payments to surrogates should be allowed to go beyond what is currently defined as 'reasonable expenses', either by introducing a fixed fee for 'gestational services' or leaving it up to the parties involved to decide. It is suggested these measures, among others,[326] "can alleviate, if not eliminate, these concerns by providing more effective regulation of surrogacy arrangements, and revised eligibility requirements and safeguards."[327] This paper attempts to answer the question: can the proposed reform of surrogacy law in the UK adequately address ethical concerns about the exploitation of surrogates?

To do so I will firstly explore how exploitation is understood in the existing literature on surrogacy, and argue that more attention should be given to the exploitation of surrogates as workers. I then look at how the Report's recommendations address this issue, and the implications of the two main solutions proposed for how we understand surrogacy as work. I conclude that, while the measures proposed in the Report represent a step in the right direction, further consultation should centre in more detail what the work performed by surrogates consists of, in order to identify potential sources of exploitation and come up with adequate measures to prevent these. This analysis is original and important because it examines the Reform proposal through an alternative lens, taking the starting point that surrogacy can and should be conceptualised as work, and then proceeding from there to identify potential sources of exploitation with a view to its prevention and/or rectification.

[326] Other key measures proposed in the Report include a simplification of the transfer of legal parenthood to the intending parents, and changes to eligibility screening of prospective surrogates. However, these considerations and their effects on exploitation are beyond the scope of this article, which focuses on proposals to reform payment for surrogates' services.
[327] Law Commission and Scottish Law Commission, *op. cit.* note 171, 2.71.

6.2.3 The exploitation argument against surrogacy

In debating the moral and legal status of surrogacy, a central tension arises between autonomy and paternalism.[328] On one hand, it is argued on grounds of reproductive autonomy that surrogacy should be permitted, so that putative parents may exercise their right to try and form a family,[329] and prospective surrogates their choice to engage in such arrangements based on personal motives, such as seeking renumeration, empowerment, or emotional fulfilment.[330] On the other hand, some argue the potential harms of surrogacy outweigh the reasons in favour of allowing it. These harms are usually conceptualised as threats to the welfare of some of the parties involved: the intended parents, the surrogate and her[331] family, and the children eventually born within surrogacy arrangements.[332] In this paper, I focus on the objections from harm to the surrogate, in particular the first of two main ethical objections against surrogacy, namely the arguments from exploitation and commodification.

Although the existence of a clear distinction between the exploitation and commodification arguments has been a subject of debate,[333] I focus on the exploitation argument as this is the criticism of surrogacy that the law reform proposal seeks to

[328] Law Commission and Scottish Law Commission, *op. cit.* note 171, 2.69.
[329] Robertson, *op. cit.* note 35.
[330] Andrews, L. B. (1988). Surrogate motherhood: the challenge for feminists. *Law, Medicine and Health Care*. *16*(1-2), 72-80.
[331] In this paper I use the pronouns "she/her", and the word "woman" to refer to surrogates. While this generalisation may exclude some surrogates who do not identify as women, I believe it is justified in the context of this paper, since it is consistent with the terminology used in the Report, and also acknowledges the heavily gendered assumptions about surrogacy, based for instance on ideas of 'maternal instinct', as well as arguments that situate surrogacy on a continuum with other types of labour usually considered to be 'women's work', which has important social consequences for how such work is valued and understood.
[332] They can also be seen as symbolic harms to society and prevailing views on women and pregnancy, but this falls outside the scope of this paper.
[333] Phillips, A. (2017). Exploitation, commodification, and equality. In M. Deveaux & V. Panitch, *Exploitation: from practice to theory. Studies in social and global justice* (pp. 99-118). London: Rowman and Littlefield International.

address directly. Avoiding the commodification argument and associations of surrogacy with 'baby-selling' is important not only for any attempt to regulate the practice, but also for UK legislation to accord with international law in this regard.[334] It has been argued in the literature on surrogacy that payment to surrogates is most plausibly interpreted as being for the service of carrying the child rather than the child itself,[335] and the Report also seems to endorse the claim that "concerns are mitigated where it is clear that any payments made to a woman for being a surrogate are for her services in carrying the child."[336] The issue of payment is thus crucial to shifting the focus of discussion from commodification to exploitation and specifically, measures that can alleviate it, as the next sections will explore in more detail.

The exploitation argument against surrogacy has several versions. Some authors argue that the practice of surrogacy is inherently exploitative, because there is something immoral or harmful about permitting women to use their bodies in this way.[337] Others argue that surrogacy arrangements are not necessarily exploitative, but can become such due to different factors,[338] such as the surrogate not being compensated fairly, or not being in a position to give fully autonomous consent.[339] Exploitation has been defined in multiple ways, from more neutral conceptions that see it as merely making

[334] Law Commission and Scottish Law Commission, *op. cit.* note 171.
[335] Kornegay, R. J. (1990). Is commercial surrogacy baby-selling?. *Journal of Applied Philosophy*. *7*(1), 45-50.
[336] Law Commission and Scottish Law Commission, *op. cit.* note 171, 2.68.
[337] Anderson, E. S. (1990). Is women's labor a commodity?. *Philosophy & Public Affairs*. *19*(1), 71-92; Ber, R. (2000). Ethical issues in gestational surrogacy. *Theoretical Medicine and Bioethics*. *21*(2), 153-169; Tieu, M. (2007). Oh baby baby: the problem of surrogacy. *Bioethics Research Notes*. *17*(1), 2.
[338] Purdy, L. M. (1989). Surrogate mothering: Exploitation or empowerment?. *Bioethics*. *3*(1), 18-34; Macklin, R. (1988). Is there anything wrong with surrogate motherhood? An ethical analysis. *Law, Medicine and Health Care*. *16*(1-2), 57-64; Kirby, J. (2014). Transnational gestational surrogacy: Does it *have* to be exploitative?. *The American Journal of Bioethics*. *14*(5), 24-32.
[339] Wilkinson, S. (2003). The exploitation argument against commercial surrogacy. *Bioethics*. *17*(2), 169-187.

use of something, to definitions that rely on a dimension of harm in such use.[340] However, starting from a 'neutral' conception of exploitation, where it is seen not as necessarily harmful to one party but may be mutually beneficial,[341] doesn't seem appropriate if lawmakers and campaigners consider it an essential ethical problem that needs addressing. It seems to me that, even without a precise decision of exploitation at hand, we should presuppose that exploitation in surrogacy entails some kind of harm being done to either the surrogate, or the commissioning couple, and indeed the Report shares from this assumption,[342] which I will also adopt as a starting point.

It has been suggested that varying conceptions of exploitation sometimes muddle the surrogacy debate, obscuring the consequences of labelling the practice as exploitative.[343] More nuanced analyses of exploitation in surrogacy have appeared in response to this worry. I shall briefly present one recent and instructive example of such an analysis, which will be used to develop the discussion that follows. Examining surrogacy as 'troublesome reproduction', Ingvill Stuvøy defines three dimensions of exploitation in the context of surrogacy. The first dimension is the 'inherent exploitation' in "having someone give birth to a child on behalf of someone else, who are to parent the child."[344] This can be linked to worries about surrogates being forced to repress their role as mothers, potentially causing psychological trauma.[345] The second

[340] Zwolinski, M., & Wertheimer, A. (2016). Exploitation. *The Stanford Encyclopedia of Philosophy (Summer 2017 Edition).* Retrieved from https://plato.stanford.edu/archives/sum2017/entries/exploitation/ (accessed 29 October 2020).
[341] Wertheimer, A. (1992). Two questions about surrogacy and exploitation. *Philosophy & Public Affairs*. *21*(3), 222.
[342] Law Commission and Scottish Law Commission, *op. cit.* note 171, 2.47.
[343] Cattapan, A. (2014). Risky business: Surrogacy, egg donation and the politics of exploitation. *Canadian Journal of Law and Society*. *29*, 361-365.
[344] Stuvøy, I. (2018). Troublesome reproduction: surrogacy under scrutiny. *Reproductive Biomedicine & Society Online*. *7*, 33.
[345] Tieu, *op. cit.* note 337; Van Zyl, L., & Van Niekerk, A. (2000). Interpretations, perspectives and intentions in surrogate motherhood. *Journal of Medical Ethics*. *26*(5), 404-409.

dimension is exploitation related to the conditions of labour performed by the surrogates, such as unfair payments or coercion invalidating informed consent to participate in the arrangement. The third dimension is "the potential exploitation by desiring-to-be parents of their reproductive assisters and of these assisters' vulnerability",[346] related to the concern about consent, but arguably also applicable to the vulnerability inherent in pregnancy, which can be augmented by coercion from the side of the intended parents.

While these dimensions clearly have some overlap, I would argue that this analysis clarifies the discussion by moving away from concerns about surrogacy being exploitative in its own right, towards looking at particular vulnerabilities at play and how these can be addressed. Additionally, this approach has the advantage of shifting the debate from the somewhat entrenched, simplistic picture of altruistic vs. commercial surrogacy, towards a more nuanced exploration of what allowing payments in particular aspects of surrogacy entails about its acceptability and implications. Most significantly for the purposes of this paper, Stuvøy's analysis highlights the dimension of exploitation that relates to the work or service performed by the surrogate, which is not only directly addressed in the Report, but also a somewhat neglected perspective in surrogacy debates. To examine this more closely, in the next section I consider what kind of work surrogacy is, and in what sense it may be exploitative.

[346] Stuvøy, *op. cit.* note 344, p. 39.

6.2.4 Surrogacy as (exploitative) work

Some authors have suggested that it is unhelpful to approach the issue of exploitation from the usual starting point of altruistic vs. commercial surrogacy.[347] Instead, it is suggested that we should focus on surrogacy as work and the possible forms of exploitation associated with this, and ways to alleviate them. This can be seen as aligning with more general arguments about the marketization of women's work in ways that are often seen as controversial or morally problematic. Some authors submit that sex work, surrogacy and other types of bodily labour typically performed mostly by women, and crucially involving their sexual or reproductive capacity, exist on a continuum with various other kinds of work that is usually seen as neutral, and therefore there is nothing exceptional about them.[348] In the particular context of surrogacy, Bronwyn Parry has argued against the so-called 'fetishization of reproductive labour', showing that this kind of reproductive labour is not drastically different from historical practices such as nursing, or more contemporary ones like sperm or egg donation, which are usually considered more acceptable.[349] Sophie Lewis similarly argues that surrogacy belongs to a continuum of 'intimate' forms of labour (such as working as a maid or nanny) "whose service is figured as dirtied by commerce", arguing that surrogacy is singled out as particularly immoral or problematic due to the perception that it is "antithetical to so-called traditional family values."[350]

[347] Roach Anleu, *op. cit.* note 19; Van Zyl, L., & Walker, R. (2013). Beyond altruistic and commercial contract motherhood: The professional model. *Bioethics*. *27*(7), 373-381.
[348] Nussbaum, M. C. (1998). "Whether from reason or prejudice": taking money for bodily services. *The Journal of Legal Studies*. *27*(S2), 693-723; Satz, D. (1992). Markets in women's reproductive labor. *Philosophy & Public Affairs*. *21*(2), 107-131.
[349] Parry, B. (2018). Surrogate labour: exceptional for whom?. *Economy and Society*. *47*(2), 214-233.
[350] Lewis, S. (2017). Defending intimacy against what? Limits of antisurrogacy feminisms. *Signs: Journal of Women in Culture and Society*. *43*(1), 100.

The key takeaway from these diverse accounts of labour in the context of surrogacy is that, instead of seeing surrogacy as an inherently exploitative practice, or one inevitably tainted by introducing any form of payment, we must first understand it as work to identify in what ways it can be exploitative, and how this can be avoided. Stuvøy summarises the purpose of this approach as "an attempt at moving beyond discussions over commodification, and instead focusing on the surrogate mothers' efforts and conditions."[351] The Report also seems to be in agreement with this view, aiming to shift the discussion from the standard, binary altruistic/commercial division towards a more nuanced discussion of how payment should be introduced into the picture, and subsequently regulated to avoid exploitation. However, in order to answer the main question of this paper, namely how well the changes proposed in the Report respond to worries about exploitation, it is necessary to go further and build on the argument that surrogacy is work, and not an exceptional, extraordinary kind of practice that must in no way be corrupted by the introduction of payment. This is partly due to the existing surrogacy regulation in the UK, where a certain level of payment is already allowed, and partly due to a general impression that, if we agree to define surrogacy as work, then the logical next step is to wonder exactly what this work would consist in, and, importantly for surrogacy arrangements (especially those regulated by contracts), what it would mean to perform it successfully.

Some of the accounts in the previous section note certain features of surrogacy, such as it being embodied and intimate labour, that may impose particular psychological and physical challenges on those performing it. Damelio and Sorensen examine the

[351] Stuvøy, *op. cit.* note 344, p. 38.

argument that surrogates' work is 'particularly unrelenting', as the surrogate is 'never off-duty' and must adjust her behaviour and lifestyle choices.[352] While they argue this is not exceptional to surrogacy, but is a feature of many common and widely accepted jobs, such as being a doctor, their analysis seems to align surrogacy with types of work that are normally seen as very responsible and inviting outside judgment. Lewis also mentions the increased scrutiny of experts over a surrogate pregnancy as compared to a 'traditional' one, due to the medical procedures usually involved.[353] Examining the particular challenges of altruistic arrangements, Toledano and Zeiler offer an interesting account of surrogacy as 'hosting a child for the intended parents',[354] a form of relational work involving a constant negotiation of boundaries and relations between the parties involved, thus highlighting the active component of gestation, rather than simply viewing the surrogate as a carrier. Even in commercial circumstances, it is likely that such negotiation will be necessary, particularly in domestic arrangements where there is likely to be some degree of interaction between the intended parents and the surrogate. Anabel Stoeckle similarly explores surrogacy as 'invisible bodily care work', arguing that while the surrogates uses her body as a key tool, other dimensions of labour (emotional, interactive) make it a demanding and ongoing endeavour which should be rightfully characterised as work, and regulated as such.[355]

It is plausible that this 'invisibility' of surrogates' work, or the failure to recognise it as such, could create or exacerbate asymmetries of power between the surrogate and

[352] Damelio, J., & Sorensen, K. (2008). Enhancing autonomy in paid surrogacy. *Bioethics*. *22*(5), 272.
[353] Lewis, *op. cit.* note 350.
[354] Toledano, S. J., & Zeiler, K. (2017). Hosting the others' child? Relational work and embodied responsibility in altruistic surrogate motherhood. *Feminist Theory*. *18*(2), 159-175.
[355] Stoeckle, A. (2018). Rethinking reproductive labor through surrogates' invisible bodily care work. *Critical Sociology*. *44*(7-8), 1103-1116.

intended parents, or lead to underestimating surrogates' efforts and their proper compensation, which are likely sources of exploitation. The Report explicitly notes the importance of clarifying the nature of surrogates' work in order to identify what adequate payments would be: "If the intended parents are able to pay a woman for her service as surrogate, then we need to clarify what the surrogate is being paid for."[356] It is also reinforced that defining surrogacy as a service moves the debate away from the commodification objection: "to avoid the payment being for the sale of the child, it would need to be linked to the surrogate's gestational services, and not to the transfer of the child, or to the acquisition of legal parenthood."[357] (emphasis mine)

This point was noted by Kornegay in her discussion of the challenge that commercial surrogacy equals baby-selling. Analysing the case of Mary Beth Whitehead and the contract she was bound to, Kornegay identifies the specified outcomes set out by their agreement: to "conceive a baby", "follow a lifestyle designed to produce a healthy baby", "nourish an embryo and fetus in her uterus" "to give birth to a child (...) etc" for the commissioning family.[358] In particular, the expectation of producing a 'healthy baby' (or 'normal child') as the intended outcome can encompass all kinds of actions demanded of the surrogate, from lifestyle choices and subjection to medical examinations to decisions about the manner of labour or responding to possibilities such as premature birth or prenatal surgical intervention.

From Kornegay's analysis of Whitehead's case, it is quite clear that a high value was placed on delivering a child, even though a (albeit much lower) compensation would be

[356] Law Commission and Scottish Law Commission, *op. cit.* note 171, 15.65.
[357] Ibid.
[358] Kornegay, *op. cit.* note 335, p. 48.

offered in case of a stillbirth, for example. Still, the main point is that we can plausibly identify the kind of services that go into the surrogate's work. When it comes to the Report's solution to this, the wording suggests that surrogacy could be understood and even regulated as a paid service, but the nature of this service is not fully clarified: it is most plausibly understood as that of 'carrying the child'[359] and giving birth to it, sometimes also referred to as simply 'gestational service'.[360]

In the next section I will look at the sections of the Report focusing on the issue of payment, and I will attempt to analyse the characterisation of surrogates' work implicit in this discussion, in order to come to a conclusion about how successful the proposals would be in preventing exploitation and thus ensuring surrogates' autonomy is maintained.

6.2.5 Exploitation and payment for surrogates

Two ways of dealing with the current uncertainty about legitimate payments for surrogates' services are proposed: "The payment could take one of two forms: (1) any sum of money agreed between the intended parents and the surrogate; or (2) a fixed fee set by the regulator."[361] The possibility of exploitation once payment for service is introduced into the picture is noted,[362] as well as the need to clarify the service being paid for.[363] However, the discussion of this issue turns out to be quite brief. While it is explicitly stated that "any fee payable to the surrogate could not be dependent on the

[359] Law Commission and Scottish Law Commission, *op. cit.* note 171, 2.68, 7.47.
[360] Ibid: 14.59, 14.63, 15.65.
[361] Ibid: 15.62
[362] Ibid: 15.63.
[363] Ibid: 15.65.

pregnancy resulting in a live birth", meaning payment would still be made in case of the pregnancy ending in a stillbirth,[364] the issue of compensation in cases of miscarriage or termination appears more difficult to resolve. It is acknowledged that "permitting any limitation of payment in such circumstances would (...) suggest that the payment is for the sale of the child, not for her service",[365] as it is thought the surrogate in such a case has still performed her service – although consultees were asked to give their opinion on whether fees may be reduced in case a pregnancy is not carried to term, or does not exceed a particular period of time.[366]

From this discussion it can be gauged most plausibly that the work or 'service' of surrogacy consists in carrying the fetus, even if not to full term. This is understandable due to above mentioned concerns about framing surrogacy as baby-selling and the public backlash to this.[367] However, I would argue that vague talk of 'gestational service' and 'carrying' fetuses seems to rob the surrogates of their agency and active contribution in maintaining the pregnancy, as well as the associated relationships to other participants in the arrangement (as per Toledano and Zeiler's relational analysis). Neglecting pregnant women's agency and the pressures accompanying this can present an issue for those carrying their own children, but arguably even more so for surrogates, who are expected to include the parents in the progress of their pregnancy and prenatal care. Arguably, however, this is the part of the surrogate arrangement in which exploitation or coercion would be most likely to occur.

[364] Law Commission and Scottish Law Commission, *op. cit.* note 171, 15.66.
[365] Ibid.
[366] Ibid: 15.73.
[367] Ibid: 14.55.

Worries about power asymmetries and subtle coercion in the relation between surrogate and intended parents are common even among those who think there is nothing immoral about (paid) surrogacy itself. The Report addresses this at para 15.95 ("the surrogate should be able to enforce the terms of a surrogacy agreement under the new pathway to parenthood insofar as they relate to the payment of money"), and again at 15.98 ("It is not unusual for surrogacy arrangements to contain provisions relating to the surrogate's lifestyle during the pregnancy (...) To make the enforcement of payments conditional [on such provisions] would, we think, represent an unjustifiable intrusion into the surrogate's privacy and personal life.") Again, these proposals evidence careful consideration of pressing issues pertaining to the autonomy of surrogates[368] and pregnant women in general.[369] Still, while it is welcome to see express condemnation of the prospect of surrogates being 'punished' for their lifestyle choices, arguably the work of gestation does not consist solely in 'carrying the child around' while carrying on with one's own life. It also involves various dimensions of emotional labour, both with the broader public and the commissioning couple specifically; subjection to various medical procedures and examinations, and the associated self-monitoring; and finally, the actual 'labour' of childbirth which can entail lots of stress and even long-term health consequences (as can the pregnancy itself). Should these elements of the 'gestational service' be properly regarded as work, and if so, how does this fit into the payment schemes proposed? A deeper analysis of this question would hopefully not only offer practical solutions but also a re-examination of the broader conceptual question at stake: is surrogacy really like any other kind of work, or is there something distinctive about it after all?

[368] Pietrini-Sanchez, M. J. (2020). A case for the asymmetric enforceability of surrogacy contracts. *Journal of Political Philosophy*. *28*(4), 438-454.
[369] Romanis, E. C., et al., *op. cit.* note 307; Milne, *op. cit.* note 31.

6.2.6 Understanding surrogacy as work: conceptual and practical implications

Having advanced an understanding of surrogacy as work in the previous parts of the paper, in this section I will outline in more detail what the 'work of surrogacy' entails, before considering some of the conceptual implications of recognising surrogacy as (specifically this kind of) work. This will then tie into exploring two related questions, a conceptual and a practical one: 1) does recognising surrogacy as work then mean that it should also be seen as a *job* or *profession*, and finally, 2) returning to the context of the UK, what implications should this have for practice and regulation?

6.2.6.1 The nature of the work of surrogacy

Based on previously discussed scholarship within the labour paradigm for understanding surrogacy, the main elements involved in the work of surrogacy can be roughly divided into two categories; those which are inherent and essential, and those (equally as important) elements which stem from external perception of it. I recognise that these two categories are interrelated, as it is likely that social perceptions and expectations also shape what could be seen as 'essential' features of surrogacy, but for present purposes I will use this basic division to ground the further discussion.

The work of surrogacy could be described as having the following *essential* elements:

Firstly, surrogacy is *bodily* labour, both in the sense that the work directly involves the body and happens within it (is embodied), and that it requires continued work *on* the body: for example, the surrogate must be mindful of the functions of her body and the changes entailed by pregnancy, attentive to possible warning signs and proactive in responding to these. This further ties into a requirement for self-discipline and maintenance in how the body is treated, which could be likened to other types of work where one is required to monitor their physique in order to be able to perform the role as required, such as for instance acting, modelling or professional sports.

Beyond being bodily labour, the work of surrogacy could also plausibly be described as involving a strong *emotional* component, similar to many forms of *care work*. Depending

on the surrogacy arrangement in question, the care element can be limited to the fetus (which is not to say that this isn't demanding in its own right), but may also extend to navigating a complex web of relationships including the intended parents and/or a surrogacy agency facilitating the process, as well as one's own partner and children, to name a few examples. The emotional element of the work involves managing one's own emotions associated with the pregnancy but also being mindful of the emotions of others, for example when relaying to the intended parents how the pregnancy is going, or responding to their concerns or voicing one's own. The caring element involves a generally conscientious attitude and commitment to a good final outcome, that is, the pregnancy hopefully resulting in a healthy baby being born, with the awareness that this is not only important for the surrogate as the worker but also for the future of the intended family and their eventual child. This, as some scholars have argued,[370] likens surrogacy to well-recognised jobs such as being a nanny or professional caretaker.

Despite the ambiguous language used in the Report, however, I would argue that the characterisation of the surrogate's work as a type of *service* is not wholly wrongful either. This is because, whether we are comfortable acknowledging this or not, there is a clear end-goal of this work which is the birth of a healthy baby that will then become part of the intended parents' family. To return to a previous example, a nanny will surely be committed to caring for a family's children, may develop a deep emotional connection to them and commitment to their welfare beyond her day-to-day professional capacity. But there is also a sense in which the work of the nanny can be separated to some extent from their personal life. The surrogate, by contrast, is not at any point able to physically 'walk away' from the job or take time off. And similarly, once the work is completed, even if the arrangement is such that she will retain some involvement in the family's and the child' life, typically the end of the pregnancy also concludes the most direct part of the work. So, it is in many ways a temporary and time-limited service, though it may have continuous physical and psychological implications.

We could thus describe the work performed by surrogates as a complex mix of bodily, emotional and caring labour, characterised by its thoroughgoing (even 'relentless' as

[370] Lewis, *op. cit.* note 350; Majumdar, A. (2018). Conceptualizing surrogacy as work-labour: domestic labour in commercial gestational surrogacy in India. *Journal of South Asian Development*. *13*(2), 210-227.

some have phrased it[371]) nature, but also the necessary time-limitation of it, despite its possible continuation in some form after the birth of the child.

This analysis ties into the second set of characteristics of the work of surrogacy which come from the social perceptions of this type of work. As care work, intimate labour and 'women's work' surrogacy is likely to be *undervalued* or *marginalised* in some sense. This can be either due to not recognised as really being work ('invisible labour') or seen as somehow shameful, as something that should not be commodified. The first concern can be linked to care work both in its informal form (as in unpaid domestic labour most often performed by women within the home) and professional (the underpayment of those working in caring professions, such as nurses or care home workers). The second concern has to do with the *intimate* aspect of surrogates' work, where parallels are sometimes drawn with sex work, as work involving women's sexual/reproductive capacity, and is somehow seen as 'dirty' or taboo. We could speculate that these would not necessarily be characteristics attached to surrogacy in a different world, and indeed in present societies these perceptions may vary. Still, having in mind how care work is usually perceived and treated, and its emotional as well as bodily dimensions that are often ignored, I would argue that the work of surrogacy, as bodily, emotional, caring, service work, is likely to also be undervalued and taken for granted. I would further argue that this is precisely why it is so important to recognise it *as work* especially when considering its practical regulation.[372]

6.2.6.2 Implications of recognising surrogacy as (this type of) work

Recognising surrogacy as work surely has broader *conceptual* implications for how we might understand pregnancy in general, for even if we are looking at the example of an 'ordinary' pregnancy where a woman carries the baby 'for herself', many of the same elements are present. This ties into feminist scholarship about the reconceptualisation of domestic work within the family, typically done by women, and even demands that this be recognised as paid work as a step towards greater equality within the nuclear

[371] Damelio & Sorensen, *op. cit.* note 352.
[372] Vertommen, S., & Barbagallo, C. (2020). The in/visible wombs of the market: the dialectics of waged and unwaged reproductive labour in the global surrogacy industry. *Review of International Political Economy*. DOI: 10.1080/09692290.2020.1866642.

patriarchal family.[373] Of course, an important difference here is that surrogates typically 'answer to' someone, i.e. they have responsibilities to the intended parents or surrogacy agency. But this is also to some extent true of women in general, whose domestic labour is often necessary to keep the family going and who thus have 'responsibilities' to the rest of the family, children, spouses etc.

It also has implications for any argument that surrogacy is in a sense unique, or necessarily a 'labour of love'. Breaking down the elements of the work of surrogacy in this way helps us demystify this process, which is arguably an important step towards recognising the potential for injustice and exploitation: for example, recognising that bodily and emotional demands on surrogates may be excessive, or that intended families may have corresponding responsibilities to the needs of the surrogate.

There are those who would argue that adopting a labour paradigm is not the right way to address the exploitation potentially entailed by surrogacy. For example, Johanna Oksala argues that "(...) it is counterproductive, or at best merely cosmetic, to insist that surrogates should be understood as laborers when the fact remains that the economic system around them operates according to a logic that makes it impossible for them to occupy such a position"[374]. Oksala further argues that conceptualising surrogacy as work, offering enhanced labour protections for surrogates, and similar measures is ultimately not helpful because surrogate work is in fact somehow unique, as: "what is produced is not an external commodity or a detachable service with the surrogate's body functioning merely as a means of production. What is produced, in fact, is a different body—a pregnant body", and further argues that "Surrogacy contracts are thus ultimately different from all other labor [sic] contracts, no matter how fair or generous they might be, because the "worker" cannot be separated from the contracted "product," the baby, for at least nine months". Her solution is to argue for "the realization that gestational surrogates cannot be viewed as ordinary laborers engaged in care work. Instead, we should recognize and take seriously the new forms of kinship that surrogacy creates: the surrogates become members of a new kind of extended family. The feminist

[373] Federici, S. (2020). *Revolution at point zero: Housework, reproduction, and feminist struggle*. PM Press; Vertommen & Barbagallo, *op. cit.* note 372.
[374] Oksala, J. (2019). Feminism against biocapitalism: Gestational surrogacy and the limits of the labor paradigm. *Signs: Journal of Women in Culture and Society*. *44*(4), 895.

political implication would be that surrogates should be given more concrete power to define their role in the new forms of kinship introduced by gestational surrogacy."[375] A similar conclusion is reached by Teman, who argues that the surrogate pregnancy is ultimately a collaborative project between the surrogate and intended parents, which creates new bonds between them as well as with the eventual baby.[376]

While I would agree with this analysis insofar as I do not consider surrogates to be 'ordinary care workers', due to such unique aspects of their work as set out above, I also believe that this proposal is somewhat idealistic in its demand to "take seriously the idea that surrogate mothers are members of a new transnational family, then monetary compensation should not be a one-time windfall but similar instead to the dependable monetary support that we expect family members to extend to each other".[377] While this is an admirable ideal to strive towards, it also depends on a broader and fairly radical reconceptualisation of the nature of family, which, while a desirable feminist project, does not seem realistic in current Western society – and indeed one may argue that the practice of genetic surrogacy itself in some way is antithetical to broadening the scope of what is traditionally considered family.[378]

What can be taken away from Oksala's analysis certainly is that surrogates cannot be seen as ordinary workers, as their work is inseparable from the incredibly complex context of effectively producing a family for another – but in circumstances where pregnancy itself is unlikely to be seen as work, and altruistic surrogacy is still perceived as the desired norm (as is the case in the UK, arguably), it seems that the more immediate project should be firstly recognising it as work and then seeing how this can be used to further the autonomy of surrogates. Otherwise, we risk remaining bound to a somewhat muddled, half-altruistic and half-commercial model, whose utilisation makes it unlikely that proper protections will be offered to any of the parties participating in surrogacy arrangements.

[375] Oksala, *op. cit.* note 374, pp. 896-899.
[376] Teman, E. (2009). Embodying surrogate motherhood: pregnancy as a dyadic body-project. *Body & Society*. *15*(3), 47-69.
[377] Oksala, *op. cit.* note 374, p. 900.
[378] Cavaliere, G. (2020). Ectogenesis and gender-based oppression: Resisting the ideal of assimilation. *Bioethics*. *34*(7), 727-734.

6.2.6.3 Practical implications for UK surrogacy law

Having the previous analysis in mind, how should this understanding of surrogacy work affect its practical and legal regulation?

In terms of surrogacy being a form of *bodily* labour, appropriate support and regard must be given to the effects of the pregnancy, delivery and its after-effects on the surrogate's body. This should extend not only to payment covering mandatory prenatal care appointments, but also long-term health effects where relevant. We may wonder whose responsibility this should be and to what extent long ranging costs should be covered. It is to be expected that a person entering a surrogacy agreement willingly and with proper informed consent should be aware of the potential risks of pregnancy to their health, both in the short and long term. Nevertheless, exceptionally bad outcomes could imply the need for some kind of injury compensation, raising further potential issues about insurance, for example.

Beyond physical health, due regard must also be given to the surrogate's *emotional* needs and well-being. This could include counselling where required/appropriate, both before, during and after the pregnancy. This could be individual guidance but also joint mediation sessions for instance if problems arise between the surrogate and intended parents causing stress to either side. A well-rounded approach which tends to both the bodily and emotional needs of the surrogate is essential for proper regulation. Another important factor to keep in mind when regulating surrogacy is the public image and sometimes marginalisation explored in the previous section. Here I would argue again that explicitly adopting a labour paradigm can reduce the negative perceptions of

surrogacy by legitimising it a form of work, and that this is an important role that the law can play in this area.

Some have taken this argument further, arguing that surrogacy should be fully professionalised and standardised as similar jobs are.[379] Some potential advantages of this solution are seen to be standardisation of performance, adequate training and screening for potential surrogates, and the possibility of unionisation and gaining labour protections and rights. Nevertheless, I would argue that professionalisation is not the best solution due to its potential to curtail the autonomy of surrogates, despite benefits that might also be gained. Once we begin treating surrogacy as a job, as some have proposed,[380] we may then legitimately ask the question of what makes a good (or bad) surrogate, what type of behaviour makes the surrogate succeed (or fail) at her job, and similar. While it is undeniable that surrogates utilise certain informal skills in performing their work, trying to assess performance in surrogacy would arguably entail making normative judgments of how one can be good or bad at *being pregnant*; but this is a very problematic idea, for reasons that will be discussed in the next two chapters.

One of the areas in which law and policy can make the biggest difference is by sending the message that certain standards (of 'good surrogate behaviour' for example) should not be cultivated nor enforced. This is why, crucially, payment to the surrogate must never depend on the final outcome: the delivery of the 'product', that is, the fetus. It should also not be dependent on the surrogate's adherence to arbitrary standards of

[379] See the proposal in van Zyl & Walker, *op. cit.* note 347; see also Armstrong, S. (2021). Surrogacy: time we recognized it as a job?. *Journal of Gender Studies*. *30*(7), 864-867.
[380] Van Zyl & Walker, ibid; for a more developed account see also Walker, R., & van Zyl, L. (2017). *Towards a professional model of surrogate motherhood*. Dordrecht: Springer.

good behaviour imposed by any side in the arrangement. Of course, there are some justified expectations of the surrogate: for instance, keeping the parents informed about the course of the pregnancy and involving them in major decisions. Nevertheless, we must keep in mind that the surrogate is being paid first and foremost for her bodily and emotional contribution in maintaining a pregnancy and doing so in the context of simultaneously helping extend an existing family. The payment should therefore cover, minimally, the time period in which this is taking place, and appropriate treatment, counselling, or care beyond this period; in particular in extreme and tragic cases, such as if a pregnancy ends spontaneously close to term.

Some challenges still need to be addressed. Firstly, we must consider the case of the surrogate who does not want to be paid for her services. There are surely some people who engage in such arrangements for purely altruistic motives and feel that the psychological reward they gain would be somehow tarnished by introducing monetary compensation. Or they might feel that payment is inappropriate due to the particular characteristics of the arrangement, for example, if bearing the child of a close friend or relative. I would argue that in such cases an appropriate fee should nevertheless be reserved and available to request later if the surrogate changes their mind subsequently (within a reasonable timeframe). Despite the often reported altruistic motivations of those engaged in surrogacy, particularly if this is done in alliance with people they are close to or wish to maintain a relationship with,[381] health expenses at least must be covered and we should avoid romanticising the process to the point of closing our eyes

[381] Berend, Z. (2016). "We are all carrying someone else's child!": Relatedness and relationships in third-party reproduction. *American Anthropologist*. *118*(1), 24-36.

to the possible risks involved.

One may also argue that this way of regulating surrogacy leaves the intending parents overly vulnerable and creates the potential for them to be exploited while giving the surrogate too much power. I would argue that an asymmetry of power is always present in any kind of labour arrangement: the worker must deliver a service in exchange for money from the employer/commissioner. Both sides can fail to deliver their end of the deal. However, the surrogate will not be able to opt out of or walk away from the work if they are unsatisfied, and potential coercion into certain behaviours during pregnancy could be traumatic. It therefore makes sense for the asymmetry to be tilted in the surrogate's favour;[382] and knowing they will have proper support no matter what course the pregnancy takes is the most likely way to ensure that the surrogate will also be willing to cooperate with the parents to achieve the desired outcome for both sides.

6.2.7 Conclusion

The proposed reform of UK surrogacy law purports to simplify the process, alongside introducing new measures to reduce the likelihood of exploitation. The ethical issue of exploitation in surrogacy arrangements is complex and multifaceted. Those who consider the practice inherently exploitative would probably not be satisfied that the new legislation can do anything to alleviate this. However, in light of empirical data on the surrogacy arrangements already taking place and the experiences of those involved in them, as well as practical considerations of the existing legislation and the global context, it is arguably more helpful to focus on different layers or dimensions of

[382] For a more developed proposal along these lines see Pietrini-Sanchez, *op. cit.* note 368.

exploitation, and to evaluate the proposal in terms of how it responds to these. Looking at the surrogate's position as a worker/labourer, the reform proposals which has to do with how payment to surrogates should be regulated are, I argue, a good initial step to reaching a satisfactory position to alleviate these worries.

The Report makes a positive step in explicitly rejecting that payment for surrogates necessarily invites exploitation and should therefore be avoided, an assumption that has grounded legislation in the UK and many other countries. This allows for a more nuanced discussion on different dimensions of exploitation within the surrogacy arrangement, and measures that need to be put in place to combat them. However, by shying away from explicitly defining what the work of surrogacy consists in, the proposed reform still leaves surrogacy in a grey zone between an altruistic act and a paid service. A more thorough look at what the work of surrogacy entails, starting from a labour paradigm such as that utilised in this paper, would arguably prove fruitful both practically and conceptually. In this paper I have set out such an account and proposed some practical measures to match the status of surrogacy as bodily and emotional labour that exists within a complicated web of social preconceptions and expectations about pregnancy and work. Further work needs to be done in resolving some of the practical challenges of regulating surrogacy according to this picture, but such work is beyond the scope of this article.

A note on Paper Three within the thesis and broader literature

This paper has argued that, in planning and proposing new legislation on surrogacy, we must be careful to identify possible sources of pressure and exploitation in order to ensure that the autonomy of surrogates is protected. I have argued that conceptualising and valuing the service performed by surrogates as work, we might be better placed to identify these subtle pressures that may arise. Some have gone further than this broad 'labour paradigm', by suggesting that surrogacy should be fully professionalised in order to protect the rights of the women engaging in it, and also to ensure that commissioning parents can expect an adequate standard of performance.[383] According to this 'professionalisation' model of surrogacy, just like workers in other professions (nurses, teachers etc) surrogates should receive appropriate education and training, but would also be bound by professional standards. A potential issue arising here is discussed in the paper: once we begin to see surrogacy as work, we may reasonably wonder what it would mean to perform such work successfully, and what kind of performance could be rightfully expected of surrogates. But this approach seems to present a genuine moral slippery slope, as such 'professional standards' for surrogacy would doubtless be tied to what is perceived as the 'best interests' of the future child, thus feeding into the problematic concept of maternal-fetal conflict.

This so-called conflict model[384] of pregnancy, and some objections to it, were explored to some extent in Paper Two in the specific context of MFS. The next and final paper in this thesis focuses directly on the notion of maternal-fetal conflict, examining its ethical and legal implications in both an historical and a contemporary perspective.

[383] Van Zyl & Walker, *op. cit.* note 347.
[384] Bowden, *op. cit.* note 303.

CHAPTER SEVEN: PAPER FOUR

An introductory note to Paper Four

This paper was one of the outcomes of the research symposium 'Reconceiving the Womb in Medicine, Law and Society?' which took place at the University of Manchester in November 2019, and which was organised by Elizabeth Chloe Romanis (ECR), Alexandra Mullock (AM), and myself. Together with one of the symposium presenters who is also a colleague at Manchester, Margaret Brazier (MB), we set out to elaborate on one of the main themes that was raised during the symposium, namely that of maternal-fetal conflict. The paper was published by the *Journal of Medical Ethics* in July 2020. The paper was jointly planned and written by all four authors. MB wrote the section on historical background (7.2.2 'Hidden from view'). ECR and I wrote the section concerning contemporary technologies and ethical issues (7.2.3 'A view into the womb'), and the sections on 'Reviewing conflict' (7.2.4, within which AM and ECR wrote the subsection on legal issues 7.2.4.1) and 'Reframing conflict' (7.2.5). ECR wrote the section on ectogestation (7.2.6 'Womb with a view'). AM, ECR and I also wrote the introduction and conclusion to the paper together, and all four authors participated in finalising the paper, with ECR doing the referencing and formatting work. ECR and I also revised the paper after it was peer-reviewed.

My contribution to this paper builds on the research done for previous papers, in particular Paper Two, arguing that the notion of maternal-fetal conflict is conceptually unsound and ethically problematic, and developing previously made arguments about how the increased visibility and accessibility of the fetus afforded by modern medical technology not only changes public perceptions of its moral standing, but also affects how women perceive the fetus and their purported responsibilities to it.

7.1 Abstract

Throughout most of human history women have been defined by their biological role in reproduction, seen first and foremost as gestators, which has led to the reproductive system being subjected to outside interference. The womb was perceived as dangerous and an object which husbands, doctors and the state had a legitimate interest in controlling. In this article, we consider how notions of conflict surrounding the womb have endured over time. We demonstrate how concerns seemingly generated by the invisibility of reproduction and the inaccessibility of the womb have translated into similar arguments for controlling women, as technology increases the accessibility of the female body and the womb. Developments in reproductive medicine, from in vitro fertilisation (IVF) to surrogacy, have enabled women and men who would otherwise have been childless to become parents. Uterus transplants and 'artificial wombs' could provide additional alternatives to natural gestation. An era of 'womb technology' dawns. Some argue that such technology providing an alternative to 'natural' gestation could be a source of liberation for female persons because reproduction will no longer be something necessarily confined to the female body. 'Womb technology', however, also has the potential to exacerbate the labelling of the female body as a source of danger and an 'imperfect' site of gestation, thus replaying rudimentary and regressive arguments about controlling female behaviour. We argue that pernicious narratives about control, conflict and the womb must be addressed in the face of these technological developments.

Keywords: Women, Feminism, Reproductive Medicine, Embryos and Fetuses, Social Control of Science/ Technology, Interests of the Woman/Fetus/Father

7.2 Reviewing the womb[385]

"As all historians know, the past is a great darkness, and filled with echoes."

— Margaret Atwood, The Handmaid's Tale

7.2.1 Introduction

This article traces how attitudes to female reproduction, shaped by historical misunderstandings of procreation and the female body, have perpetuated an approach that continues to subjugate and 'other' women,[386] especially as they gestate and bear children. From Classical times the womb garnered suspicion and fear among 'medical men', theologians and ordinary people partly because it was obscured from their view. Pernicious narratives about conflict and danger, born from ignorance, have endured and transmuted into modern, medicalised tropes. New reproductive technologies, heralded as increasing reproductive choice for women, equally foreshadow exacerbation of maternal-fetal conflict and medical hegemony over women's choices. We illuminate this problem and argue that such attitudes must not be permitted to direct ethico-legal approaches to emerging technology.

[385] Romanis, E. C., et al. *op. cit.* note 307.

[386] It is important to acknowledge that it is persons of female biology, regardless of the gender they live in or identify with, that can become pregnant. In this article, we refer to women and pregnant women because throughout history the fact that the majority of pregnant people identified as, or were assumed to be, women because of their biology impacted on how pregnancy was conceptualised and how pregnant people were and are treated.

Until recently, the womb was an exclusively natural, static female organ, but medical science is now delivering opportunities to transplant[387] or emulate the womb.[388] Women who suffer from uterine factor infertility can now receive a uterus transplant, and it seems feasible that soon trans women and cis men wanting to gestate their own child could too.[389] Such advances may potentially de-gender[390] and de-humanise gestation. On the horizon there is the promise of 'artificial wombs'[391] creating further options for the wombless and those who want a child but not to gestate. More choices

[387] In December 2014 the first baby was born from a transplanted uterus in Sweden: Gallagher, J. (2014, October 4). First womb-transplant baby born. *BBC News*. Retrieved from https://www.bbc.co.uk/news/health-29485996 (accessed 22 October 2019).

[388] In 2017 a team of fetal scientists and surgeons in Philadelphia revealed an AW prototype that had yielded promising results in animal testing (the Biobag). Another research team, based in Western Australia, has reported similar results from testing their prototype AW, the EVE platform. In 2019 a third research team in the Netherlands announced they had received Horizon 2020 funding to build their AW prototype: Partridge, E. A., Davey, M. G., Hornick, M. A., McGovern, P. E., Mejaddam, A. Y., Vrecenak, J. D., ... & Han, J. (2017). An extra-uterine system to physiologically support the extreme premature lamb. *Nature Communications*. *8*, 15112; Usuda, H., Watanabe, S., Miura, Y., Saito, M., Musk, G. C., Rittenschober-Böhm, J., ... & Jobe, A. H. (2017). Successful maintenance of key physiological parameters in preterm lambs treated with ex vivo uterine environment therapy for a period of 1 week. *American Journal of Obstetrics and Gynecology*. *217*(4), 457-e1; Davis, N. (2019, October 8). Artificial womb: Dutch researchers given €2.9m to develop prototype. *The Guardian*. Retrieved from https://www.theguardian.com/society/2019/oct/08/artificial-womb-dutch-researchers-given-29m-to-develop-prototype (accessed 17 February 2020).

[389] Medical objections to uterus transplantation in non-biologically female persons (that formed the basis of the Montreal Criteria about ethical uterus transplantation) do not appear to be well-founded: Jones, B. P., Williams, N. J., Saso, S., Thum, M. Y., Quiroga, I., Yazbek, J., ... & Smith, J. R. (2019). Uterine transplantation in transgender women. *BJOG*. *126*(2), 152-156.

[390] Claims that artificial wombs will de-gender gestation are frequently made in the literature: Brassington, I. (2009). The glass womb. In F. Simonstein, *Reprogen-ethics and the future of gender* (pp. 197-209). Dordrecht, Springer; Welin, S. (2004). Reproductive ectogenesis: The third era of human reproduction and some moral consequences. *Science and Engineering Ethics*. *10*(4), 615-626; Schultz, J. H. (2009). Development of ectogenesis: how will artificial wombs affect the legal status of a fetus or embryo. *Chicago-Kent Law Review*. *84*, 877-906; Gelfand, S. (2006). Ectogenesis and the ethics of care. In S. Gelfand & J. Shook, *Ectogenesis. Artificial womb technology and the future of human reproduction* (pp. 89-108). Amsterdam: Rodopi. For an explanation of why these claims are inaccurate see: Horn, C., & Romanis, E. C. (2020). Establishing boundaries for speculation about artificial wombs, ectogenesis, gender, and the gestating body. In C. Dietz, M. Travis, & M. Thomson, *A jurisprudence of the body* (pp. 227-254). Palgrave Macmillan.

[391] Kingma and Finn note that it is more appropriate to refer to ectogestation and the specific names of designed prototypes because describing the technologies as 'artificial wombs' is inaccurate [Kingma, E., & Finn, S. (2020). Neonatal incubator or artificial womb? Distinguishing ectogestation and ectogenesis using the metaphysics of pregnancy. *Bioethics*. *34*(4), 354-363], and as we will demonstrate the notion of an 'artificial' womb might perpetuate harmful narratives about the need to control gestation. Here, we use the term 'artificial womb' because this is how they are popularly referred to and understood, and because this term is an important part of our argument about how language is used in this context to create narratives about women.

for all putative parents and better health care for the fetus, whether in a parent's biological uterus or a 'machine,' appear to represent progress which should be welcomed.

History, however, suggests that a note of caution must be voiced about the impact of such developments on women's rights and role in society more generally. Fascination with the womb, coupled with the capacity for others to intervene for the benefit of the fetus, has culminated in the notion of 'maternal-fetal' conflict, in which the interests of pregnant woman and the fetus are presented as incompatible with, or in competition with, each other. Whilst advances in reproductive technologies offer hope and important solutions for putative parents, there may be unintended side-effects that negatively affect pregnant women because of prevailing narratives within health care, maternity care and wider society.

In this paper we recall how frameworks based on the womb as a site of conflict, and concerns about the need to control women because of their wombs, are evident in medical practice and law throughout history. We then consider how these narratives have prevailed as advances in medical technologies have provided us with a 'view into the womb', and demonstrate why the conflict framework is not only conceptually and evidentially unjustified, but also potentially harmful. Finally, we examine this danger in connection with future reproductive technology, focusing on 'artificial womb' technology, to interrogate these issues in a contemporary context. We consider the development of ectogestation and argue that such technology exemplifies further why we need a wholescale shift in medicine, ethics and law away from narratives that consider pregnancy and the womb as a site of danger.

7.2.2 Hidden from view

Possession of a womb has not always been a blessing. In the past, the woman who successfully gestated children faced an agonising labour and risk of death. Her pain was to expiate the sin of Eve in tempting Adam with that apple. The book of Genesis declares 'I will greatly multiply your pain in childbirth, in pain shall you bring forth children yet your desire shall be for your husband' (Genesis 3.7). John McKeown cites Martin Luther:

> [W]e see how weak and sickly barren women are. And those who are fruitful are healthier cleanlier and happier. and even if they bear themselves weary – or ultimately bear themselves out - that does not hurt let them bear themselves out this is the purpose for which they exist.[392]

For Luther, women were 'not created for any other purpose than to serve man and be his assistant in bearing children.'[393]

However, even if a woman's purpose was thought to be to gestate her husband's children, her contribution to the creation of the child was judged by many learned men across the ages to be simply a 'seed bed' for the embryo.[394] Wombs were no more than a necessary medium in which the father's seed could grow. Aristotle argued that the embryo was formed when the male seed interacted with menstrual blood. The woman nourished the seed.[395] Galen disagreed, contending that women produced seeds, albeit 'weaker in

[392] McKeown, J. (2014). God's babies: Natalism and Bible interpretation in Modern America. *Cambridge: Open Book Publishers.* p. 89.
[393] Ibid.
[394] De Renzi, S. (2004). Women and medicine. In P. Elmer, *The healing arts: Health, medicine and society in Europe 1500-1800* (pp. 198-227). Manchester: Manchester University Press.
[395] Ibid.

nature' than the male seed. In the 17th century, anatomists examining semen under the microscope discovered sperm, originally described as 'animalcules.' The view (described as pre-formationism) grew that the fully formed child was present in the sperm.

Animalculism obviously proved inaccurate, but for those who believed that mothers only contributed an environment in which the father's child could grow and be nurtured, the woman was in effect a 'gestational carrier'. From this (mistaken) premise, the legal incapacities which English law imposed on married women begin to make some sort of sense.[396] The marriage contract obliged a wife to make her womb available to nourish her husband's s children. Coupled with the myth that a wife could not refuse consent to marital intercourse, perpetuated in English law until 1991,[397] husbands enjoyed something akin to what we might classify today as a right to procreate, and wives a duty to provide the means by which he might do so.[398]

A husband's interest in the child was magnified by the firm belief that the child was 'his', the product of his body; he had the strongest of interests in ensuring that no other man's 'animalcule' was carried in the wife's womb and passed off as his. He had a further strong interest in ensuring that the behaviour of the 'gestational carrier' did not compromise his reproductive enterprise. That sadly did not mean that all husbands acted positively to promote the health of the wife. The high rates of child mortality and at many times in history the surplus of women over men might mean that quantity in

[396] Brazier, M. (2015). The body in time. *Law, Innovation and Technology*. *7*(2), 161-186.
[397] *R v R* [1991] 1 AC 599, H.L.
[398] The right to sexual intercourse was not solely linked to the right to reproduce but theological suspicions of sexual pleasure even in marriage, the notion that the primary purpose of marriage was the procreation of children in theory demoted the non-procreative role of marital intercourse to a subordinate role.

reproduction was the primary objective, to generate as many children as possible and replace 'worn out wombs' with fresh stock. The desire for sons and primogeniture begin to make sense. If you accepted animalculism, a son when he reproduced begat a grandson who shared your blood. Daughters will bear a child formed by her husband's 'animalcule', unrelated to its maternal grandfather.

A working womb did not necessarily benefit the woman, but to be barren might have been a worse fate. From classical times, theologians and physicians declared barren women to be monstrous. In Ancient Greek myth, the grisly Gorgon queen Medusa, whose gaze turned men to stone, was said by some to be barren. The empty womb was dangerous, but so was any womb, dangerous to the woman and to others. Secreted far from public view, wombs were judged the cause of many female ills, or rather conditions styled 'ills' by men.

Women, learned men declared, were defective creatures possessing weak intellectual capacity and unregulated emotions. Christian theology was supported by so-called science. The 'scientific' grounds for female defects were various, contradictory and changed over time. When it came to female physiology 'medical men', anatomists, the law, the Church *et al* resembled Alice in Wonderland trying 'to believe as many as six impossible things before breakfast.' The female body was declared to be defective compared to male perfection, yet when anatomists were able to examine the interior of female corpses, they argued that female organs could be seen as inversion of the male.[399] So, it was said that the 'neck of uterus is like the penis, and its receptacle with

[399] Vesalius, A. *De Humani Corporis Fabrica*. Italy, 1543.

testicles and vessels is like the scrotum'.[400] Wombs however were accorded dark powers not shared by the perfect male genitalia. The 'wandering womb' which was not fixed in its proper place but wandered around the body pressing on heart and lungs endangered the woman's life resulting in 'suffocation of the mother'.[401] The wandering womb was described as 'a migratory uterus prowling about the body like a wild animal pressing on the chest'.[402] The uterus emitted noxious fumes; not a desirable commodity.

By no means all eminent physicians agreed that such a condition existed. *The Trotula*, a medieval compendium on women's medicine, rejected the notion of 'suffocation of the mother'.[403] Popular opinion on science then as now influenced society, as Edward Shorter explained 'through popular culture as well rode a visceral male fear of women's' magical powers'.[404] Wandering wombs made a good story. A cure for wandering wombs and later hysteria recommended by some medical men was sexual intercourse - within marriage of course. Writers warned of the libidinous nature of imperfect women, seeking in sexual relations with a man to be completed. As Rawcliffe notes, male writers seemed to see no contradiction in depicting the womb as both 'a passive empty vessel and a voracious animal'.[405]

If the danger of the womb was not enough, its monthly function testified further to the evidence of female defect. Menstruating women were 'venomous during the time of

[400] De Renzi, *op. cit.* note 394, p. 198.
[401] Merskey, H., & Merskey, S. J. (1993). Hysteria, or "suffocation of the mother". *CMAJ: Canadian Medical Association Journal*. *148*(3), 400.
[402] Rawcliffe, C. (1999). *Medicine and society in later Medieval England*. London: Sandpiper Books.
[403] Green, M. (Ed.). (2002). *The Trotula: An English Compendium of Women's Medicine*. Philadelphia: University of Pennsylvania Press. p. 48.
[404] Shorter, E. A. (1984). *A history of women's bodies*. London: Penguin Books.
[405] Rawcliffe, *op. cit.* note 402.

their flowers and so dangerous that they poison beasts with their glance and little children in their cots.' Should a man have intercourse with a menstruating woman, a child conceived might inter alia be born leprous or blind, hunch backed or malformed.' Any child born in defiance of such a taboo 'would bear some mark of ignominy, if only red hair'.[406]

Once human dissection showed plainly that wombs were not apt literally to suffocate or wander around the body, Victorian doctors recast the womb as the cause of hysteria.[407] The womb disordered the female brain**.** We hear a great deal about 'baby brain' today and cognitive impairment in the menopause. It has been reported that women having a heart attack with exactly the same symptoms as men are often sent home told they are suffering from panic or stress[408] – hysteria by any other name?

Arcane beliefs about the womb, which underpinned laws adverse to women and especially pregnant women, no longer hold sway. The womb is no longer mysterious and yet misogynistic attitudes, which define women by their biology, persist. Look at contemporary social media abuse of female MPs. See how some US States have passed regressive laws on abortion, contra to Constitutional Rights, to police every woman's womb.[409] As we now examine, technological advances, whilst potentially benefitting women, might also invite opportunities to interfere with female autonomy, increasing

[406] Rawcliffe, *op. cit.* note 402.
[407] Abbott, E. C. (1993). The wicked womb. *CMAJ: Canadian Medical Association Journal*. *148*(3), 381-382.
[408] Pelletier, R., Humphries, K. H., Shimony, A., Bacon, S. L., Lavoie, K. L., Rabi, D., ... & Pilote, L. (2014). Sex-related differences in access to care among patients with premature acute coronary syndrome. *CMAJ: Canadian Medical Association Journal. 186*(7), 497-504.
[409] For example: Alabama, Georgia, Kentucky, Louisiana, Mississippi, Missouri and Ohio.

the potential for conflict between the interests of women and fetal welfare and the continued pathologisation of aspects of female physiology.

7.2.3 A view into the womb

The previous section outlined the ways in which the 'inaccessibility' of the womb was a source of rampant speculation about women and their pregnancies. 20th century advances in medical technology have drastically changed how we engage with women and the fetus during pregnancy, though as we will demonstrate, these have not necessarily quashed some of the backward thinking about needing to control gestation. X-ray technology initially allowed obstetricians to diagnose potential health problems prenatally, and the later development of obstetric ultrasound provided a safer way of gaining insight into fetal health, ultimately becoming a routine part of prenatal care. In the second half of the century, various forms of prenatal testing and treatment procedures were pioneered, including complex prenatal surgeries for conditions like spina bifida.[410] Many of these relatively recent developments are now used routinely, and some previously experimental and risky procedures have been made safer and less invasive, allowing their gradual introduction into healthcare.[411] These developments have placed the fetus firmly at the centre of the gestation process. Some worry that this shifts the maternal-fetal relationship to be potentially adversarial and may also lead to the woman's interests being side-lined.[412] Douglas explains that 'the perception of childbearing as primarily, rather than coincidentally, a health matter has led to an increasingly more difficult dilemma for health professionals. Who is their patient, the mother or the foetus?... But in the event of a conflict of interests who should take

[410] Howe, *op. cit.* note 286.
[411] Adzick, *op. cit.* note 250.
[412] Lyerly, A. D., et al., *op. cit*. note 270.

priority?'.[413] Technology has arguably oriented the focus away from the pregnant person towards gathering as much information as possible about the fetus, potentially becoming a form of coercive control. Douglas concludes that 'the main focus of attention these days [with all of contemporary obstetric technology] has moved away from the pregnant women and towards the foetus within her… [and this] enables supervision to be maintained over the woman and to some extent her lifestyle'.[414]

Developments in fetal medicine, from heart-rate monitoring to 3D imaging and prenatal surgery, have made the journey from zygote to child, once hidden from view, accessible not only to pregnant women, but also their families, doctors, and society. We are increasingly afforded a 'view into the womb,' leading to the perception of the fetus as a distinct being. Taylor notes that ultrasound has had the effect of bringing fetuses "to life" in that 'it necessarily involves making visible the invisible and unmasking what has been hidden and obscured, [and] inevitably draws us into a rhetoric and politics of vision.'[415] The fetus appears as something that can be watched and 'interacted with'.[416] Technology has afforded the means 'to monitor, to control and possibly intervene.'[417] However, an important boundary remains in the form of the pregnant woman, whose consent is essential for any kind of intervention to be performed: "literally, if not conceptually, the pregnant woman incorporates the foetus, so direct medical access to the fetal patient is as remote as ever".[418] Laws in many countries *appear to* recognise

[413] Douglas, G. (1991). *Law, fertility and assisted reproduction*. London: Sweet & Maxwell.
[414] Ibid.
[415] Taylor, J. (2008). *The public life of the fetal sonogram: Technology, consumption and the politics of reproduction*. New Brunswick: Rutgers University Press.
[416] Tropp, L. (2013). *A womb with a view: America's growing public interest in pregnancy*. Santa Barbara: Praeger.
[417] Petchesky, R. P. (1987). Fetal images: The power of visual culture in the politics of reproduction. *Feminist Studies. 13*(2), 274.
[418] Mattingly, *op. cit*. note 274, p. 16.

the interests of the pregnant woman as primary, and the fetus is usually not considered a being with its own rights and interests.[419] Respecting the autonomy of the pregnant patient is given ethical primacy even by those who would accept a limited notion of fetal patienthood.[420] Yet it is necessary to be vigilant as personal and social perceptions of fetal status and interests have and are likely to continue to evolve, even as legal and ethical codes maintain the autonomy of the pregnant woman as central.[421] The medicalisation of pregnancy has already led to a change in how women perceive their responsibilities to the unborn child,[422] and technological developments, such as more sophisticated prenatal imaging or pregnancy apps monitoring fetal well-being, could further encourage this thinking. Empirical studies of pregnant women preparing for prenatal therapy suggest that the fetus is commonly seen by them as a distinct entity with its own needs and interests.[423] Further technological development may increase the potential for tension between the perceived interests of the woman and her fetus. Consequently, it is important to interrogate the ways in which we imagine the maternal-fetal relationship as technology increases access to the womb.

There is an urgent need to avoid perceptions of the womb as a site of conflict, in order to ensure that pregnant women's bodies are not treated as a dangerous environment for the fetus, rather than an essential part of the maternal-fetal unit. Pregnant women's interests and autonomous choices must not be erased and ignored in favour of promoting fetal well-being, and the conflict view of the maternal-fetal unit seems to play

[419] Cao, K. X., et al., *op. cit.* note 15.
[420] Chervenak & McCullough, *op. cit.* note 281.
[421] McLean, *op. cit.* note 15.
[422] Markens, S., et al., *op. cit.* note 303; Isaacson, N. (1996). The "fetus-infant": Changing classifications of *in utero* development in medical texts. *Sociological Forum*. *11*(3), 457-480.
[423] Harvey, M. E., et al., *op. cit.* note 294.

a crucial role in this framing. In the next two sections we present the notion of maternal-fetal conflict as it is often used in the ethical and legal literature, and demonstrate why this notion is unsubstantiated, incoherent, and possibly dangerous, and should therefore be rejected.

7.2.4 Reviewing conflict

Maternal-fetal conflict is said to occur when a pregnant woman behaves in ways that may be harmful to the fetus, such as drinking excessive alcohol or refusing a caesarean that is medically indicated.[424] This is seen in definitions like: "maternal–fetal conflict has been defined as the situation in which ''the intent or actions of the pregnant woman do not coincide with the needs, interests, or rights of her fetus as perceived by her obstetric caregivers''".[425] This posits the main ethical dilemma for doctors as being how to balance the interests of the pregnant woman in having her autonomy respected and the fetus in having its 'interests' or welfare protected, leading back to the problematic issue of recognising the fetus as a separate patient.

Sometimes it is not the pregnant woman who is considered to be the 'perpetrator' of the conflict – her well-being might be jeopardised by interventions aimed at ensuring the well-being of the fetus[426] – for example, more invasive maternal-fetal surgeries that may present long-term risks to the woman's health and well-being, and sometimes

[424] Baylis, F., Rogers, S., & Young, D. (2008). Ethical dilemmas in the care of pregnant women: Rethinking ''maternal–fetal conflicts.'' In P. Singer & A. Viens, *The Cambridge Textbook of Bioethics* (pp. 97-103). Cambridge: Cambridge University Press; Steinbock, B. (2009). Mother-fetus conflict. In H. Kuhse & P. Singer, *A companion to bioethics* (pp. 149-160). Oxford: Blackwell Publishing.
[425] Chavkin, W., & Bernstein, P. (1995). Maternal-fetal conflict is not a useful construct. In M. McCormick & J. Siegel, *Prenatal care: effectiveness and implementation* (pp. 285-300). Cambridge: Cambridge University Press. p. 285.
[426] Townsend, S. F. (2012). Obstetric conflict: When fetal and maternal interests are at odds. *Pediatrics in Review*. *32*(1), 33-36.

caesareans performed for fetal benefit. The definition above more clearly paints the pregnant woman and fetus as adversaries, rather than acknowledging that the well-being of the fetus ultimately depends on respecting the autonomy of the pregnant woman, who is usually the one most invested in ensuring good outcomes for the future child.[427] However, any conception of clashing interests rests on the assumption that pregnancy involves two separate parties, between whom conflict might occur, rather than a necessarily interdependent biological unit. We argue instead that this interdependence must be taken as a starting point when examining ethical issues in prenatal care and application of reproductive technology.

The notion of 'maternal-fetal conflict' is so pervasive it is often the starting point of discussions related to ethical issues in pregnancy. Bioethical discussion often takes this framework, and examples of conflict, as the default assumption[428] or a problem to be addressed,[429] thus generating the false perception that such conflict is widespread. Medical research also adopts this terminology at times, which inevitably frames the presentation and discussion of findings.[430] Most notably, maternal-fetal conflict is arguably one of the key concepts in the area of obstetric ethics[431] including a large body of work on balancing the doctor's obligations towards the pregnant woman and those

[427] Bowden, *op. cit.* note 303; Harris, *op. cit.* note 305.
[428] Post, L. F. (1996). Bioethical consideration of maternal-fetal issues. *Fordham Urban Law Journal*. *24*(4), 757-776; Steinbock, B. (1994). Maternal-fetal conflict and in utero fetal therapy. *Albany Law Review*. *57*(3), 781-794.
[429] Wilkinson, D., Skene, L., De Crespigny, L., & Savulescu, J. (2016). Protecting future children from in-utero harm. *Bioethics*. *30*(6), 425-432.
[430] Oduncu, F. S., Kimmig, R., Hepp, H., & Emmerich, B. (2003). Cancer in pregnancy: maternal-fetal conflict. *Journal of Cancer Research and Clinical Oncology*. *129*(3), 133-146; Ohel, I., Levy, A., Mazor, M., & Sheiner, E. (2006). Refusal of treatment in obstetrics-a maternal-fetal conflict. *American Journal of Obstetrics & Gynecology*, *195*(6), S97.
[431] Chervenak and McCullough, *op. cit.* note 265; Pinkerton, J. V., & Finnerty, J. J. (1996). Resolving the clinical and ethical dilemma involved in fetal-maternal conflicts. *American Journal of Obstetrics and Gynecology*. *175*(2), 289-295; Fasouliotis, S. J., & Schenker, J. G. (2000). Maternal–fetal conflict. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. *89*(1), 101-107.

owed to the fetus.[432] Some have suggested that the difference of opinion between medical professionals and pregnant woman about what to do in a particular situation is the true source of conflict: the term 'maternal-fetal conflict' "misdirects attention away from the conflict that needs to be addressed: namely the conflict between the pregnant woman and others (such as child welfare agencies, physicians, and other healthcare providers) who believe they know best how to protect the fetus."[433] This is reminiscent of the imagery conjured by pre-Victorian doctors treating the female body as an innate source of danger. We can see echoes of suspicion and mistrust towards women where risk is calculated by doctors who seem to be advocating for the fetus, as if the default assumption is that women's behaviour will somehow endanger it.

7.2.4.1 Conflict enshrined in the law: the example of England and Wales

The law is often the mechanism through which ethical and medical ideas about conflict in pregnancy have been translated into a substantial impact on women's bodies and choices. McLean explains that "the attribution of rights to embryos and foetuses places the mother and conceptus in direct conflict in a number of possible situations."[434] There are several legal principles which afford recognition to fetuses in ways influenced by conflict framing. Alghrani notes that "many of the cases that have generated legal rules and principles on the status of the unborn have developed in the context of the abortion

[432] McCullough & Chervenak, *op. cit.* note 265; Fleischman, A. R., Chervenak, F. A., & McCullough, L. B. (1998). The physician's moral obligations to the pregnant woman, the fetus, and the child. *Seminars in Perinatology*. *22*(3), 184-188; Chervenak, F. A., McCullough, L. B., Skupski, D., & Chasen, S. T. (2003). Ethical issues in the management of pregnancies complicated by fetal anomalies. *Obstetrical & Gynecological Survey*. *58*(7), 473-483.
[433] Baylis, F., et al., *op. cit.* note 424, p. 97; Hollander, M., van Dillen, J., Lagro-Janssen, T., van Leeuwen, E., Duijst, W., & Vandenbussche, F. (2016). Women refusing standard obstetric care: Maternal fetal conflict or doctor-patient conflict?. *Journal of Pregnancy and Child Health*. *3*, 251.
[434] McLean, S. A. M. (1990). Abortion law: Is consensual reform possible?. *Journal of Law and Society*. *17*(1), 111.

debate and cases of maternal-foetal conflict."[435] Thus, they have some notion of inherent conflict at their root.

In England and Wales, it has been established by the courts that the fetus does not have legal personality until birth, and therefore it does not (and probably never did) have any claim to human rights protection.[436] Moreover, an unborn child cannot be the victim of murder, and manslaughter may only apply if it is delivered alive before subsequently succumbing to its injuries[437].[438] The fetus cannot be a victim of a non-fatal offence against the person irrespective of whether it survives the injury.[439] A fetus can be, however, the victim of child destruction once it has reached the gestational stage of being capable of life outside its mother's body.[440] The offence of procuring a miscarriage also safeguards fetal life unless one of the grounds specified in the Abortion Act 1967 applied[441].[442] While the case of *Paton*,[443] which involved an unsuccessful claim by a putative father seeking to prevent abortion, confirmed that the fetus has no right to life under Article 2 of the European Convention on Human Rights,[444] abortion law does provide certain protections for fetal life. Section 1(1)(a) Abortion Act 1967 can be seen to provide little, if any, protection for fetal interests up to 24 weeks gestation, but it is

[435] Alghrani, A. (2008). Regulating the reproductive revolution: Ectogenesis – a regulatory minefield?. In M. Freeman, *Law and Bioethics: Volume 11* (pp. 303-332). Oxford: Oxford University Press. p. 318.
[436] *Paton*, *op. cit*. note 164.
[437] This is also the case in several other common-law jurisdictions; the Born-Alive rule is enshrined in the Canadian Criminal Code, for example.
[438] *Attorney General's Reference (No. 3 of 1994)* [1997] UKHL 31.
[439] *CP (A Child) v Criminal Injuries Compensation Authority* [2015] QB 459.
[440] Section 1 Infant Life Preservation Act 1929
[441] Sections 58 and 59 Offences Against the Person Act 1861.
[442] There are compelling calls to decriminalise abortion in England and Wales in order to afford proper weight to the bodily autonomy of pregnant women [Jackson, E. (2000). Abortion, autonomy and prenatal diagnosis. *Social & Legal Studies*. *9*(4), 467-494].
[443] *Paton*, *op. cit*. note 164.
[444] This was also confirmed in the European Court of Human Rights Decision in *Vo v France* [Vo v France [2004] ECHR 326].

possible for doctors – as gate-keepers – to exercise professional discretion in seeking to discourage abortion, or indeed to refuse to participate as a matter of conscience.[445] It also might be argued that the first ground in the Abortion Act provides real protection to a non-viable fetus because it requires women to justify their terminations in medical terms (though in reference to their own bodies). It remains unlawful for a pregnant person in English law to access termination 'for any reason or no reason'.[446] After 24 weeks the potential for maternal-fetal conflict within the Abortion Act 1967 is more significant. We see, therefore, that abortion law and the Infant Life Preservation Act 1929, in offering greater protection once there is the potential for the fetus to survive ex-utero, convey the message that the mature fetus has interests worthy of protection.

For women who have chosen to carry a pregnancy to term, other points of conflict arise. The shift towards greater respect for patient autonomy in medical matters has been slow to materialise in disputes involving pregnant women. The forced caesarean cases illustrate this problem.[447] Although the rights of pregnant women to refuse interventions intended to benefit their fetus are routinely declared in judgements,[448] implementation of these principles is hard to evidence since the majority of these cases involve compulsory treatment being ordered on the grounds that the woman does not have capacity. Some of the ways in which women are found to be lacking in decision-making capacity are questionable.[449] Conversely, professional reluctance to allow

[445] *Attorney General's Reference (No. 3 of 1994), op. cit.* note 406.
[446] Jackson, *op. cit.* note 442.
[447] *Re MB*, *op. cit.* note 167; *St. George's Healthcare NHS Trust v S* [1998] 3 All ER 673; Francis, R. (1997). Compulsory caesarean sections: an English perspective. *Journal of Contemporary Health Law and Policy*. *14*, 365-389.
[448] *Re MB*, *op. cit.* note 167; *St. George's Healthcare NHS Trust v S, op. cit.* note 415.
[449] *Re MB* [*op. cit.* note 167] left the door open to problematic findings of incapacity. In finding that panic and a phobia of needles incapacitated a pregnant woman, this judgment left open the possibility of using

women to choose to give birth by caesarean, illustrated in *Montgomery v Lanarkshire*,[450] suggests that the autonomy of pregnant women is often not prioritised. Women seeking to avoid medical interference in childbirth altogether will also find their choices constrained. Section 17 of the Nurses, Midwives and Health Visitors Act 1979 makes it a summary offence for a person other than a registered midwife or medical practitioner to attend a woman in childbirth, unless there is sudden or urgent necessity. This is a formalised attempt to medicalise pregnancy and childbirth and take away control from the labouring woman. As such it is reminiscent of the medical comment repeatedly made of female physiology throughout history. Such instances of conflict in childbirth seem to support the view that the true conflict lies between women and the medical profession,[451] and that the presence of the fetus still means that a woman is less likely to be afforded full agency in situations where her views conflict with accepted ideals about what is 'best for baby'. Even more extreme examples are found in the United States where a pregnant woman's status as an aggressor is embedded in a wide range of criminal laws including the Federal Partial-Birth Abortion ban and fetal homicide laws at State level.[452]

terms like 'panic' and 'pain' generally to establish a person is incapable of making decisions. Since panic and pain are very common, normal and temporary states they might easily be attributed to a pregnant woman and used to conclude she does not have capacity by virtue of the fact she is in childbirth. This may "tempt" a concerned judge to "err on the side of finding incompetence" especially when pregnant women are in disagreement with their doctors, but pain prevents clear, reasoned explanation [Francis, *op. cit.* note 415]. There are similar concerns about forced caesareans in the United States [Morris, T., & Robinson, J. H. (2017). Forced and coerced cesarean sections in the United States. *Contexts*. *16*(2), 24-29].

[450] *Montgomery*, *op. cit.* note 158; Romanis, E. C. (2019). Why the elective caesarean lottery is ethically impermissible. *Health Care Analysis*. *27*(4), 249-268.

[451] Baylis, F., et al., *op. cit.* note 424.

[452] Paltrow, L. M., & Flavin, J. (2013). Arrests of and forced interventions on pregnant women in the United States, 1973–2005: Implications for women's legal status and public health. *Journal of Health Politics, Policy and Law*. *38*(2), 299-343.

7.2.5 Reframing conflict

The prevalent framing of pregnancy as a site of conflict in medicine, ethics and law has been challenged, especially by authors writing from a feminist standpoint. Bowden argues that the pervasive maternal-fetal conflict conceptualisation of pregnancy is both innately problematic and empirically unfounded.[453] She explains that this model "presents the interests of the pregnant woman as conflicting with those of the future child and therefore, the pregnant woman as a threat to her future child rather than the person who is most invested in its welfare".[454] This can lead to the ignoring of women's autonomous choices as well as the erosion of trust between pregnant women and medical professionals, likely leading to further negative outcomes. In this section, we demonstrate that there are conceptual, outcome-based, and political and social reasons why framing pregnancy as a site of conflict is both unfounded and harmful, and must be abandoned.

First, the notion of maternal-fetal conflict is arguably conceptually unsound. This has been explored extensively within bioethical and philosophical literature. There are metaphysical arguments about the status of the pregnant woman positing that it is mistaken to consider a pregnancy as involving *two* distinct entities.[455] Some argue that considering the fetus as a *part of* the pregnant woman[456] or considering the fetus-pregnant woman as a unit/dyad view[457] is more accurate. Some of these authors do not attempt to draw any normative claims from such argumentation.[458] Still, their

[453] Bowden, *op. cit.* note 303.
[454] Ibid: 137.
[455] Kingma & Finn, *op. cit.* note 391; Kingma, *op. cit*. note 16.
[456] Kingma, *op. cit.* note 16.
[457] Mattingly, *op. cit.* note 274.
[458] Kingma, *op. cit.* note 16.

conclusions could be used as support for the idea that the pregnant woman and the fetus are intertwined such that the concept of there being separate interests cannot make sense.

The terminology around this concept is also highly suggestive and value-laden. Using the term 'conflict' perpetuates the problematic assumption that ethical dilemmas in pregnancy are a matter of clashing rights between the woman and the fetus,[459] when it is not determined in either ethics or law that fetal rights are a coherent concept.[460] Also, the 'maternal' in maternal-fetal conflict implies that the pregnant woman already has parental responsibilities toward the fetus while it is still in the womb, which may then conflict with her other desires and actions. This is also (rightfully) contested,[461] with some authors arguing that fetuses cannot be the proper object of parental responsibilities.[462]

Second, the outcomes for maternal and fetal health are worse when women are perceived as a potential threat to their own pregnancy. As the fetus is increasingly visualised and subject to clinical recognition as a 'patient', and even some legal recognition,[463] this strengthens the perception that there is a need to interfere with the choices women can make about their pregnancies, either by failing to disclose

[459] Baylis, F., et al., *op. cit.* note 424.
[460] Cao et al., *op. cit.* note 15; Singer, P. (1993). *Practical ethics*. Cambridge: Cambridge University Press.
[461] Baylis, F., et al., *op. cit.* note 424.
[462] Singh, P. (2020). Fetuses, newborns, & parental responsibility. *Journal of Medical Ethics*. *46*(3), 188-193.
[463] Even if not legally recognised as a person the fetus does have some legally protected interests, for example in the Abortion Act [Jackson, *op. cit.* note 442; McGuinness, S. (2013). Law, reproduction, and disability: fatally 'handicapped'?. *Medical Law Review*. *21*(2), 213-242; Romanis, E. C. (2017). Pregnant women may have moral obligations to foetuses they have chosen to carry to term, but the law should never intervene in a woman's choices during pregnancy. *Manchester Review of Law, Crime & Ethics*. *6*, 69-85].

information (as in *Montgomery*[464]) or in the framing of childbirth as an emergency when this may not necessarily be appropriate.[465] However, empirical studies have demonstrated that fetal outcomes are better when women are enabled to take a more directive role in their own care.[466] Respecting women's autonomy is important in allowing them, the people most familiar with their own body, underlying health needs and values, to make the decisions they feel best promote their own and their fetus's welfare.

The notion of conflict is deeply rooted in a historical tradition of thinking about women and wombs. The origins of our social and medical attitudes can be found in early mistaken beliefs about procreation and the mother's gestational role. These ideas however, when applied in medical practice, encourage dysfunctional relationships between clinicians and pregnant women, as observed in forced caesarean cases where doctors often seek court approval in cases involving women with mental health conditions.[467] The presentation of a woman's health interests and personal wellbeing as detrimental to her fetus can also dissuade some, particularly vulnerable women, from accessing prenatal care.[468] Pregnant women are more likely to engage in prenatal care when they do not fear legal consequences[469] or being made to feel judged by care-providers.[470] There is substantial evidence that outcomes are better for both woman

[464] *Montgomery, op. cit.* note 158.
[465] Wolf, A. B., & Charles, S. (2018). Childbirth is not an emergency: Informed consent in labor and delivery. *IJFAB: International Journal of Feminist Approaches to Bioethics*. *11*(1), 23-43.
[466] Bowden, *op. cit.* note 303; Adhikari, R., & Sawangdee, Y. (2011). Influence of women's autonomy on infant mortality in Nepal. *Reproductive Health*. *8*(1), 7; Sharma, A., & Kader, M. (2013). Effect of women's decision-making autonomy on infant's birth weight in rural Bangladesh. *ISRN Pediatrics*. 159542-159542.
[467] *GSTT & SLAM v R* [2020] EWCOP 4.
[468] Bowden, *op. cit.* note 303.
[469] Morris and Robinson, *op. cit.* note 449.
[470] Bowden, *op. cit*. note 303; Romanis, *op. cit.* note 450.

and foetus when pregnant women are engaged and receive routine prenatal care,[471] so to guarantee this autonomy in pregnancy must be protected. Furthermore, as Bowden observes, women choosing pregnancy are almost always invested in the outcome and so treating women as a source of danger is usually spurious.[472]

Finally, there are significant political and social ramifications of the framing of the womb as a hostile environment. Some of these are already evident in practice. A worrying trend of prosecuting 'pregnancy-related offenses' in some US states under so-called 'fetal protection laws' shows a perception of women as dangerous, leading to apprehension and all the consequences of life after imprisonment. These cases involve an overrepresentation of poor women/women of colour, showing how certain groups are disproportionately affected by conflict framing, depending on the overall political context.[473] Such thinking also encourages the view of women as 'dangerous creatures' that threaten a man's procreative interests, again echoing the themes evident in the historical background provided earlier in this paper. Furthermore, we have demonstrated that it is not constructive, nor pertinent to the achievement of the best clinical outcomes, to routinely place blame at women's feet for failing in gestation when there are other factors that need to be addressed. There are broader socio-economic factors that are more responsible for poor prenatal outcomes, including access to care, than any individual women's behaviour.

[471] Chazotte, C., Youchah, J., & Freda, M. C. (1995). Cocaine use during pregnancy and low birth weight: the impact of prenatal care and drug treatment. *Seminars in Perinatology*. 19(4), 293-300; El-Mohandes, A., Herman, A. A., El-Khorazaty, M. N., Katta, P. S., White, D., & Grylack, L. (2003). Prenatal care reduces the impact of illicit drug use on perinatal outcomes. *Journal of Perinatology*. *23*(5), 354-360.
[472] Bowden, *op. cit.* note 303.
[473] Goodwin, M. (2017). How the criminalization of pregnancy robs women of reproductive autonomy. *Hastings Center Report*. *47*, S19-S27.

We argue that the above considerations show we must 'move away from presenting the needs of a developing fetus as being in conflict with those of the pregnant woman'.[474] One way to do this is by adopting a more holistic view, which regards the pregnant woman and the fetus as "an inseparable whole whose well-being needs to be fostered before, during, and after the pregnancy".[475] Focusing on this maternal-fetal 'dyad'[476] as an interdependent biological unit is a better approach to providing ethical prenatal care than trying to balance the distinct interests of two (seemingly opposed) parties, especially since the fetus is fully dependent on the pregnant woman for its health and survival.[477] This also ensures that women are affirmed as persons, with their autonomy and bodily integrity respected. Rejecting the notion of 'conflict' reduces the risk of stigmatising pregnant women for a multitude of decisions about their gestation, from diet to childbirth. As future reproductive technologies emerge, it is particularly important that we reframe thinking about pregnancy to determine appropriate ethical and legal parameters for their use.

7.2.6 Womb with a view

One of the most anticipated developments in assisted reproduction is 'assisted gestation'; the 'artificial womb.' Ectogestation[478] is the process of gestation undertaken ex utero in a device attempting to emulate the conditions of the human womb. Complete ectogestation is the growing of babies entirely from scratch in an artificial womb; partial ectogestation is the use of 'artificial womb' devices to facilitate the continued gestation

[474] Bowden, *op. cit.* note 303, p. 139.
[475] Chavkin & Bernstein, *op. cit.* note 425, p. 285.
[476] Mattingly, *op. cit.* note 274, p. 17.
[477] Ibid.
[478] Kingma & Finn, *op. cit*. note 391.

of human entities that are removed from a woman's womb prematurely. Recent animal experiments with artificial womb prototypes have demonstrated it is possible to facilitate partial ectogestation in lambs,[479] fuelling speculation about the development of this technology and its impact.

Artificial wombs are often heralded as a source of potential liberation for women. Simonstein and Mashiach-Eizenberg explain that "reproductive hazards have traditionally been viewed as women's fate, and therefore, have been taken for granted."[480] Firestone,[481] Kendal[482] and Smajdor[483] echo concerns about the physical burdens of gestation and pregnancy being placed exclusively on female people and posit that entirely removing gestation from the body offers women, *finally*, equal opportunity. Smajdor explains that with complete ectogestation available, women would be able to "reproduce as men do, without risking their physical and mental health, economic and social well-being, and crucially – their bodily integrity."[484] Partial ectogestation has also been advocated as beneficial for women as a way of alleviating some of the burdens of pregnancy by offering, for example, an alternative if pregnancy is dangerous (or potentially undesirable) in the later stages.[485] The problem with the arguments about how ectogestation might assist women in taking more control of their reproduction is

[479] Partridge, E. A., et al., *op. cit*. note 388.
[480] Simonstein, F., & Mashiach–Eizenberg, M. (2009). The artificial womb: a pilot study considering people's views on the artificial womb and ectogenesis in Israel. *Cambridge Quarterly of Healthcare Ethics*. *18*(1), 88.
[481] Firestone, S. (2003). *The dialectic of sex: The case for feminist revolution*. New York: Farrar, Straus and Giroux.
[482] Kendal, E. (2015). *Equal opportunity and the case for state sponsored ectogenesis*. Basingstoke and New York: Palgrave Macmillan.
[483] Smajdor, A. (2007). The moral imperative for ectogenesis. *Cambridge Quarterly of Healthcare Ethics*. *16*(3), 336-345.
[484] Ibid: 340.
[485] Romanis, E. C. (2020). Artificial womb technology and the choice to gestate *ex utero*: is partial ectogenesis the business of the criminal law?. *Medical Law Review*. *28*(2), 342-374.

that they are often advanced in a vacuum, seemingly ignorant of contemporary socio-legal conditions and importantly, women's *hystories*. Some of our concerns about the capacity of the technology to liberate women of the burdens placed exclusively on the female body are shared by other feminist scholars.[486] Vallerdú and Boix assert that 'medical practices have historically maintained a form of male control over women, and that reproductive technologies have been oriented towards the male help in detriment of women's welfare'[487] and thus the introduction of ectogestation would likely be no different.

In this section, we place the (potential) development of the artificial womb into historical and contemporary context by demonstrating how prevailing narratives of maternal-fetal conflict - if not addressed - will limit the capacity of technology capable of ectogestation from benefiting women and pregnant people. First, artificial wombs might escalate the pathologisation of gestation, and second, they might fuel excessive control over natural pregnancy by creating a 'narrative of alternative.' The purpose of this examination is not to advocate that we should ban research into ectogestation, because we see the potential benefits it will bring. Rather we seek to contextualise any potential development in the prevailing and enduring norms about pregnancy to illuminate the concerns that should be considered before ectogestation is used in humans. Whilst this investigation is inevitably speculative, it helps highlight some of the contemporary concerns about harmful conceptualisations of maternal-fetal conflict.

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[486] Jackson, E. (2008). Degendering reproduction?. *Medical Law Review*. *16*(3), 346-368; Cavaliere, G. (2020). Gestation, equality and freedom: ectogenesis as a political perspective. *Journal of Medical Ethics*. *46*(2), 76-82; Romanis, E. C., & Horn, C. (2020). Artificial wombs and the ectogenesis conversation: a misplaced focus? Technology, abortion, and reproductive freedom. *IJFAB: International Journal of Feminist Approaches to Bioethics*. *13*(2), 174-194.

[487] Vallerdú, J., & Boix, S. Ectogenesis as the dilution of sex or the end of females?. In J. Loh & M. Coeckelbergh, *Feminist Philosophy of Technology vol. 2* (105-122). Stuttgart: J. B. Metzler. p. 115

7.2.6.1 Pathologising gestation

Limon notes that liberal feminists often adopt pathological language in explaining the necessity or desirability of ectogestation.[488] Firestone described pregnancy as "barbaric" and childbirth as like "shitting a pumpkin".[489] Smajdor refers in detail to the pain and suffering gestation causes women and explicitly claims it is a "conceptual failure in medicine and social and ethical terms to address the pathological nature of gestation and childbirth".[490] While Kendal advocates for ectogestation as a reproductive choice (and is explicit that she does not seek to devalue natural pregnancy and childbirth), she nevertheless describes pregnancy as "temporary incapacitation," as an illness or cause of injury, and suggests it is "only logical for someone to actively avoid developing a physical condition that is guaranteed to cause significant, prolonged discomfort, especially if it also carries the risk, no matter how small, of sustaining some severe injury or death".[491] We do not disagree that pregnancy can be difficult, harmful and in some cases dangerous. It remains true that gestating and birthing can (rarely) have serious, long-term, even fatal, consequences for women. However, pathologising *all* pregnancy could exacerbate notions of maternal-fetal conflict by explicitly locating a normal pregnancy as a source of danger and providing justification for medical intervention.

This pathologisation lends itself to the way the female body has always been 'othered.' Earlier, we demonstrated how the female body and particularly the womb has always been considered oppositional to and defective compared to the male body, pathologised

[488] Limon, C. (2016). From surrogacy to ectogenesis: reproductive justice and equal opportunity in neoliberal times. *Australian Feminist Studies*. *31*(88), 203-219.
[489] Firestone, *op. cit.* note 481, pp. 343-344.
[490] Smajdor, *op. cit.* note 483, p. 340.
[491] Kendal, *op. cit.* note 482, p. 4.

in its ability to gestate, its *inability* to gestate and its capacity to menstruate. These female attributes were thus seen as medical matters worthy of medical supervision and patriarchal interference. The language of pathology that has been used by some scholars in explaining why some women might opt for ectogestation unintentionally implies that the fact that females carry pregnancies (and thus potentially subject to this 'incapacity' at some point or multiple times in their lifespan) renders them inferior. There are parallels between historical attitudes and the imagined 'artificial womb' utopia. Importantly, to pathologise and medicalise is to direct to the necessity of intervention and this can have material impacts. This is evident today in the stark increase in interference in childbirth, as the female body and its capacities, Wolf and Charles explain, are treated as an "inherently dangerous, unpredictable process that must be controlled to remove its dangers and lack of predictability" because "serious complications can arise at any moment and create an emergency."[492] Burrow suggests that there is an operative technological imperative in obstetrics,[493] which increasingly encourages individual clinicians to "rationalise surgical [or technological] intervention to gain as much control as possible."[494]

Furthermore, pathologising pregnancy treats all pregnancies as homogenous. Many women enjoy being pregnant,[495] so we must be mindful of how using language that describes pregnancy as 'an illness,' analogising it to a disease or referring to it as

[492] Wolf & Charles, *op. cit.* note 465, p. 33.
[493] Burrow, S. (2012). On the cutting edge: Ethical responsiveness to cesarean rates. *The American Journal of Bioethics*. *12*(7), 44-52.
[494] Romanis, E. C. (2020). Addressing rising cesarean rates: Maternal request cesareans, defensive practice, and the power of choice in childbirth. *IJFAB: International Journal of Feminist Approaches to Bioethics*. *13*(1), 8.
[495] There are many women (and non-women) campaigning for a right to gestate. For example, those who want to receive a womb transplant in order to be able to carry a pregnancy or women who campaign for access to IVF treatment.

'temporary incapacitation' feeds into old-fashioned claims about the inherent pathology of female biology. This is to denigrate natural pregnancy and the women who value the experiences of pregnancy and labour. Moreover, it paints the female body as a dangerous place and feeds into claims that fetuses might be safer gestating ex utero. A woman's body is perceived as a conflict zone to be avoided in favour of ectogestation.

7.2.6.2 Narrative of alternative

We have examined how the womb being both invisible within the pregnant body, yet increasingly visible with a wide variety of technologies has led to the conceptualising of the pregnant body as an environment in need of supervision. The visibility of the fetus has potentially increased the prevalence of conceptualising pregnancy as a conflict-zone of competing interests. The possibility of a fetus being gestated externally further increases the visibility of the fetus and could potentially impact on how a fetus in a pregnancy is conceptualised. Sander-Saudt posits that "conflicts between the rights of women and foetuses will be heightened greatly as a result of this technology."[496] The view, even sometimes expressed in the courtroom, that the fetus is "a fully formed child, capable of a normal life if only it could be delivered from the mother"[497] is potentially emboldened by technology that allows us to see, control and visualise gestation in every material way. If there is an alternative space for gestation there may be an *increased* tendency, as this view is already prevalent to some extent, to view the pregnant woman

[496] Sander-Saudt, M. (2006). Of machine born? A feminist assessment of ectogenesis and artificial wombs. In S. Gelfand & J. Shook, *Ectogenesis. Artificial womb technology and the future of human reproduction* (109-128). Amsterdam: Rodopi. p. 113.
[497] *Norfolk and Norwich Healthcare (NHS) Trust v W* [1997] 1 FCR 269.

as a 'temporary foetal container'.[498] These concerns reflect aspects of Aristotle's view of the woman as the mere 'seed bed'.[499]

The idea of there being an alternative to the pregnancy for the fetus is consistently used inappropriately in the context of gestation to control the behaviour of pregnant women.[500] The fact that a fetus if delivered prematurely might be able to survive in neonatal intensive care at a given fixed point (usually identified as 24 weeks) is repeatedly used as justification to control a woman's body. After this point she is not allowed to end her pregnancy unless a fetal abnormality is present, or her health is seriously threatened. The fact that the fetus could perhaps survive ex utero - though it remains unlikely until 26 weeks[501] - prevents abortion on all but serious medical grounds. Simultaneously, she is not allowed to prematurely deliver that fetus intending for it to receive neonatal intensive care unless there is medical justification.[502] The artificial womb is frequently posited as both an alternative to abortion,[503] and to pregnancy.[504] It is inappropriate to consider ectogestation as an alternative to abortion for three principal reasons. First, because the procedure to extract a foetus for ex uterum gestation is far more invasive than the procedures of medical or surgical

[498] Jackson, *op. cit.* note 486.
[499] De Renzi, *op. cit.* note 394.
[500] Romanis, *op. cit.* note 485, pp. 89-90.
[501] Lissauer, T., & Clayden, G. (Eds.). (2012). *Illustrated textbook of pediatrics*. London: Mosby Elsevier.
[502] For example, her life is threatened by a condition like preeclampsia or the fetus is displaying signs of intrauterine growth restriction.
[503] Colgrove, N. (2019). Subjects of ectogenesis: are 'gestatelings' fetuses, newborns or neither?. *Journal of Medical Ethics*. *45*(11), 723-726; Kaczor, C. (2018). Ectogenesis and a right to the death of the prenatal human being: a reply to Räsänen. *Bioethics*. *32*(9), 634-638; Simkulet, W. (2020). Abortion and Ectogenesis: Moral Compromise. *Journal of Medical Ethics*. *46*(2), 93-98.
[504] Romanis, *op. cit.* note 485; Hammond-Browning, N. (2018). A new dawn: ectogenesis, future children and reproductive choice. *Contemporary Issues in Law*. *14*(4), 349-373; Pence, G (2006). What's so good about natural motherhood? (In praise of unnatural motherhood). In S. Gelfand and J. Shook, *Ectogenesis. Artificial womb technology and the future of human reproduction* (pp. 77-88). Amsterdam, Rodopi.

abortion.[505] Second, because women want access to abortion care as early as possible; most care is provided before 13 weeks,[506] and there is not yet evidence to suggest that artificial womb technology will be capable of gestating embryos since current prototype models are reliant on fetal physiology[507].[508] Finally, several scholars have highlighted that abortion is meaningful not only a right not to be pregnant, but to encompass the broader harmful social realities for women if forced to accept the consequences of unwanted pregnancy.[509] Romanis and Horn argue that it is important to reground conversation about ectogenesis in the realities of this technology and its unsuitability as an 'alternative to abortion' calling for scholars to consider the ramifications of neglecting to understand abortion as healthcare.[510]

It is also harmful (and likely always going to be factually inaccurate)[511] to label ectogestation as an alternative to pregnancy. Pence[512] and Hammond-Browning[513] both advocate that ectogestation might be beneficial in those instances in which a pregnant woman is behaving 'inappropriately', for example, abusing substances. It is thought that ectogestation brings the possibility of 'safeguarding' fetuses and embryos without interfering with women's rights.[514] It is not difficult to extrapolate from this argument

[505] Romanis, *op. cit.* note 485; Jackson, *op. cit.* note 486.
[506] Department of Health. *Abortion Statistics, England and Wales: 2018*. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/808556/Abortion_Statistics__England_and_Wales_2018__1_.pdf (accessed 12 April 2020).
[507] Romanis & Horn, *op. cit.* note 486.
[508] Model AW prototypes currently being tested on animals are reliant on the subject being developed beyond an embryo; for example, it must have a primitive heartbeat to enable circulation [Partridge, E. A., et al., *op. cit*. note 388; Romanis, E. C. (2018). Artificial womb technology and the frontiers of human reproduction: conceptual differences and potential implications. *Journal of Medical Ethics*. *44*(11), 751-755].
[509] Jackson, *op. cit.* note 486; Romanis & Horn, *op. cit*. note 486; Limon, *op. cit*. note 488.
[510] Romanis & Horn, ibid.
[511] It is hard to imagine a technology that could emulate natural pregnancy so well that it was literally a direct alternative to pregnancy.
[512] Pence, *op. cit*. note 504.
[513] Hammond-Browning, *op. cit.* note 504.
[514] Welin, *op. cit.* note 390.

that there is seemingly frustration that *maternal* rights are seen to be interfering with the goal of protecting a fetus (clearly placing the pregnant person, even if unintentionally, second in the pecking order) and ectogestation is thus seen as a tool to ensure these interests can be superseded. What is concerning about these arguments concerning the welfare of fetuses (and/ or potential 'ecto-children'[515]), is that they invite the potential for "increased control and pressure to use ectogenesis to secure the fetus",[516] or to encourage compliance in a multitude of different ways with medical recommendations about behaviour during pregnancy.[517] Welin posits that, if ectogestation were to come to fruition, 'women who choose to have a natural pregnancy [in its place] will have to face restriction on lifestyles. At least, I believe it will be very hard to argue against such restriction in order to protect the fetus…'.[518] This kind of argumentation is maternal-fetal conflict rearing its ugly head once more and it is reminiscent of animalculism and the view of a woman as her husband's 'gestational carrier.'

7.2.6.3 Situating gestation and pregnancy

Petchesky wrote of ultrasound imagery that women must be re-centred in discussions of pregnancy with attention to context; placing the fetus 'back into the uterus, and the uterus back into the woman's body and her body back into its social space'.[519] In discussions of ectogestation there is an abject failure to recognise the realities of the

[515] Inevitably referring to the subject of an artificial womb as an 'ecto-child' [Hammond-Browning, *op. cit.* note 504] uses emotive language to describe the entity that can be potentially used to compel behaviour during pregnancy. This is one of the reasons why the term 'gestateling' [Romanis, *op. cit.* note 476] for the subject of the artificial womb is thought to be important.
[516] Cavaliere, *op. cit.* note 486, p. 79.
[517] Welin, *op. cit.* note 390.
[518] Ibid: 624.
[519] Petchesky, *op. cit*. note 417, p. 287.

technology that scholars are referring to. Arguments made about moral obligations of pregnant women or about the experience of pregnancy in the event of this technology are based on unhelpful generalisations. What is most important to highlight is that in any event the capacities of the technology mean that, first and foremost, gestation takes place inside the female body. Any claims made directly about uses of or conditions following the development of the artificial womb inevitably impact on the female body and experiences of pregnancy. Even where gestation can take place *partially* ex utero, it is a process that originates from and remains *partially* unique to the female body. Placing this reality at the centre of argumentation can prevent the subjugation of the gestating body and their autonomy.

Furthermore, appropriate language must be used to describe pregnancy and gestation that is inclusive of diverse reproductive experiences, that differ person to person based on social factors, lived realities and reproductive preferences. Reproductive consciousness is individual, complex, and corporeal and thus is difficult to generalise.[520] It is crucial that natural pregnancy is not denigrated in discussions about the potential benefits of the technology. While describing the extent to which artificial womb technology can alleviate some burdens in later-term pregnancy for women who may need or choose relief, Firestone[521] and Smajdor[522] explicitly and Kendal[523] implicitly use language that devalues the capacities of the female body and the empowering experiences of some pregnant women. Adopting language that is inclusive of a range of reproductive experiences can help prevent the pathologisation of gestation and assist in

[520] Petchesky, *op. cit*. note 417.
[521] Firestone, *op. cit.* note 481.
[522] Smajdor, *op. cit*. note 483.
[523] Kendal, *op. cit.* note 482.

the conceptual understanding that the artificial womb is not a 'direct' alternative to a natural pregnancy that can be used to dictate the conditions of pregnancy and the behaviours of pregnant women.

Artificial wombs might be thought of, for some women, as an alternative to continuing their pregnancy at some risk to their life or health. However, the artificial womb ought not to be discussed as an 'alternative' in general terms to either abortion (because this claim is false[524]) or gestation. Gestation is the process of genesis of a human entity in the womb; pregnancy is the task performed by the womb and female body in sustaining gestation. An 'artificial womb' may be an alternative *form* of the gestation process but it is not an alternative *womb* (organ of the female body) or *pregnancy*.

Petchesky also contends that we must 'separate the power relations within which reproductive technologies, including ultrasound imaging, are applied from the technologies themselves. If women were truly empowered in the clinic setting, as practitioners and patients, would we discard the technologies?'[525] It is clear that ectogestation has the potential to be an incredible tool to assist pregnant women and potential parent(s) where used as an alternative to neonatal intensive care[526] and in the absence of the concerning power dynamics outlined should be welcomed. Our task then is to mediate how such technology can come to fruition without exacerbating problematic notions of pregnancy and foetal welfare as oppositional to pregnant women; this is best done by demanding that the maternal-foetal conflict framework is abandoned.

[524] Romanis & Horn, *op. cit.* note 486.
[525] Petchesky, *op. cit.* note 417, p. 287.
[526] Romanis, *op. cit.* note 508.

7.2.7 Conclusion

Examining historical medical and social attitudes to women, and particularly pregnant women, helps us understand how and why misogynist tropes and damaging narratives about maternal-fetal conflict endure over time, influencing the (mis)treatment of pregnant women now and potentially in the future. We explored how historical narratives of the woman's purpose as 'gestational carrier' have persisted as increasing access to the womb has influenced the perception of the fetus and its status as a potential 'second patient.' Historical suspicion of the womb when obscured from view has equally endured, despite increasing visibility resulting from technologies routinely used in obstetric care, as the womb, pregnancy and childbirth have institutionally been rendered an 'emergency'[527] warranting medical intervention. We must be mindful of these trends when speculating about future technologies and in order to minimise notions of conflict compromising care today.

It is frequently posited that a wide variety of technologies, from fetal heart rate monitoring in childbirth to ultrasound, have enabled more intervention in pregnancy.[528] This has strengthened the perception that the fetus has distinct interests that are directly impacted on by the pregnant woman's behaviour, which is perceived as a potential threat to those interests. We demonstrated that this conception of conflict is erroneous in several ways, both conceptually and factually. It is additionally problematic in that it fails to encompass the social context of pregnancy and the maternal-fetal unit. As Bowden explains, by 'focussing on the behaviour of pregnant

[527] Wolf & Charles, *op. cit.* note 465.
[528] Ibid.

women other more significant causes of prenatal harm such as poverty and poor prenatal care are obscured and overlooked'.[529] In order to ensure we respect women's reproductive autonomy in a meaningful way, especially in view of a future that may bring even more innovative technologies and possibilities for intervention in pregnancy, we must abandon this overly simplistic and biased concept.

Future reproductive technologies may have emancipatory potential for women, but they may equally end up entrenching problematic patriarchal notions and gender roles. Jackson warns that advocating for ectogestation as a safer alternative for fetuses would be extremely harmful "since it carries the implication that the maternal body is a source of danger for the developing fetus when this is of course very seldom the case".[530] The possibility of advocating for ectogestation in place of pregnancy demonstrates how the artificial womb might be preferred in order to exert control over the process of gestation. The evident enthusiasm for the idea that the power of creation would no longer be contained exclusively in the female body, reveals the power of the maternal-fetal conflict narrative. We can see this in the multitude of authors who have made confident claims about a man's entitlement to equal control over ex utero gestation.[531] These seemingly echo the historical calls of medical men and putative fathers in their attempts to assert control over reproduction. We therefore should be mindful of these concerns in the development of technology that, in attempting to emulate gestation, has promising benefits for the care of preterm neonates and for women experiencing dangerous pregnancies. Reorienting our understanding of pregnancy away from maternal-fetal conflict will ensure that potential benefits from future assistive

[529] Bowden, *op. cit.* note 303, p. 136.
[530] Jackson, op*. cit.* note 486, p. 360.
[531] Brassington, *op. cit.* note 390; Welin, *op. cit.* note 390.

technologies like ectogestation can be realised, but also will benefit pregnant women experiencing problems resulting from conflict in contemporary prenatal care.

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A note on Paper Four within the thesis and broader literature

Paper Four was accepted for publication after revision in June 2020 and published online first in the *Journal of Medical Ethics* in July 2020. My participation in writing this paper (which chronologically comes last of the four) highlighted to me how much of the thesis actually focuses on maternal-fetal conflict, especially in light of the increased access we have to the fetus thanks to developments in diagnostic, imaging and surgical technology. This paper argues that in light of such existing technological advancements (monitoring, imaging, maternal-fetal surgery), and also potential ones like partial or full ectogestation, we must be mindful of the dangers associated with adopting a conflict framework of pregnancy.

I would argue that such an attitude towards maternal-fetal conflict needs to be taken as a starting point when assessing the ethical implications of (new) reproductive technologies. Building on this conclusion, in the next and final chapter I argue further that conflict perception, while erroneous and possibly dangerous, will likely recur with technological development and thus needs to be kept in mind instead of being easily dismissed, or worse, uncritically accepted. I also clarify what conflict means in this context and how we can better deal with challenging situations in pregnancy.

CHAPTER EIGHT: CONCLUSION

This chapter sets out the original contribution of this thesis to the current literature in bioethics, presenting its main arguments and proposing further work drawing on them. I will start by outlining how my research ideas developed during the writing of this thesis, and how this influenced its final form. I then identify the main themes coming out of the thesis as a whole, showing how these advance existing discussions and open up space for further research. Finally, I consider the further implications of the thesis, including prospects for future research based on the questions explored within it.

8.1 Reflections on the themes and development of the thesis

During the four years it took to research and write the four papers, my ideas and starting assumptions inevitably evolved. Along with them, the unifying theme of the PhD also changed to an extent. Therefore, I believe it will be useful if I briefly outline the progression of the thesis, and reflect on the way it came to its final form before setting out my conclusions. This is done not only to demonstrate personal reflection on my research progress, but also to help the reader understand the trajectory.

When starting the research, I identified the theoretical concept of reproductive autonomy as the main subject of the thesis, to be explored in the context of various reproductive technologies across the papers. After an initial survey of the literature (which became the basis for Chapters Two and Three), I recognised that the prevalent concepts of reproductive autonomy used in bioethical debate (especially those influenced by the so-called procreative liberty framework) are too narrow to

encompass the various complexities involved in reproductive decision-making. This was a key turning point in the research orientation. As my core research interest lay in the possible infringements on women's autonomy in these contexts, I relied particularly on feminist criticism of the prevailing notions of reproductive autonomy, both in ethics and law. This grounded the analysis in Paper One (Chapter Four), which sought to investigate the notion of reproductive autonomy that is applied in the context of the ethical assessment of prenatal testing for disability. Consequently, the paper offered suggestions for a richer and more robust concept to inform ethical analysis and policy.

While Paper One remained close to the initial idea of reconsidering the notion of reproductive autonomy, the remaining papers focus more on the practicalities of upholding autonomy when faced with different decisions or challenges *in pregnancy*, often on the basis of behaviour required to ensure potential fetal welfare. I set out to write Paper Two (Chapter Five) from a similar starting point, this time tackling the issue of pregnant women's autonomy when participating in maternal-fetal surgery. After reviewing the relevant literature, I realised that additional complexity in this case stems from the fact that such interventions usually take place later in pregnancy – at a stage when the fetus is not only already viable or close to viability but also, more importantly, when an emotional bond between the pregnant woman and fetus is likely already established. In fact, it is this bond and accompanying feelings of responsibility and care for the future child that typically motivate women to go through these interventions, often experimental or physically invasive procedures with an uncertain outcome.

The analysis of maternal-fetal surgery gave me a valuable insight into how autonomy and respect for decision-making can present differently when a commitment is already

made to the developing entity. I would argue that this contrasts to some extent with the way women approach making decisions earlier in pregnancy, for example, about whether to terminate or not on the basis of prenatal testing results (or with the way they make decisions about whether to undergo testing in the first place). I thus made the decision at this point to incorporate an assessment of how the development of medical technology and changing perceptions of the fetus impact on autonomy: specifically, when making concrete decisions about how to conduct oneself through pregnancy, how to respond to testing or treatment options, and other issues.

Despite this, my research was informed by the assumption that idealising this sort of 'maternal sacrifice' and commitment is potentially dangerous, especially when it comes to developing technologies where outcomes are unclear and risks still significant. Recognising even limited moral (let alone legal) significance of the fetus is arguably a potentially dangerous move, as it feeds into the pervasive and problematic notion of 'maternal-fetal conflict'.[532] According to this notion, the fetus is seen as a distinct entity with its own set of interests which can then contrast with those of the pregnant woman, which may also lead to the woman's interests being sidelined or ignored. As this is an important consideration for my research, I examined this concept in Chapter Five (as part of the broader argument about the implications of recognising fetal patienthood), as well as in my contribution to Chapter Seven (which tackles this notion more broadly in its historical, as well as contemporary, ethical, legal and practical context).

[532] See the discussion in Chapter Seven.

In Paper Three (Chapter Six), which deals with the autonomy and potential exploitation of surrogates in the context of newly proposed surrogacy legislation in England, Wales and Scotland, the conflict framing of pregnancy again looms in the background, with proposals for full professionalisation of surrogacy on one side, and the associated worry that this opens the door to surrogates being extensively monitored, pressured or even punished for 'inappropriate' behaviour that may endanger the fetus, on the other.

In summary, I began writing the papers that constitute this thesis with a focus on the idea that we need a more context-sensitive account of reproductive autonomy, which overcomes the narrow procreative liberty framework, to successfully address a variety of ethical scenarios related to reproduction. The unifying theme changed during the course of thesis writing, from a more theoretical analysis of the concept of reproductive autonomy, to a consideration of possible threats and challenges to women's autonomy in pregnancy. In that sense, as it progressed, the research evolved from a more traditionally theoretical philosophical examination to a firmly applied, practical ethical analysis.

The next section will explore the main findings and contributions to the literature of this thesis taken as a whole, beyond the particular subjects of the individual papers. I will identify some of the main themes and arguments that come out of this thesis, showing how my work has made a contribution to the existing literature and finally, outlining some possible future research questions that could come out of this body of work.

8.2 Key arguments of the thesis

The key argument of the thesis is that, while developing inclusive and nuanced accounts of reproductive autonomy is an important endeavour in its own right, this may not be sufficient for truly upholding women's autonomy in pregnancy. This argument can be developed into three main considerations. Firstly, I argue that when it comes to upholding autonomy in pregnancy, no theoretical notion of autonomy can be 'one size fits all'. This has to do with the limitations of the concept of autonomy as outlined previously in the thesis, but also with the specific nature of the context of pregnancy, which could be argued to be somewhat unique.[533]

This ties into my second argument: to truly be able to uphold the autonomy of pregnant women, we must recognise that the relationship with the fetus is a complex one and may affect their willingness to do certain things (as well as, even more crucially, the social context and circumstances they are situated in). The third and final main argument, is that the already recognised ethical and legal values of individual freedom of decision-making and respect for bodily autonomy cannot always fully capture the ethical landscape of certain situations arising in pregnancy. On the basis of these arguments, I present the main conclusions of the thesis and recommendations for what should be done (in particular by ethicists).

[533] Little, M. O. (1999). Abortion, intimacy, and the duty to gestate. *Ethical Theory and Moral Practice*. *2*(3), 295-312.

8.2.1 Best approach to upholding autonomy is context-dependent – no theoretical notion is 'one size fits all'

As I have discussed in Chapter Three, despite its status as a key principle and concept in contemporary bioethics,[534] the concept of autonomy is not without its critics. Some criticise this notion for being too exclusive to Western thought,[535] or even more narrowly, the Anglo-American social and cultural context of health care and life in general,[536] while others criticise it for being an unrealisable ideal.[537] Many important objections to autonomy-centric bioethics, as discussed in previous chapters, come from feminist perspectives. The basic argument in this literature is that the ideal of the autonomous person (or patient) presupposes a certain type of individual, namely someone who is fully independent of others in an unrealistic way, considering most humans have a social network, caring responsibilities, and other commitments.[538] It is argued that this representation is particularly unrealistic when it comes to women, who are often faced with additional societal expectations and pressures.[539]

It is only to be expected, then, that a notion of *reproductive* autonomy derived from such an autonomy ideal will inherit some of its problems, due to the fact that those who

[534] As explained in the relevant chapter, the principle of respect for autonomy is one of the main principles of contemporary medical ethics, and 'autonomy' in this context is often used as shorthand for this idea. See Beauchamp and Childress, *op. cit.* note 111.
[535] Fox & Swazey, *op. cit.* note 4; Behrens, K. G. (2018). A critique of the principle of 'respect for autonomy', grounded in African thought. *Developing World Bioethics*. *18*(2), 126-134.
[536] Holm, S. (1995). Not just autonomy--the principles of American biomedical ethics. *Journal of Medical Ethics*. *21*(6), 332-338; Rendtorff, J. D. (2002). Basic ethical principles in European bioethics and biolaw: autonomy, dignity, integrity and vulnerability–towards a foundation of bioethics and biolaw. *Medicine, Health Care and Philosophy*. *5*(3), 235-244.
[537] See for example Haliburton, R. (2013). *Autonomy and the situated self: a challenge to bioethics*. Lanham, Maryland: Lexington Books; Jennings, B. (2016). Reconceptualizing autonomy: A relational turn in bioethics. *Hastings Center Report*. *46*(3), 11-16.
[538] Meyers, *op. cit.* note 11.
[539] Donchin, *op. cit.* note 11.

gestate, menstruate, give birth etcetera are, overwhelmingly, women. Besides this physical fact, there is also the social construction of reproduction that joins the idea of femaleness and motherhood, all of which seems to be disregarded if we see reproduction as a somewhat genderless enterprise. The argument of this thesis is not, however, that the classic idea of 'procreative liberty' or 'reproductive autonomy' is somehow innately 'male'. Nor is it that a different or richer notion of reproductive autonomy is needed to encompass women too. Rather, I argue that the context of pregnancy, and the technological advancements that pose ethical dilemmas within it, makes the top-down application of any particular concept of autonomy difficult.

Perhaps then the solution is to abandon the focus on autonomy and look at other concepts used in the literature? Other related concepts may well help to illuminate important features of autonomy in pregnancy, so I will now discuss the closely related notion of bodily integrity to help clarify the proper scope and application of reproductive autonomy – including an analysis of the potential stakes held by non-gestating partners who nonetheless participate in reproduction in other ways.

8.2.1.1 Reproductive autonomy beyond bodily integrity

Reproductive autonomy has been applied to both women and men, or more precisely, to all those who contribute in some way to a reproductive 'project' – by providing genetic material and/or gestating. It could be said that there are some core interests, contained in the negative concept of procreative liberty examined earlier in this thesis, which apply to all such parties – for instance, being able to choose whether to have genetically related offspring, and with whom. These issues were explored to some extent in

Chapters Two and Three, when discussing the procreative liberty framework and legal approaches to reproductive autonomy.

However, in the majority of the thesis I have focused on autonomy specifically as it can be challenged or upheld in *pregnancy*, and in this context it is usually considered that for reasons of bodily integrity any interests that male partners have will necessarily be overridden by the right of non-interference over the pregnant woman's body. As Bennett explains, "(...) while we acknowledge that men also have reproductive choices and interests, ultimately when it comes to traditional pregnancy, the reproductive choices of women are paramount and conclusive (...) Respect for the pregnant woman's bodily integrity means that the decisions regarding the pregnancy must ultimately be hers alone."[540] In some very limited cases (such as that of the so-called 'brain-dead pregnancy', where the pregnant woman becomes permanently and irreversibly incapacitated but there is still a prospect of bringing the fetus to term by keeping her body alive), when the woman's bodily integrity is no longer relevant we might take more seriously men's decision-making over their prospective children.[541] Overall, however, as far as the context of pregnancy is concerned (and so long as we continue to prioritise respect for autonomy and for bodily integrity) for all practical purposes women should have the last word about any potential intervention.

One may wonder then how the concept of bodily integrity relates to that of reproductive autonomy. Further conceptual confusion arises from the fact that, similarly to

[540] Bennett, R. (2008). Is reproduction women's business? How should we regulate regarding stored embryos, posthumous pregnancy, ectogenesis and male pregnancy?. *Studies in Ethics, Law, and Technology*. *2*(3), 1.
[541] Ibid: 8.

reproductive autonomy, the concept of bodily integrity does not have a strict and clear-cut definition. For instance, Herring and Wall differentiate between bodily *integrity* and bodily *autonomy*. They suggest that, in the medical law sphere at least, the right to bodily integrity primarily applies to situations where a patient wishes to refuse treatment that would constitute interference with their body.[542] Bodily autonomy, on the other hand, refers to the right to make decisions about one's body (here, in the context of medical treatment). While the difference here is quite nuanced, they suggest that "the right to bodily integrity cannot be reduced to the principle of bodily autonomy because it is premised on a moral basis that cannot be reduced to respect for a person's autonomy."[543]

Confusion arises because we tend to understand bodily *autonomy* as referring to the rational side of a person's life (agency, decision-making, having particular values and preferences), while, by contrast, bodily *integrity* is a concept applied to a lower level of functioning: the physiological, 'sub-personal' level of existence. However, these authors suggest that this neat picture cannot be maintained: our selves are necessarily embodied, and so "the body is best understood as the integration of these (subjective and objective) states."[544] The right to bodily integrity is thus not reducible to the right to have one's autonomy respected: it "gives a person exclusive use of, and control over, their body on the basis that the body is the site, location, or focal point of their subjectivity (however understood and constituted)."[545]

[542] Herring, J., & Wall, J. (2017). The nature and significance of the right to bodily integrity. *The Cambridge Law Journal*. *76*(3), 566-588.
[543] Ibid: 576.
[544] Ibid: 579.
[545] Ibid: 580.

Priaulx further provides an illuminating analysis of bodily integrity and reproductive autonomy, stressing the potentially devastating psychological impact of one's bodily integrity being violated when it comes to reproductive decision-making. This captures why, although we may well have a concept of reproductive autonomy encompassing issues beyond bodily integrity and thus applying to all participants in reproduction gestating or otherwise, pregnancy represents a special case or collection of cases where violations of the body amount to a fundamental attack on the person's self concept.[546] On Priaulx's argument, furthermore, despite "the importance of reproductive autonomy (...) lying in its instrumentality to fostering of human needs and interests, it is nevertheless impossible in any sensible account to ignore the particular significance of this concept to women and their status as *persons*".[547] (emphasis in original) This is because control over bodily integrity in reproduction is fundamental to women since their reproductive capacities have historically been used to oppress and control them (as discussed in more detail in 8.2.3.1 below), and so protection from any form of coercion in the reproductive domain is crucial for women to be valued as human beings (rather than being seen as 'othered' throughout history in part due to their reproductive capacities, as explored in Chapter Seven and below).

So, where does this place the interests of men as non-gestating but nevertheless contributing partners in a reproductive project? It seems that upholding autonomy in pregnancy cannot be reduced to either respecting reproductive autonomy or honouring bodily integrity, as these concepts become 'enmeshed' within the pregnant body and cannot be neatly separated. Arguably, we can recognise interests stemming from both of

[546] Priaulx, N. (2008). Rethinking progenitive conflict: why reproductive autonomy *matters*. *Medical Law Review*. *16*(2), 180.
[547] Ibid.

these sources in men as well as women; reproductive autonomy-related interests as a reflection of preferred life plans, such as choosing whether to partake in reproduction in the first place, or whether to donate genetic material; and bodily integrity as in the right not to be touched or have one's bodily materials used or gathered without consent, a consideration that played a crucial role in the *Evans* case discussed in Chapter Three.[548] However, challenges to reproductive autonomy in pregnancy, for women, will almost always involve some possible violation of bodily integrity, and so in this context the interests of men (at least within the current reproductive reality) are limited to what happens before a pregnancy is established.

Moreover, as it seems that in the pregnancy context it is not entirely possible to neatly disentangle and apply the concepts of reproductive autonomy and bodily integrity, I suggest that instead we should turn our focus to the nature and social construction of pregnancy and the maternal-fetal relationship, as key features shaping the options that pregnant women have at their disposal. Ideally, such a socially sensitive and informed approach would be best suited to illuminate and uphold the autonomy of other actors in reproductive processes (not only men, but also those who donate genetic material, surrogates and 'womb-givers'[549]), but this is beyond the scope of the thesis. To justify this approach, I will argue in the next two sections that there are specific features of pregnancy that make it a particularly complicated context for ethical deliberation, including varieties in experience, deeply entrenched social perceptions, the oddity and uniqueness of the physical process itself.

[548] *Evans v United Kingdom*, *op. cit.* note 67.
[549] Mullock, A., et al, *op. cit.* note 2.

8.2.2 Maternal-fetal conflict and the complexity of the maternal-fetal relationship

Another theme explored throughout the thesis is the notion of maternal-fetal conflict and how it may impact upon the autonomy of pregnant women. The so-called 'conflict framing' of pregnancy[550] has been highly influential in obstetric ethics[551] and medical ethics in general. The prevalence of this model has led not only to direct consequences for pregnant women,[552] but can be argued to create an atmosphere of caution for *all* women who may become pregnant. If enforced, it might ultimately require of women to act in the best interest of the fetus even where there is none yet.[553] This is clearly a problematic picture.

On the other hand, technological developments have arguably changed not only how society perceives pregnancy, but also how women themselves experience it. Barbara Katz Rothman, writing about prenatal testing some decades ago, identified the phenomenon of the 'tentative pregnancy'.[554] This is the phenomenon of women approaching their pregnancies somewhat ambivalently in the face of uncertainty, due to the ongoing monitoring of fetal health and development, and possible disappointment in case, for example, a miscarriage occurs, or a termination is needed for some reason. Consequently, their relationship to the fetus is fluid and prone to reconceptualisation depending on how the pregnancy continues.

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[550] Bowden, *op. cit*. note 303.
[551] Chervenak & McCullough, *op. cit.* note 265.
[552] Such as the proposal to routinely test pregnant women for carbon monoxide presence, but also more drastic examples like forced caesareans.
[553] As aptly phrased by Sheila McLean (quoted in Brazier & Cave, *op. cit.* note 169, p. 345), if fetal vulnerability early in pregnancy were taken as grounds for establishing maternal responsibility, "the law would in effect demand that 'fertile, sexually active women of childbearing age should act at all times as if they were pregnant'".
[554] Rothman, B. K. (1986). *The tentative pregnancy: Prenatal diagnosis and the future of motherhood* (Vol. 1). New York: Viking.

However, in light of empirical research about women considering prenatal therapy and maternal-fetal surgery, we notice that the perception pregnant women have in these kinds of situation is quite different.[555] It has been noted that ideas of unconditional love and acceptance may be idealised, and are often in fact contingent on the reality of the child's disability, which only becomes apparent after birth.[556] An interesting contrast can thus be observed between the subject matter of Chapters Four and Five, respectively. There is a concern that women are sometimes pressured into undergoing prenatal testing for fetal disability, and even into terminating in case of a positive result, due to the perceived importance of having a 'healthy child'. But where disability can be corrected later in pregnancy, there is the expectation that this should be done instead of opting for termination (obviously subject to legal possibility), again for the child's sake.

Society thus seems to prioritise having a 'healthy population' and 'normal families' over actually respecting women's decisions and more importantly, providing concrete support if it is needed before and after such decisions are made. There is clearly a risk of such social pressure shaping women's worldview and thus the decisions they are likely to make, or more direct pressures stemming from the family, environment or medical professionals. Ideas of 'good mothers' and 'proper behaviour' in pregnancy are still deeply entrenched, even in societies that nominally put the highest value on individual

[555] Bliton, *op. cit.* note 295.
[556] See for instance Meira Weiss's ethnographic research about parental attitudes and reactions to having children with different kinds of disability, suggesting that the level of acceptance highly depends on the visibility of the 'deformation' and does not necessarily correlate with the severity of the condition. Weiss, M. (1997). Territorial isolation and physical deformity: Israeli parents' reaction to disabled children. *Disability & Society*. *12*(2), 259-272.

choice and respect for differing life plans,[557] which must be taken into account when considering autonomy as a starting point.

Nevertheless, I would argue that the case of maternal-fetal surgery illustrates well that, once a bond and commitment to the future child is established, and a possible avenue to 'help' the future child is identified, this strongly affects how future parents see the decision. For them, it is no longer only *about* the pregnant woman, even though it necessarily concerns some invasion of her body, and possible long-term consequences for health. In fact, women clearly make this distinction[558] when agreeing to undergo the surgery, or even initiating this themselves (for example by agreeing to take part in research/trials). This demonstrates prioritisation of the future child's interests over their own, which adds to the complexity of determining how best to ensure women's autonomy is upheld.

Exploring this side of decision-making in pregnancy highlights the importance of examining how autonomy can be maintained in the context of an individual pregnancy when there is perceived to be *more than one entity[559] at stake*. It could be argued that this is to some degree always so, as with the development of medical technology pregnancy has effectively become something of a public spectacle.[560] In addition to this, the social context of reproduction implies that the individual decisions made are never really outside the influence of other parties. However, with the development of new

[557] Mullin, A. (2005). *Reconceiving pregnancy and childcare: Ethics, experience and reproductive labor*. New York: Cambridge University Press.
[558] Sheppard, M., et al., *op. cit.* note 294.
[559] For the purposes of this discussion it is not of key importance whether the 'fetal entity' is considered to be a (full) person or a patient. See the discussion in Chapter Five.
[560] Casper, *op. cit.* note 275; see also Lupton, D. (2013). *The social worlds of the unborn.* Basingstoke: Palgrave Macmillan.

technologies that increase fetal visibility and accessibility (as I will discuss in more detail in section 8.3 below), this concern is likely to become all the more pressing, and is thus not something that can be disregarded when examining how autonomy may be affected by their introduction into health care and the social world.

8.2.2.1 Maternal-fetal conflicts revisited

What has just been said may be seen in a way as contrasting with the arguments in Chapter Seven about the concept of maternal-fetal conflict. In this section I will attempt to clarify the views about the conflict framing of pregnancy set out in that chapter, and how they relate to other arguments about the maternal-fetal relationship in this thesis. The crucial argument of Chapter Seven was that the idea of maternal-fetal conflict should be abandoned as a *dominant* model under which we conceptualise pregnancy. We should not assume the womb as a site of potential conflict, for reasons relating to consequences for pregnant women's autonomy and wellbeing (as set out in the paper), but also because this misplaced focus can lead to side-lining other significant sources of conflict – chief among which is, we believe, the conflict between prevailing social (and medical) expectations of how women ought to behave when pregnant/planning to become pregnant, and the freedom of pregnant women to make their own choices. This conflict can manifest in practice through, for instance, overly and inappropriately directive counselling from medical professionals; pressure from family members/close people in one's environment expecting the pregnancy to be carried in a certain way; or, more broadly and formally, laws and policy being brought into force to monitor and limit the behaviour of pregnant women. These are the sources of the most significant conflicts when it comes to pregnancy, and also where a lot of the medico-legal and -ethical dilemmas originate.

While recent scholarship has criticised the so-called 'container' model of pregnancy, instead turning to models on which the fetus is conceived as a part of the pregnant woman's body,[561] it is unclear how these metaphysical commitments map onto normative concerns about the possibility of conflict and differing obligations. Whatever the relationship between pregnant woman and fetus, in naturally occurring pregnancies as they are today, genuine conflicts of interest cannot occur because the fetus is not the kind of entity that can possess independent moral and legal rights against the 'mother'; and even if someone were to disagree with this, the fact would still remain that the fetus is situated within the woman's body, and any intervention on its behalf would amount to violation of bodily integrity. This picture could perhaps change in the event of full ectogestation becoming a reality. For the moment, however, the pregnant woman and the fetus, while conceptually separable cannot be physically taken apart without the woman's consent, otherwise we are dealing with a gross violation of her autonomy – which seems to this author a plausible reason to treat them as a unit where any decisions are made by its rational, autonomous member – the woman - and respecting these is most likely to produce the best outcomes both for her and the future child.[562]

But surely not all pregnancies fit this harmonious picture? I will now examine a couple of cases that could plausibly be described as involving some kind of 'conflict' between the pregnant woman and the fetus; I will argue that such cases, while presenting their own challenges, are still better addressed by avoiding the conflict framework as proposed in Chapter Seven. Maternal-fetal conflict is usually understood as only going

[561] Baron, Kingma, *op. cit.* note 16.
[562] Minkoff, H., & Paltrow, L. M. (2007). Obstetricians and the rights of pregnant women. *Women's Health*. *3*(3), 315-319.

in one direction, by the pregnant woman acting in ways that endanger the fetus,[563] but I will also consider 'inverse' cases where remaining pregnant or undergoing certain procedures during pregnancy pose risks to the pregnant person as conflicts.[564]

The first case I will examine is the classic case of the 'irresponsible mother-to-be': a pregnant woman who behaves in ways that are empirically known to lead to negative postnatal effects; for example, a woman who consumes excessive quantities of alcohol with the awareness that this could lead to fetal alcohol syndrome.[565] It seems plausible that in this case, the woman is doing something that might lead to the future child having serious health problems. How do we approach this case, ethically speaking – and, crucially, is the notion of maternal-fetal 'conflict' necessary for this?

Firstly, we may wonder whether the woman in this case is even acting in her own best interests, or fully autonomously. A lot of behaviours that are often taken as examples of classical maternal-fetal conflicts (smoking, drinking alcohol or taking drugs in pregnancy) are typically addictive behaviours, and as such might themselves be the result of diminished autonomy. Therefore it is likely that the persons 'harming' their future children in this way are also harming themselves to some extent and/or do not have full control over their behaviour. It is also noted in the empirical literature that the consequences of such behaviour are not always straightforward, in that other factors (such as the quality of the pregnant woman's nutrition, for example, and general health

[563] Adams, S. F., Mahowald, M. B., & Gallagher, J. (2003). Refusal of treatment during pregnancy. *Clinics in Perinatology*. *30*(1), 127-140.
[564] Minkoff, H., & Ecker, J. (2021). Balancing risks: making decisions for maternal treatment without data on fetal safety. *American Journal of Obstetrics and Gynecology*. *224*(5), 479–483.
[565] To highlight how extreme this case is, see the discussion of casual drinking in pregnancy versus alcohol abuse as risk factors for FAS: Armstrong, E. M., & Abel, E. L. (2000). Fetal alcohol syndrome: the origins of a moral panic. *Alcohol and Alcoholism*. *35*(3), 276-282.

and well-being including social factors) might be more decisive in how much damage ultimately results to the fetus.[566]

One could argue that this is irrelevant as the pregnant woman, even with diminished autonomy, still has some choice in how she behaves, while the future child has absolutely no say in the matter. Or we might imagine the case (however unrealistic) of a person doing something with the express intent of harming the fetus and only the fetus. The important point to make here is that avoiding a conflict model does not mean denying that such behaviours can pose a risk for the fetus – rather, it means refusing to take the balancing act (how much should we allow the woman in this situation? What kind of sanctions are we justified in placing upon her? And similar considerations) as a *starting point*. If we are genuinely concerned for the welfare of the fetus/future child, the best route to take in order to ensure the best possible outcome is to try and establish a trusting relationship between the woman and doctor to allow for appropriate counselling and forewarning of risk (this is still permissible – avoiding a conflict model doesn't mean that women shouldn't be provided with such info; it is, as in most reproductive ethics dilemmas, more about *how* the information is presented than if the information should even be shared). Attempts to 'rescue'[567] the fetus are, at best, likely to reduce chances of cooperation on the mother's side and at worst could actively

[566] See for instance: Angelotta, C., Weiss, C. J., Angelotta, J. W., & Friedman, R. A. (2016). A moral or medical problem? The relationship between legal penalties and treatment practices for opioid use disorders in pregnant women. *Women's Health Issues*. *26*(6), 595-601; Bingol, N., Schuster, C., Fuchs, M., Iosub, S., Turner, G., Stone, R. K., & Gromisch, D. S. (1987). The influence of socioeconomic factors on the occurrence of fetal alcohol syndrome. *Advances in Alcohol & Substance Abuse*. 6(4), 105-118; Tominey, E. (2007). Maternal smoking during pregnancy and early child outcomes. CEP Discussion Paper No 828: Centre for Economic Performance, London School of Economics.

[567] As is still sometimes proposed by influential bioethicists; for a recent example see Wilkinson, D., et al, *op. cit.* note 429.

endanger her autonomy; both outcomes are hardly likely to contribute either to her or fetal well-being in the long run.[568]

Beyond duties not to harm, we could also imagine cases where women are able to do something that potentially benefits the fetus, but do not. An example could be not taking certain prenatal vitamins or recommended therapy or, more dramatically, refusing to submit to maternal-fetal surgery when this could improve fetal prospects. Again, advice and counselling is appropriate to some extent, but ultimately it is the woman's choice what she wishes to do to her body – and there are limits to what we could plausibly expect of women to give up to refrain from any possible risk of fetal harm. For instance, some medications are contra-indicated in pregnancy, but some of these are hard to find less risky replacements for. What of the woman with serious mental health issues that need to be regulated medication (that might be considered a threat to her pregnancy) on an ongoing basis – should we advise her to refrain from pregnancy altogether, or to risk her health by stopping treatment abruptly?[569]

When we look at the literature on maternal-fetal surgery for instance (as seen in Chapter Five), we find that women often approach the possibility of having the procedure from the perspective of wanting to do 'anything they can' to help – even if this places significant burdens on them and the prospective benefits for the fetus are not that high. There are also tragic cases of women who receive a cancer diagnosis during pregnancy but decide to delay or forgo treatment, even at grave risks to themselves, in order to carry the pregnancy to term. I believe these are also cases where

[568] Bowden, *op. cit.* note 303; Harris, *op. cit.* note 305; Minkoff & Ecker, *op. cit*. note 564.
[569] Bonari, L., Pinto, N., Ahn, E., Einarson, A., Steiner, M., & Koren, G. (2004). Perinatal risks of untreated depression during pregnancy. *The Canadian Journal of Psychiatry*. *49*(11), 726-735.

the (clinical) interests of the pregnant woman and the fetus somehow conflict, and yet it seems strange to think of them as conflicts in the same sense as the cases discussed above. Why? Is it because the fetus has no intentions and so cannot autonomously choose to inflict harm upon the woman – rather, she is choosing to inflict harm upon herself to continue the pregnancy, for example? But as argued above, it is doubtful that most women engaging in 'harming' behaviours do so fully autonomously or intentionally, so perhaps intention is key.

If we were to take this misalignment of clinical interests as a kind of conflict., however, would this be helpful to the women making these choices? It seems unlikely that it would be a useful framework, as it would probably lead women to evaluate competing interests and see themselves as 'owing' something to the fetus, trying to estimate how much should be sacrificed. Centering the fact that decisions made during pregnancy are primarily about the pregnant woman and consequences for her own life would be more likely, in my opinion, to get women to rethink the level to which they are ready to burden themselves for fetal welfare, than forcing them to think about it in terms of competing rights.

To summarise, I would argue that we can recognise that the interests and behaviour of pregnant women can affect fetal welfare (but also that prioritising fetal well-being can conversely impact on theirs) without adopting a conflict framework of pregnancy. Starting from the idea that the best road to fetal well-being is respect for maternal autonomy and trust in the pregnant woman, we can address such difficult scenarios through appropriate advice, guidance and non-directive counselling. However, a conflict framework seems to encourage assessment of completing rights, rather than finding a

joint way forward, when the cooperation of the pregnant person is necessary for good fetal outcomes; and it seems to bolster ideas of 'protecting' the fetus, when this can plausibly only be done by in some way infringing on the pregnant woman's autonomy. Therefore we stand to lose very little, if anything, by abandoning the conflict framework of pregnancy.

8.2.3 'Reproductive autonomy' cannot encompass all concerns about upholding autonomy in pregnancy

The final main theme coming out of this thesis is that there is an important conceptual difference between what it means to *respect* one's reproductive autonomy, and what it means to ensure one's autonomy is *upheld* during pregnancy. In line with the previously stated conviction that the words we use matter, I will reflect here briefly on the way I have used these words in my work. Respect, as in the bioethical principle of respect for autonomy, implies acceptance of another's (sufficiently autonomous and informed) decision, and non-interference even in cases where we might not agree with these decisions. In the context of reproduction, this seems to me to align most appropriately with choices made about conception, which are sometimes seen as controversial due to considerations about 'procreative beneficence' and giving the best possible life to a future child.[570] We may disagree, for example, with a Deaf[571] couple's wish to choose to select an embryo with the same gene for implantation rather than an unaffected embryo, in order to have a child that also cannot hear. This disagreement does not

[570] Savulescu, J. (2001). Procreative beneficence: why we should select the best children. *Bioethics*. *15*(5-6), 413-426. See also Bennett, R. (2014). When intuition is not enough. Why the principle of procreative beneficence must work much harder to justify its eugenic vision. *Bioethics*. *28*(9), 447-455.
[571] I use 'Deaf' here to specify that this refers to those who identify as members of the Deaf community. See Dolnick, E. (1993, September). Deafness as culture. *The Atlantic Monthly*, p. 38.

necessarily mean that this is morally wrong and that interference is justified (although such a choice would not be permitted, for example, under provisions of the HFEA 2008 in the UK if there were a non-affected embryo also available).[572] Some would still argue that we ought to respect such a decision, even if it seems unusual or controversial, or even that making such a controversial reproductive decision is in fact morally preferable for independent reasons.[573]

However, once a pregnancy is established, there is arguably almost always some investment from different parties in conducting it in a certain way. The pregnant woman may, for example, wish to carry the child to term without knowing anything about the characteristics it might have, whether this has to do with sex or potential disability. Alternatively, she may opt for prenatal testing to prepare for the potential birth of a disabled child, or to seek the option of prenatal therapy, if available. She may also change her mind. However, it is likely that the pregnant woman would not be the only party who will have strong convictions and preferences in this respect. Healthcare professionals may have their own ideas about what would be the best course of action. They may, for instance, underestimate a woman's capacity to make an informed decision about whether to have a child with disability, and encourage her to reconsider testing as she may end up regretting her choice later. The woman's partner and family may want to gain information that she is not interested in learning in advance. Even then, in the face of societal pressure and prevailing attitudes about what is good

[572] HFEA 2008, *op. cit.* note 82.
[573] See for example Fahmy, M. S. (2011). On the supposed moral harm of selecting for deafness. *Bioethics*. *25*(3), 128-136; Sparrow, R. (2005). Defending deaf culture: The case of cochlear implants. *Journal of Political Philosophy*. *13*(2), 135-152.

behaviour in pregnancy, a woman may choose to undergo invasive testing, place herself under a strict regimen, or develop feelings of guilt and anxiety.

In all these cases, then, *respecting* the woman's choice will not be enough. Pregnancy is an incredibly culturally and socially loaded experience that always comes with a set of expectations and preconceptions.[574] Looking at the ways in which women, their bodies and reproductive capacities have been perceived and treated throughout history,[575] and often still are today,[576] we cannot presume women's autonomy will be respected, but instead that it is something that will likely need to be actively and *upheld* at different junctures in the process of carrying a pregnancy and delivering a child. In this sense, autonomy in pregnancy is not simply about respect for one's reproductive choices, nor merely about maintaining bodily integrity. Due to the unique context of pregnancy, both as a biological process and a socially and culturally mediated, medical and personal experience, I would argue that the best ways to ensure pregnant women's autonomy should also be approached as complex and highly contingent on a variety of factors, including but not limited to: the socio-economic and cultural context in which the pregnancy takes place; the nature of the ethical issue under investigation (whether it involved novel/experimental technology or appears more routine); the woman's own beliefs and experience of pregnancy and the relation to her fetus/future child, and other relevant considerations.

[574] Petchesky, *op. cit.* note 417; Lupton, *op. cit.* note 518.
[575] Romanis, E. C., et al. *op. cit.* note 307.
[576] Romanis, *op. cit.* note 494; Romanis, E. C., & Nelson, A. (2020). Maternal request caesareans and COVID-19: the virus does not diminish the importance of choice in childbirth. *Journal of Medical Ethics*. *46*(11), 726-731.

Some could argue that this sounds like an overly negative view of pregnancy, representing autonomy as something that is always endangered and in need of protection. I would argue that the latter is in some sense true. While different medical and technological options have indeed to some extent liberated women from biological constraints, it has also been argued persuasively that the medicalisation of reproduction and pregnancy in turn create new limitations and standards of good behaviour.[577] In that sense I would argue that autonomy, if not always in need of immediate protection, needs to be *permanently rethought*, and its importance and centrality reiterated. On the other hand, this does not mean that the experiences of pregnancy women have at this point in time are necessarily negative (after all, this critically depends on their social positions and the resources available to them). While we arguably live in a heavily patriarchal world that places a multitude of expectations and restrictions on women's behaviour and lifestyle (even in so-called liberal societies), this does not mean that individual women's lives are necessarily miserable, or that value and fulfilment cannot be found in experiences of reproduction.[578] This kind of argumentation however naturally opens up the broader, and highly complex, issue of whether the fact that individuals value and enjoy certain experiences means that we should assess these as independently valuable and/or morally acceptable. The next subsection addresses this question by examining the status of pregnancy and its role in women's oppression.

8.2.3.1 Women's oppression and the value of pregnancy

It was previously argued in one of the papers contained within this thesis that one of the problems with the construction of pregnancy as 'pathological' by some scholars, and the

[577] Lippman, *op. cit.* note 183; Rothman, *op. cit.* note 512.
[578] Mullin, *op. cit.* note 515.

sometimes corresponding enthusiasm for alternatives to natural gestation such as full ectogestation (were it to become feasible), lies in the implied devaluation of the experience of pregnancy, although it is seen as highly important to many people.[579] One of the central tenets of many, if not most (dominant) strands of feminism is that women have been historically systematically disadvantaged by being reduced to their roles as wives and mothers, removed from public life or positions of power and confined to the sphere of the home and/or low-paying, low-status jobs, alongside almost mandatory caring responsibilities. In particular, radical feminist theorists identify women's reproductive function and ability to bear children as the primary source of their oppression, especially insofar as in a patriarchal society these capacities are controlled by men and used to keep women in a subjugated position.[580] Firestone expresses the view thus: "Women, biologically distinguished from men, are culturally distinguished from 'human'. Nature produced the fundamental inequality – half the human race must bear and rear the children of all of them – which was later consolidated, institutionalized, in the interests of men."[581]

The revolutionary vision proposed by Firestone aims to eliminate this fundamental difference (and source of women's disadvantage) by using technological means to displace gestation from the female body, coupled with a radical reorganisation of childcare in society to be evenly distributed across its members, including men. It seems that the biological liberation of women from their reproductive role, however, comes first in this proposal: "To free women thus from their biology would be to threaten the

[579] Romanis, E. C., et al. *op. cit.* note 307.
[580] Denny, E. (1994). Liberation or oppression? Radical feminism and in vitro fertilisation. *Sociology of Health & Illness*. *16*(1), 62-80; Firestone, *op. cit.* note 481.
[581] Firestone, ibid.

social unit that is organized around biological reproduction and the subjection of women to their biological destiny, the family."[582]

Taking a historical perspective, we can see that social liberatory projects of different kinds have often been met with resistance by those who are seen as in need of such liberation in the first place. For example, strong backlash has followed feminist ideas (even much 'milder' ones than those espoused by Firestone and other radicals) from the very beginning - not only from those who are seen as the oppressor in the patriarchal system (men) but also from those perceived as oppressed (women). This is evident in past and current trends of women themselves rejecting feminist ideas, from organised opposition to the original suffrage movements of the 20th century,[583] to more contemporary traditionalist, anti- and post-feminist leanings and practices.[584] Could we understand many contemporary women's embrace of and enthusiasm for gestation, childbearing and mothering, whether natural or facilitated by technology, in this key as a form of self-perpetuated, internalised oppression? And if so, what should be done about this? In this section I address this problem firstly as an instance of a broader philosophical dilemma about the effects of oppression on personal autonomy, and then move on to discuss the case of pregnancy specifically.

[582] Firestone, *op. cit.* note 481, p. 352.
[583] Marshall, S. E. (1985). Ladies against women: Mobilization dilemmas of antifeminist movements. *Social Problems*. *32*(4), 348-362; Thurner, M. (1993). "Better citizens without the ballot": American antisuffrage women and their rationale during the progressive era. *Journal of Women's History*. *5*(1), 33-60.
[584] Christiansen, A. P. L., & Høyer, O. I. (2015). Women against feminism: Exploring discursive measures and implications of anti-feminist discourse. *Globe: A Journal of Language, Culture and Communication*. *2*, 70-90; Lopes, F. M. (2019). Perpetuating the patriarchy: misogyny and (post-) feminist backlash. *Philosophical Studies*. *176*(9), 2517-2538.

How oppression impacts the individual's capacity to make authentic autonomous choices is a question spurring a large volume of rich debate in philosophy and other disciplines.[585] One way of understanding this phenomenon has been through the concept of 'adaptive preferences'. According to this idea, when those who are oppressed sometimes comply with oppressive norms and even perpetuate them, we should not see these actions as expressing their 'true', authentic preferences. Rather, these preferences were formed under conditions of oppression and so the agents in question were forced to *adapt* their genuine preferences to other ones that are more acceptable within the oppressive system: hence the notion of *adaptive* preference. Such preferences "seem not to truly belong to agents, because unjust conditions have either a) caused those agents to lack normative points of view that are genuinely theirs or b) generated views in those agents that they themselves would repudiate."[586]

I believe that this is a useful framework through which to view women's acceptance of what may be considered oppressive conditions of life under patriarchy. Khader argues that "the concept of AP (or something like it) is indispensible [sic] for feminism" as "it provides grounds for questioning preferences whereby women perpetuate sexist oppression".[587] However, even if we believe that certain people form their preferences within oppressive systems, this does not mean fully denying their rationality and agency. The concept of adaptive preference has been fruitfully applied to surrogacy to explain how women making choices among a limited set of options still retain autonomy

[585] For an example of some of the contemporary philosophical debates on the subject, see the contributions in Oshana, M. A. (ed.). (2014). *Personal autonomy and social oppression: Philosophical perspectives*. New York: Routledge. (in particular chapters 3, 4, 6, 8 and 9)
[586] Khader, S. J. (2012). Must theorising about adaptive preferences deny women's agency?. *Journal of Applied Philosophy. 29*(4), 306.
[587] Ibid: 305.

despite all of the choices entailing exploitation.[588] We could potentially apply this concept to pregnancy by arguing that women who choose to become pregnant and bear children are thus making a choice that is not irrational even though it will ultimately contribute to the perpetuation of their oppression (both in their individual life and as a class) – they value the opportunity to fulfil the role of mothers assigned to women by society, though women on the whole might be better off without the existence of such a role. Certainly this framework makes sense for many actions that women undertake in patriarchal society, however, I would argue that it is not evident that it is not pregnancy itself that is a source of oppression, but the broader system of control over women's bodies and choices which only escalates in reproductive contexts where there is perceived to be more than one entity at stake.

Of course, some would argue that pregnancy is in a sense inherently oppressive. Firestone noted the physical difficulties of pregnancy and the resulting social obligations imposed upon women as reasons why it should be abolished.[589] Kathryn MacKay explains that the 'tyranny of reproduction' as termed by Firestone consists in the fact 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."[590] We could argue then that pregnancy is oppressive insofar as it is part of the oppressive system of (natural) reproduction more broadly, but this does not tell us much about pregnancy itself, and why people desire it to the point of wanting to

[588] Fellowes, M. G. (2017). Commercial surrogacy in India: The presumption of adaptive preference formation, the possibility of autonomy and the persistence of exploitation. *Medical Law International*. *17*(4), 249-272.
[589] Firestone, *op. cit.* note 481.
[590] MacKay, K. (2020). The 'tyranny of reproduction': Could ectogenesis further women's liberation?. *Bioethics*. *34*(4), 349.

undergo such drastic procedures as uterus transplants (or, less drastically but still potentially highly burdensome, multiple cycles of IVF).

When it comes to women's valuation of the experience of pregnancy specifically, we may wonder whether oppression could come from the (physical and psychological) experience of pregnancy itself[591] or the social conditions around what is considered to be acceptable behaviour around conception, gestation and delivery. I would argue that it is impossible to make a clear delineation between the two. What we nowadays would consider to be a 'natural' pregnancy, as opposed to one for example facilitated by an artificial womb, is one that is already shaped to a large extent by the contemporary medical context. However, we can and should question whether pregnancy is somehow an *inherently* oppressive state to be in. This is not for the simple reason that some women report enjoying their pregnancies, or that many people strongly desire to be pregnant at certain points in their lives, though these facts certainly suggest that there is great diversity in how people experience and value pregnancy; there are however also theoretical reasons to doubt if pregnancy is inherently oppressive.

In contrast to Firestone's negative characterisation of pregnancy, for instance, other feminists have celebrated women's reproductive capacity and ability to 'give life' and establish a unique maternal attachment.[592] More than being a potentially enjoyable and enriching experience, pregnancy can also be considered as a kind of *transformative* experience, bringing with it a sort of privileged knowledge. As defined by Laurie Paul,

[591] To once again illustrate the 'pathologising' view of pregnancy with a quote from Firestone: "Pregnancy is the temporary deformation of the body of the individual for the sake of the species." *Op. cit.* note 481, p. 343.
[592] Margree, V. (2018). *Neglected or misunderstood: The radical feminism of Shulamith Firestone*. Hampshire: John Hunt Publishing. pp. 86-89.

transformative experiences are those which provide us with access to knowledge that could not be gained otherwise than by going through that experience.[593] Fiona Woollard applies Paul's concept to the case of pregnancy, arguing that "[t]he sheer number of ways in which pregnancy affects the pregnant person mean that it is difficult to acquire the 'facts' about pregnancy without being pregnant."[594] Indeed, even among those who have been pregnant varieties in experience might make it difficult to grasp and empathise how it is for others.[595] Thus there is a sense in which not only are experiences of pregnancy vastly diverse, but additionally opaque insofar as knowing the 'facts' does not allow us to make an objective judgment about how valuable, or difficult, the experience is. The value of pregnancy might be impossible to judge objectively, and I would argue that it will be valued differently primarily based on social circumstances, which brings us to another important aspect to the liberatory potential of technology.

Namely, those who argue for technological intervention as a means of liberating women from pregnancy and consequently the biological difference at the root of women's oppression could be said to take an overly 'techno-optimist' stance towards the prospects of technology for women's liberation. The history of reproductive technology and the medicalised treatment of pregnancy shows that these developments were never truly aimed at ensuring or maintaining women's autonomy, or at least not primarily so. Discovering more about the fetus was the principal goal in the development of prenatal imaging and testing.[596] More knowledge does not necessarily equal more power, and if the knowledge is aimed toward another entity which thus becomes more visible (both

[593] Paul, L. A. (2014). *Transformative experience*. Oxford: Oxford University Press.
[594] Woollard, F. (2021). Mother knows best: pregnancy, applied ethics, and epistemically transformative experiences. *Journal of Applied Philosophy*. *38*(1), 158.
[595] Ibid: 162.
[596] Nakou, *op. cit.* note 177.

in the literal sense and socially/culturally), then it may even lead to women being marginalised and side-lined. Also, it must be stressed that Firestone's original proposal presumed other drastic changes in society beyond displacing reproduction from women's bodies, including creating the conditions for full economic independence of women and humans in general;[597] changes that sadly seem even more distant today.

Despite the arguably revolutionary potential of certain technologies should they come to fruition,[598] we are still far from a world of degendered and disembodied reproduction, which would likely present its own challenges.[599] At this stage, pregnancy is still 'women's work' and as such subject to all kinds of patriarchal and paternalist assumptions – but it is also still a necessity, both for the continuation of the species and for the realisation of individual reproductive projects. As such, we must never presume that new technologies will automatically enhance autonomy, or that old solutions will work as well in new situations. We can and should learn from bad and good examples, both historical and contemporary, but we must not assume that autonomy in pregnancy is easily upheld, or that, faced with new dilemmas, we will always know how to do so.

8.2.4 Conclusions

Based on these arguments, my conclusion is that the best way forward to ensure pregnant women's autonomy is truly upheld in these diverse and evolving contexts, is to investigate particular cases with a broad approach that has the following key features:

[597] Firestone, *op. cit.* note 481.
[598] MacKay, *op. cit.* note 590; Smajdor, *op. cit.* note 483.
[599] Petchesky, *op. cit.* note 417.

1. The primacy of the pregnant woman's choice must be presumed in all scenarios, for reasons that have been well established in both ethical and legal literature. For discussion in the sphere of law, we must be especially wary of positing any kind of 'fetal rights', or even interests, as these have too often been used to infringe on women's autonomy and even blatantly violate their bodily integrity.[600] We ought to assume, as a starting point, that women will usually want to make the optimal choices for themselves, their pregnancy, and the eventual child resulting from it.[601] This does not mean that we should adopt a simplistic approach on which 'whatever is best for the woman is also the best for the fetus', or vice versa. It means, rather, that the fetus should not feature at all as an entity whose needs or interests should be considered when making decisions about the course of pregnancy, *unless, in some limited circumstances, the pregnant woman regards it as such and consciously decides for this to inform her choices.* Still, even in such cases (I submit that maternal-fetal surgery can be an example of this[602]), caution must be exercised in basing any broader conclusions about the maternal-fetal relationships or the obligations of pregnant women on such conceptions.

2. Reproductive autonomy in the context of pregnancy should not be conflated with either 'procreative liberty' (in terms of making decisions about whether or not or how to reproduce), or bodily integrity. While both considerations are highly important in their own right, they do not encompass or exhaust what autonomy in pregnancy is about. I would argue that both of these concepts (procreative liberty and bodily integrity) resonate better with legal than ethical examination, as they stress the primacy of individual women's decision-making and the inviolability of their bodies and choices,

[600] Milne, *op. cit.* note 31.
[601] See for example Harris, *op. cit.* note 305; Minkoff & Paltrow, op. cit. note 562.
[602] See the discussion in Chapter Five.

which is necessary to support clear-cut legal decisions. While this is (again for reasons discussed earlier) a crucial consideration for ethics as well, I believe it does not exhaust important autonomy-related concerns that should be taken into account, as illustrated in the cases addressed by the papers.

Take the example of non-invasive prenatal testing. Having such a test without fully understanding its implications, or even against one's will, is arguably not a great violation of bodily integrity.[603] The most important infringement on autonomy here arises from the violation of personal *psychological* boundaries, in terms of being directed towards certain actions or choices, and from being afforded insufficient or biased information necessary to make a maximally autonomous decision. I believe this is not fully covered by considerations of either procreative liberty or bodily integrity.

Similar concerns may arise in maternal-fetal surgery, a particularly delicate case because it necessarily involves some intervention on the woman's own body (varying in invasiveness depending on the kind of therapy), but where women are sometimes ready to accept these for the sake of the fetus/future child. From the standpoint of bodily integrity/autonomy, it is clear that here we are talking about one body and one patient only, namely the pregnant woman – and good reasons why this should always remain so legally have been offered.[604] However, again we find good reasons also in ethical examination to give some importance to the views of women who do not see this as simply being about their own bodies. Even without delving into the issue of whether

[603] While legally speaking (in the UK) it would potentially amount to battery in case of physical contact without the patient's consent, the primary point I wish to make here is that an action that is not necessarily harmful to the body (or even accepted willingly, for example a blood test that is not aimed at screening), could still amount to a violation of autonomy.
[604] McLean, *op. cit.* note 15.

these women consider the fetus to be a patient, person or separate entity, there is arguably some moral significance to how these women feel about the boundaries of their bodies being traversed for this sake.

Finally, in the case of surrogacy again we find potentially interesting contrasts between what an integrity/liberty view might entail when it comes to the potential infringement of the autonomy of surrogates. Existing UK regulation[605] arguably has safeguards against this, but again this does not mean that the possibility of exploitation cannot occur, as I have argued in Chapter Six – especially in terms of the expectations that may be placed on the surrogate by the intending parents on her comportment in pregnancy.

3. Constraints on autonomy are most often based on social and cultural factors, and will thus most effectively be addressed by large-scale social change. However, this does not mean that smaller steps cannot contribute to resolving these concerns. In particular, the way in which information is presented to pregnant women to support their decision-making is crucial for ensuring that autonomy is upheld to the extent this is possible[606] – as well as relieving some of the burdens on women to inform themselves and stressing the duties of healthcare professionals in this area.[607]

4. In terms of what specifically ethicists can and should do, I submit that it is possible to go some way towards alleviating these worries by ensuring that research on choices in pregnancy is conducted and presented in a clear, coherent and patient-centred way. The

[605] Surrogacy Arrangements Act, *op. cit.* note 170.
[606] Clarke, *op. cit.* note 184.
[607] As illustrated by the decision in *Mordel*, *op. cit*. note 160.

recommended approach informed by these starting assumptions should also incorporate the following basic methodological premises:

a) We should as far as possible seek to conduct a situated analysis which considers the social context of the practice under examination and the social position of the agents, with a view to anticipating factors that may influence autonomy. This includes reliance on insights from other disciplines where this is necessary/appropriate.

b) Following on from the previous point, research should also be informed by empirical and interdisciplinary studies where this is possible and appropriate. Research examining the perspectives and experiences of pregnant women is of particular significance to arriving at ethically sensible and relevant frameworks.

c) Finally, an insistence on conceptual clarity and consistency must be upheld. Of particular importance is examining the key concepts used in discussion, making sure these are not value-loaded (or at least that we are aware of the connotations applied), especially when these may postulate further entities ('fetal patient') or risk opening up further pressures upon pregnant women (such as 'maternal responsibility' or 'responsible behaviour in pregnancy').

8.3 Developments and prospects for future research

In this section I will give a brief overview of some of the developments in scholarship and practice that have happened during the writing of this thesis, and which are

relevant to the subjects explored in it. Secondly, on the basis of these and again related to the topics covered within the thesis, I will outline some possible avenues for future research on autonomy in these areas.

8.3.1 Theoretical, practical and legal developments

8.3.1.1 Prenatal testing

During the writing of this thesis several developments have occurred in prenatal testing (both practice and scholarship) that are relevant to the arguments given here. Prenatal testing, especially the non-invasive variant which is attaining routine status in some countries and healthcare systems, has generated a large body of literature looking at its possible implications for autonomy, as well as the most ethically justifiable ways to implement it in practice. As outlined previously, some authors have called for more nuanced approaches to upholding autonomy in this context, such as one based on the capabilities framework.[608]

Other authors focus on practical, on-the-ground issues to draw broader conclusions about impact on autonomy. For example, several recently published papers discuss payment for prenatal tests and their accessibility,[609] exploring the effect of this for the autonomy of pregnant women in choosing whether to undergo testing. This kind of

[608] Stapleton, G., et al., *op. cit.* note 237.
[609] See for example Löwy, I. (2020). Non-invasive prenatal testing: a diagnostic innovation shaped by commercial interests and the regulation conundrum. *Social Science & Medicine*. 113064; Bunnik, E. M., Kater-Kuipers, A., Galjaard, R. J. H., & De Beaufort, I. D. (2020). Should pregnant women be charged for non-invasive prenatal screening? Implications for reproductive autonomy and equal access. *Journal of Medical Ethics*. *46*(3), 194-198; Bunnik, E. M., Kater-Kuipers, A., Galjaard, R. J. H., & de Beaufort, I. (2020). Why NIPT should be publicly funded. *Journal of Medical Ethics*. doi:10.1136/medethics-2020-106218; Schmitz, D. (2020). Why public funding for non-invasive prenatal testing (NIPT) might still be wrong: a response to Bunnik and colleagues. *Journal of Medical Ethics*. *46*(11), 781-782.

analysis would certainly fit with a 'reproductive autonomy worth having' framework such as the one advocated in my paper, and would be an interesting avenue to explore.

The findings of some recently published empirical work also seem to speak in support of the arguments given in my paper.[610] Kater-Kuipers et al. have looked at the views of Dutch interviewees on the acceptability of NIPT, concluding that most study participants believe that the decision to take the test should be a matter of the woman's personal choice.[611] This suggests the importance of the reproductive autonomy model in the eyes of the public, although public health considerations (such as whether testing is reimbursed) do affect participants' views about the primacy of individual choice.[612] In contrast to this, however, Ravitsky et al. surveyed pregnant women and their partners in Canada on their attitudes to the routinisation of NIPT, reporting that many participants were concerned about the pressure to undergo NIPT, both on the personal level and in terms of broader social consequences.[613] These two pieces of research illustrate well the ambivalence about such testing, especially the challenges that come with its routinisation.[614]

In the (English) legal sphere, the decision in *Mordel*[615] (building on previously established principles in *Montgomery*[616]) suggests the law is becoming increasingly

[610] Kater-Kuipers, A., Bakkeren, I. M., Riedijk, S. R., Go, A. T., Polak, M. G., Galjaard, R. J. H., ... & Bunnik, E. M. (2020). Non-invasive prenatal testing (NIPT): societal pressure or freedom of choice? A vignette study of Dutch citizens' attitudes. *European Journal of Human Genetics*. 1-9. https://doi.org/10.1038/s41431-020-0686-9; Ravitsky, V., Birko, S., Le Clerc-Blain, J., Haidar, H., Affdal, A. O., Lemoine, M. È., ... & Laberge, A. M. (2020). Noninvasive prenatal testing: Views of Canadian pregnant women and their partners regarding pressure and societal concerns. *AJOB Empirical Bioethics*. 1-10. doi:10.1080/23294515.2020.1829173.
[611] Kater-Kuipers, A., et al., ibid.
[612] Ibid.
[613] Ravitsky, V., et al., *op cit.* note 610.
[614] Nakou, *op. cit.* note 177.
[615] Discussed above in section 3.3.3.
[616] *Montgomery, op. cit.* note 158.

supportive of reproductive autonomy, and more consideration is being given to the procedural aspects of giving consent, and ensuring it is properly informed. This has positive implications for an ideal of 'reproductive autonomy worth having' being realised in practice, although broader considerations about the availability of screening and proper support for those who still wish to have a disabled child must also be taken into account. Perhaps the claimant in *Mordel* would not have seen the outcome of her pregnancy as so tragic if proper support systems were in place to ensure that her child had the potential to lead an enjoyable life and be included in society?

On the other hand, disability activists in the UK have recently attempted to challenge provisions of the AA 1967 relating to late-term termination on the grounds of fetal abnormality, launching a petition to remove this ground on the basis that this represents discrimination against people with Down's syndrome and their families.[617] It is true that confusion around the terminology of 'serious handicap' and abnormality in the current law poses some important challenges.[618] However, I would argue such a legal challenge is not the best way to address the problem of disability discrimination and the 'eradication' of Down's. Precisely because the scope of what falls under serious handicap is so broad and loosely defined, removing this ground from the law would mean that women would be unable to access late-term abortion for much more serious, possibly fatal conditions. Even if the petition only applied to Down's syndrome, it still seems that removing certain choices from women is not the right way to achieve the goal of disability advocates, and would result in infringement of their autonomy, fueling

[617] Rigby, C. L. (2020). Repeal section 1(1)(d) of the Abortion Act 1967. Petitions: *UK Government and Parliament*. Retrieved from https://petition.parliament.uk/petitions/331135 (accessed 5 January 2021).
[618] McGuinness, *op. cit.* note 463.

the efforts of pro-lifers to further restrict abortion rights. While this petition ultimately proved unsuccessful,[619] it is unlikely that debate on this topic will subside in the future.

8.3.1.2 Maternal-fetal surgery

At the time of writing, maternal-fetal surgery in the UK is still at a similar stage as it was when Chapter Five was written – it is being performed on a case-by-case basis at selected hospitals only, and has been ongoing even throughout the COVID-19 pandemic.[620] A few success stories have been reported in recent years,[621] including procedures performed using the less invasive 'keyhole' surgery variant.[622] Once these operations have become more frequent and accessible (which may well be in the near future), it is possible that ethical considerations such as those outlined in the paper may arise – or that more research will be done illuminating the perspectives of those who undergo such treatment in the UK. It was pointed out to me when presenting this paper at a conference that in countries where the technique is more developed and pervasive (as is the case in the Netherlands), there have been discussions about the possibility of recognising the fetus as a patient in MFS for insurance-related reasons.[623]

8.3.1.3 Surrogacy

The law reform explored in Chapter Six is currently at the consultation stage, based upon the discussion and proposals outlined in the Law Commissions report.[624] It is

[619] Topping, A. (2021, September 23). Woman with Down's syndrome loses UK abortion law case. *The Guardian*. Retrieved from https://www.theguardian.com/world/2021/sep/23/woman-with-downs-syndrome-loses-uk-abortion-law-case (accessed 25 September 2021).
[620] Great Ormond Street Hospital for Children, *op. cit.* note 259.
[621] BBC News, *op. cit.* note 255.
[622] Gallagher, J. (2019, May 17). Spina bifida: Keyhole surgery repairs baby spine in womb. *BBC News*. Retrieved from https://www.bbc.co.uk/news/health-48253477 (accessed 5 January 2021).
[623] I am grateful to Marleen Eijkholt for raising this point to me.
[624] Law Commission and the Scottish Law Commission, *op. cit.* note 171.

possible that concerns about exploitation will ultimately be addressed more explicitly and that payment provisions will be designed to respond to such worries. While in other contexts some have called for the professionalisation of surrogacy,[625] this approach does not seem likely in the UK due to worries about commodification. Nevertheless, a new law explicitly addressing the implications of surrogacy as work would be welcome as it would ultimately afford more protection to surrogates, and arguably could also create broader awareness of the labour involved in gestation outside of surrogacy.

8.3.2 Questions for future research

Changing the concept of family/parenthood: maternal responsibility before birth?

As outlined previously in this thesis, recent advances in prenatal technology have made drastic changes to the ways in which we are able to engage with the fetus during pregnancy. Developments such as ultrasound, advanced prenatal imaging, prenatal therapy etcetera have increased our access to the fetus, in terms of its visibility and later our ability to interact with it directly – leading to the fetus now being perceived as a visually, and possibly also clinically distinct entity. These changes in our access to and perception of the fetus, and the process of pregnancy itself, clearly have the potential to equip pregnant women and their partners with more information, leading to a sense of control and potentially more autonomous decisions.

On the other hand, it could also be said that the process of pregnancy in general has increasingly come under scrutiny with the development of such technologies, making

[625] Van Zyl & Walker, *op. cit.* note 347.

things more complicated for the couple, and in particular the woman whose body is directly involved in gestation. The ability to 'look into the womb' and closely monitor the fetus throughout pregnancy has arguably had the effect of raising the standards for responsible maternal behaviour, implying that pregnant women should be held to the same, or even higher standards than 'regular' mothers. The development of reproductive technology has thus also reshaped the idea of parental responsibility as starting even before pregnancy, primarily for women but also to some extent men, for instance in research on the epigenetic effects of lifestyle which can then be passed onto future children.[626] By broadening the scope of parental obligations to the future child, more pressure could be placed on future parents, increasing the anxiety associated with the process of pregnancy and thus almost paradoxically reducing their autonomy.

Part of ensuring that these negative consequences are avoided and that reproductive technology is allowed to realise its emancipatory potential certainly lies in questioning the regulation of these technologies. Careful moral deliberation is a necessary first step in this process as strong moral reasons are typically needed to challenge existing regulation.[627] There are also cases in which, while regulation remains firmly on the side of expectant mothers for instance, certain issues may nevertheless creep into everyday medical practice and public consciousness, requiring vigilance and careful reconsideration of the key ethical concepts. New reproductive technologies, both existing ones such as sophisticated pregnancy imaging, maternal-fetal surgery, but also

[626] Dupras, C., & Ravitsky, V. (2016). The ambiguous nature of epigenetic responsibility. *Journal of Medical Ethics*. *42*(8), 534-541.
[627] The currently evolving debate on extending the time limit for embryo research in the UK is a case in point. See Cavaliere, G. (2017). A 14-day limit for bioethics: the debate over human embryo research. *BMC Medical Ethics*. *18*(1), 38; McCully, S. (2021). The time has come to extend the 14-day limit. *Journal of Medical Ethics*. DOI: 10.1136/medethics-2020-106406.

more futuristic ones like pregnancy tracking apps or partial/full ectogenesis may have the potential to break the conventional views of parenthood and parental responsibility starting at birth. But, as set out above, whether this potential will be fully realised depends on regulation, which in turn depends on our notions of who is a parent and what kinds of obligations follow from this. It is therefore crucial to investigate the notions of parenthood and responsibility more carefully.

The development of reproductive technologies, from in-vitro fertilisation to more recent achievements like mitochondrial transfer and preimplantation genetic diagnosis, undoubtedly has had a significant effect on how contemporary families are formed, and which people are enabled to become parents. Single women, same-sex couples, heterosexual couples where one or both of the partners are infertile, and others who would not normally be able to reproduce 'naturally' have been granted a chance to create families through these scientific advances. It could thus be argued that reproductive technologies have a disruptive and even revolutionary potential, bringing about greater equality in reproduction and accommodating different lifestyles and plans. However, the introduction of new reproductive options into healthcare is usually faced with great scrutiny, and once available is typically heavily regulated.[628] It has been argued that entrenched ideas of what families should be, rooted in the ideal of the nuclear, heterosexual family unit "have a powerful influence on determining which potential technological innovations in human reproduction are developed and funded, and who can access them."[629]

[628] As evident from the example of legislation in England, such as HFEA 1990 (*op. cit.* note 68) and the updated version of the Act (*op. cit.* note 82). See also the discussion in Eijkholt, *op. cit.* note 10.
[629] Cutas, D., & and Smajdor, A. (2018). Reproductive technologies and the family in the twenty-first century. In S. Giordano, *The freedom of scientific research: Bridging the gap between science and society* (pp. 57-70). Manchester: Manchester University Press. p. 57.

Pregnancy monitoring and tracking apps – enhancing control or strengthening scrutiny?

A newly emerging cluster of technologies has the potential to bring the fetus under even closer scrutiny: namely, pregnancy tracking apps aimed at gestating women. One could argue that there is no real difference between using an app and obtaining the same information from a guidebook or website. One of the most popular apps, *What to Expect* is, after all, adapted from the globally known book of the same name, and things like pregnancy diaries, nutrition tips and development checklists have been around for many years. In many ways, pregnancy apps can be seen as a natural progression of already existing help tools for expecting parents. Yet I would argue that they represent an ethical as well as technological novelty, for two reasons.

Firstly, the near-constant stream of information and opportunities to engage will doubtless affect the way the pregnant woman relates to her fetus. In line with similar implications of routinising ultrasounds and prenatal testing, for example, we might worry about this increased influx of information placing pressure on pregnant women to 'know everything and do everything' and raising the societal standards for responsible behaviour in pregnancy. But the other important novel aspect of pregnancy apps is that the information women can obtain through them is or will be, at least for the most part, unmediated by medical experts or other figures of authority.

Of course, this does not mean that such apps are likely to replace professional advice altogether, but their broader use is likely to transform the experience of pregnancy, especially if more advanced tracking functions are successfully developed. In one sense, this has the potential to be empowering to women and to contribute to the

characteristic intimacy of the pregnancy experience. On the other hand, though, imprecise information or its misunderstanding could lead to negative psychological and possibly also physical consequences for the app users. With their use on the rise, this is another example of an evolving technology for whose analysis it would be instructive to once again think through the tensions between empowerment and pressure, and choice and control, that are so common when it comes to women's autonomy in pregnancy. Some work in this direction that has been undertaken recently[630] encourages me to inquire into this fascinating new area building on the themes explored in this thesis.

[630] Segers, S., Mertes, H., & Pennings, G. (2021). An ethical exploration of pregnancy related mHealth: does it deliver?. *Medicine, Health Care and Philosophy*. DOI: 10.1007/s11019-021-10039-y.

8.4 Concluding remarks

This thesis has looked at the impacts on women's autonomy of technological developments affecting the experience of pregnancy and the kinds of difficult choices women may be faced with. To answer the question of how women's autonomy can best be upheld in pregnancy, I have looked at particular contexts and their associated challenges. I conclude that, while there is no 'one size fits all' conception of reproductive autonomy that can be successfully applied to all cases, certain features of decision-making in pregnancy (such as the social embeddedness of pregnancy, the ethical implications of fetal accessibility and visibility, and the potential for subtle pressures on how pregnant women should comport themselves while gestating) should always be taken into account if we are to devise realistic, context-sensitive and potentially emancipatory ethical accounts and policies.

In this sense, reflecting on my initial assumptions and intuitions, through this research I have uncovered and identified some of the complexities of autonomy in pregnancy that can be overlooked in 'traditional' bioethical research. I hope these insights will not only inform my research in the future, but that they may also be of use to others interested in the rich and intricate areas of pregnancy ethics and reproductive autonomy.

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APPENDIX

Appendix 1 - Begović, D. (2019). Prenatal testing: Does reproductive autonomy succeed in dispelling eugenic concerns?. *Bioethics*. *33*(8), 958-964.

Appendix 2 - Romanis, E. C., Begović, D., Brazier, M. R., & Mullock, A. K. (2020). Reviewing the womb. *Journal of Medical Ethics*. Published online first: 29 July 2020. DOI: 10.1136/medethics-2020-106160.

Appendix 3 – Mullock, A. K., Romanis, E. C., & Begović, D. (2021). Surrogacy and uterus transplantation using live donors: Examining the options from the perspective of 'womb-givers'. *Bioethics*. Published online first: 17 July 2021. DOI: 10.1111/bioe.12921.

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Prenatal testing: Does reproductive autonomy succeed in dispelling eugenic concerns?

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Abstract

Traditionally, two main rationales for the provision of prenatal testing and screening are identified: the expansion of women's reproductive choices and the reduction of the burden of disease on society. With the number of prenatal tests available and the increasing potential for their widespread use, it is necessary to examine whether the reproductive autonomy model remains useful in upholding the autonomy of pregnant women or whether it allows public health considerations and even eugenic aims to be smuggled in under the smokescreen of autonomy. In this article I argue that if we are serious about upholding women's autonomy in the context of prenatal testing, what is needed is a model based on a more robust conception of reproductive autonomy, such as the one defended by Josephine Johnston and Rachel Zacharias as 'reproductive autonomy worth having'. While Johnston and Zacharias put forward a basic outline of this conception, I apply it to the specific case of prenatal testing and show how it responds to objections levelled against the reproductive autonomy model. I argue that adopting this kind of conception is necessary to avoid fundamental challenges to women's autonomy when it comes to prenatal screening and testing.

KEYWORDS

eugenics, prenatal, reproductive autonomy, screening, testing

1 | INTRODUCTION

Prenatal testing and screening for genetic disease and disability[1] continue to be areas of controversy. The rapid development of prenatal testing techniques with the potential for their broad use[2] makes the elaboration and evaluation of the rationales behind offering them a pressing matter. When it comes to prenatal testing, and especially screening programmes supported by public funds, it is crucial that we are clear on its aims so that we can assess whether they are acceptable.

Two main models of justifying prenatal testing and screening[3] are recognized in the literature. In the public health model the basic aim of prenatal testing is to reduce the frequency of select birth defects, and thus improve population-level health along with reducing the burden of disease on society. The reproductive autonomy model is focused on providing women with crucial information that can help them make important reproductive decisions, such as whether to continue a pregnancy.[4] This model emphasizes the value of choice based on adequate information, which is often seen as grounding the

[1] Prenatal testing can be done for various reasons. In this article I focus on testing for the presence of anomalies or genetic diseases in the fetus that are typically untreatable and may lead to disability. These tests are therefore performed essentially to provide prospective parents with information that might influence their decision whether to continue the pregnancy or not.

[2] An example that has received a lot of attention recently is non-invasive prenatal testing (NIPT).

[3] In the rest of the text I will refer to these simply as 'models of prenatal testing'.

[4] Lippman, A. (1986). Access to prenatal screening services: Who decides? *Canadian Journal of Women & the Law*, *1*(2), 434–445.

autonomy and empowerment of individuals in clinical settings. It has been recognized that these models are best described as idealized paradigms.[5] The real-life application of prenatal testing usually involves some kind of compromise between, or amalgam of the two models.[6] It has been argued that a result of this compromise can be that public health aims, or even eugenic attitudes, are allowed to subvert the autonomy of women behind a smokescreen that aims to uphold women's autonomy and empower women with information.[7] This does not sit comfortably in a society which, at least in principle, puts patient autonomy at the centre of health care.

In this article I will argue that, if reproductive autonomy is reduced purely to having more choices at our disposal, the model turns out to be inadequate and liable to several objections, including that of allowing eugenic aims to dominate. Without a more robust conception of reproductive autonomy, prenatal screening and testing will continue to ride quietly roughshod over women's autonomy. I suggest that a more adequate conception can be found in what Johnston and Zacharias call 'reproductive autonomy worth having'.[8] I apply their general proposal to the context of prenatal testing, showing how it can answer some pressing objections and provide a promising basis for policy.

2 | WHAT IS THE PROBLEM WITH REPRODUCTIVE AUTONOMY?

Before considering a possible solution to the problem of reproductive autonomy in prenatal testing, we need to show what the problem involves. Of the two prominent rationales for prenatal testing discussed in the literature, the reproductive autonomy model is usually considered to be the more acceptable. It certainly aligns better with the central place that bioethics, as well as Western society in general, assigns to patients' autonomy. It also has the advantage of escaping the associations with eugenics and disability discrimination that are commonly raised against the public health model.[9] However, some authors have suggested that the reproductive autonomy model is more problematic than usually thought. One common criticism is that the reproductive autonomy model is used as a more palatable façade for the fact that prenatal testing is implemented with the ultimate aim of cutting health care costs by reducing the number of people born with disabilities.[10] According to such accounts, the rhetoric of choice in this context simply masks the economic logic, and underlying assumptions about the value of certain kinds of lives over others, that actually govern prenatal testing policies. These worries are certainly highly relevant to the plausibility of retaining the reproductive autonomy model in practice. However, another significant, and perhaps philosophically prior question, is whether the reproductive autonomy model, when assessed on its own merits, provides a morally acceptable and theoretically sound basis for policy. If the model turns out to have important flaws, we need to address these before insisting on its practical implementation.

In the next section I address this worry by analysing an argument recently made by Stephen Wilkinson, according to which the reproductive autonomy model is susceptible to several pressing objections, making the public health model more defensible overall.[11] While his argument is quite persuasive, I suggest that we can come up with a more plausible version of the reproductive autonomy model that resolves these concerns. I go on to defend such a model in later sections of this article.

3 | PURE CHOICE VERSUS PUBLIC HEALTH PLURALISM

In order to show the inherent flaws of the reproductive autonomy model, Wilkinson compares two possible views on the goals of prenatal testing programmes. On the so-called pure choice view, the main and only aim of prenatal testing is to enable reproductive choice.[12] The second view is public health pluralism, which contains a multitude of aims for prenatal testing including, but not limited to, improving population health, improving maternal and fetal health, cutting health and social welfare costs and respecting autonomy and providing choice. These multiple goals include the explicit goal of reducing the prevalence of disability and disease in the newborn population,[13] opening this view to various charges that I refer to as 'eugenic concerns'.

The term eugenic concerns refers to a cluster of arguments sharing the basic idea that some forms of prenatal testing are problematic because they appear to be based on the assumption that certain kinds of lives are less worth living than others. Some of these arguments explicitly use the term eugenics,[14] either to support the notion that certain technologies are immoral because they are instances of eugenics (so-called 'direct eugenics arguments'[15]), or to point out morally relevant similarities between practices we engage in today and historic eugenic practices that we consider

[5] Clarke, A. (1997). Prenatal genetic screening: Paradigms and perspectives. In Harper, P., & Clarke, A. (Eds.), *Genetics, society and clinical practice* (pp. 119–140). Abingdon, UK: BIOS Scientific Publishers.

[6] Lippman, op. cit. note 4, pp. 434–445.

[7] Ravitsky, V. (2017). The shifting landscape of prenatal testing: Between reproductive autonomy and public health. In L. P. King, R. L. Zacharias, & J. Johnston (Eds.), *Just reproduction: Reimagining autonomy in reproductive medicine, special report. Hastings Center Report, 47*(6), S34–S40. Wilkinson, S. (2015). Prenatal screening, reproductive choice, and public health. *Bioethics, 29*(1), 26–35.

[8] Johnston, J. & Zacharias, R. (2017). The future of reproductive autonomy. In L. P. King, R. L. Zacharias, & J. Johnston (Eds.), *Just reproduction: Reimagining autonomy in reproductive medicine, special report. Hastings Center Report, 47*(6), S6–S11.

[9] Lippman, op. cit. note 4, pp. 437–438. See also Ravitsky, op. cit. note 7, S35.

[10] Ravitsky, op. cit. note 7. See also Paul, D. (1998). Genetic services, economics, and eugenics. *Science in Context, 11*(3–4), 488.

[11] Wilkinson, op. cit. note 7, pp. 28–29.

[12] Ibid: 26.

[13] Ibid: 27.

[14] For a recent overview of eugenics-based arguments in reproductive ethics see Cavaliere, G. (2018). Looking into the shadow: the eugenics argument in debates on reproductive technologies and practices. *Monash Bioethics Review, 36*(1–4), 1–22.

[15] Wilkinson, S. (2010). *Choosing tomorrow's children: The ethics of selective reproduction*. Oxford, UK: Oxford University Press. p. 149.

morally objectionable.[16] Other arguments that do not explicitly invoke this term can still be classified as eugenic concerns. One of these is the expressivist argument, according to which prenatal testing is morally problematic because it expresses a negative view of the lives of people affected by the conditions tested for, sending a hurtful or disparaging message to them.[17] While this hurtful message can be characterized in different ways, some people with disabilities arguably see prenatal testing and selective abortion as founded on 'the assumption that any child with a disability would necessarily be a burden to the family and society, and therefore would be better off not being born'.[18]

Arguments explicitly referring to eugenics have been criticized on the grounds that there is substantial disagreement about the meaning of the term, and consequently on what counts as a case of eugenics.[19] Despite this, it is possible to single out some core eugenic ideas and attitudes.[20] While we may agree that eugenics is a problematic term, and that its rhetorical power provides a good reason to be cautious about its use in academic writing,[21] the emotionally charged nature of the term also suggests it is likely to recur as a part of the popular debate.[22] Omitting it from academic discourse might therefore result in a failure to engage critically with arguments often made in the public sphere. As for the expressivist argument, while it has been criticized on its own terms,[23] it is difficult to deny that the fact that states fund certain tests and even encourage women to take them sends out the message that this is the preferred course of action. When it comes to designing testing policy, the question of which conditions are tested for, why, and what this says about our evaluation of life with a disability, is certainly not one that can be overlooked.

The explicit goal of 'reducing the prevalence of disability and disease in the newborn population'[24] in public health pluralism opens this view to concerns like these. The pure choice view does not appear to be vulnerable to these objections, as its only goal is the promotion of choice. However, Wilkinson suggests that eugenic aims and consequences could still occur within a programme such as pure choice. One argument supporting this is that eugenics is not necessarily authoritarian or coercive in nature, as some of its historical manifestations have not had these features,[25] meaning it is both theoretically and practically compatible with individual, freely made choices. We could point out that the most striking historical examples of eugenics (Nazi mass killings, compulsory sterilization in North America) did contain significant elements of coercion, but this doesn't mean that we wouldn't find the ideas behind them troubling even if they were not forced on anyone.[26] Also, even if we can dispute the compatibility of eugenic *aims* with reproductive freedom, it has been argued that eugenic *effects* can arise through an accumulation of individual, freely made and perhaps entirely value-neutral choices.[27] A contemporary example of this is seen in recent reports that Down syndrome is 'virtually disappearing' in Iceland as a consequence of high percentages of women choosing to terminate after a positive result on a prenatal test.[28] When it comes to the expressivist argument, Wilkinson claims that in terms of the message sent out to people with disabilities, there is no big difference 'between a screening programme which aims to reduce the prevalence of disability and one that merely aims to provide choice, if it is known that most people, when given a choice, choose to avoid disability'.[29] This is obviously a relevant concern when we know that in the UK about 90% of women faced with a positive prenatal test for Down choose to terminate,[30] while in some countries Down is nearly becoming eradicated from the population.[31]

The vulnerability of pure choice to these eugenic concerns removes one key advantage it has over public health pluralism. Wilkinson suggests that the pure choice model has other unpalatable implications that public health pluralism deals with better.[32] One notable issue is how far providing choice should extend. If providing choice is the sole rationale behind offering prenatal testing, Wilkinson asks, why shouldn't we give people more options beyond testing for serious diseases and disabilities – for instance, allowing non-medical sex-selective abortion? Wilkinson suggests that, if they wish to be consistent, proponents of pure choice cannot restrict the range of choices they are willing to support, and must accept reasons for screening and termination that may seem trivial or unacceptable.[33] Public health pluralism fares better when faced with this ob-

[16] For an example of such an argument see Iltis, A. (2016). Prenatal screening and prenatal diagnosis: Contemporary practices in light of the past. *Journal of Medical Ethics*, *42*(6), 334–339.

[17] Parens, E. & Asch, A. (2000). The disability rights critique of prenatal genetic testing: Reflections and recommendations. In E. Parens & A. Asch (Eds.), *Prenatal testing and disability rights* (pp. 3–43). Washington, DC: Georgetown University Press.

[18] Saxton, M. (2000). Why members of the disability community oppose prenatal diagnosis and selective abortion. In E. Parens & A. Asch (Eds.), *Prenatal testing and disability rights* (pp. 147–164). Washington, DC: Georgetown University Press, p. 147.

[19] Paul, D. (1998). Eugenic anxieties, social realities, and political choices. In D. Paul, *The politics of heredity: Essays on eugenics, biomedicine, and the nature–nurture debate*. Albany, NY: State University of New York Press, 99–100. See also Buchanan, A., Brock, D. W., Wikler, D. & Daniels, N. A. (2000). *From chance to choice: Genetics and justice*. Cambridge, UK: Cambridge University Press. pp. 30–46.

[20] Buchanan, A. et al., op. cit. note 19, pp. 46–52, Paul, D. (2014). What was wrong with eugenics? Conflicting narratives and disputed interpretations. *Science & Education*, *23*(2), 259–271, p. 268.

[21] Wilkinson, S. (2008). 'Eugenics talk' and the language of bioethics. *Journal of Medical Ethics*, 34(6): 467–471.

[22] As it has been the case within the debate on prenatal testing, see the campaign Don't Screen Us Out. (2017). *Our concerns*. Retrieved from http://dontscreenusout.org/

[23] See for example Nelson, J. (2000). The meaning of the act: Reflections on the expressive force of reproductive decision making and policies. In E. Parens & A. Asch (Eds.), *Prenatal testing and disability rights* (pp. 196–213). Washington, DC: Georgetown University Press.

[24] Wilkinson, op. cit. note 7, p. 27.

[25] Wilkinson, op. cit. note 15, pp. 150–155. See also Paul, op. cit. note 19, p. 267.

[26] Iltis, op. cit. note 16, p. 337.

[27] Duster, T. (1990). *Backdoor to eugenics*. New York, NY: Routledge.

[28] Quinones, J., & Lajka, A. (2017). *'What kind of society do you want to live in?': Inside the country where Down syndrome is disappearing*. CBS News. Retrieved from https://www.cbsnews.com/news/down-syndrome-iceland/

[29] Wilkinson, op. cit. note 7, p. 28.

[30] Morris, J. K., & Springett, A. (2014). *The national Down Syndrome Cytogenetic Register for England and Wales: 2013 Annual report*. Retrieved from http://www.binocar.org/content/annrep2013_FINAL.pdf

[31] See note 28 above.

[32] Wilkinson, op. cit. note 7, p. 30.

[33] Ibid: 30.

jection, because it can appeal to other values in order to justify making a difference between, for example, selection on the basis of sex or disability. Importantly, the aim of reducing disease and disability prevalence in the newborn population through screening provides a clear basis for making the aforementioned distinction.[34] Public health pluralism is also concerned with cutting costs, which could be another way to prioritize offering certain choices over others as part of screening programmes.

To sum up, Wilkinson presents several important weaknesses of the pure choice view. Even if we do not accept all the particular points he makes, we are left with a strong overall case that even though it does not prioritize choice and autonomy, public health pluralism appears to be the most defensible option to accept when deciding how to regulate prenatal testing and screening. However, I argue that we need not conclude from this that attempts to base screening policy on a reproductive autonomy model should be abandoned, and that a public health model should be accepted instead. In order to support my argument I will now delve a little deeper into the characterization of the two models and offer some reasons why a reproductive autonomy model is preferable to a public health-based one.

4 | SHOULD WE OPT FOR A PUBLIC HEALTH MODEL?

Wilkinson's arguments seem to leave us at a point where public health pluralism appears to be the most defensible option. We can, however, question his characterization of the two models. I will make two brief points, one about each of the models, then move on to explain why public health pluralism, and any public health model in general, should not be accepted.

One important feature of public health pluralism is that it involves a multitude of goals including respecting autonomy and freedom of choice. This suggests that the model incorporates what we value about reproductive autonomy while avoiding the pitfalls of the pure choice view. However, we should pay attention to the exact wording of this goal: 'respecting autonomy, requiring valid consent (where practicable), and providing choice (where appropriate)'.[35] This raises suspicion about how much autonomy is really valued on this model, and whether it will in practice be subsumed under the goals of public health. It seems that this model tries to be too inclusive and includes goals that might pull in different directions, such as respecting autonomy versus assuring population, maternal or fetal health. Public health pluralism seems like a very sophisticated version of the public health model, but it is not clear how the inevitable conflicts between some of its goals would be resolved, and how much weight would be given to autonomy in such cases.

Similarly, it is doubtful whether the pure choice view that Wilkinson criticizes is a representative version of the reproductive autonomy model.[36] Pure choice is explicitly characterized in a very simple way, as a view on which prenatal screening has the one and only aim: of 'providing choice'.[37] In a way, we could say that Wilkinson contrasts a highly complex and sophisticated version of the public health model with an oversimplified and uncharitable account of the reproductive autonomy model, making the initial setup unfair.

However, I would argue that while pure choice may be overly simplistic, Wilkinson's persuasive criticism of it points to a fundamental flaw in existing reproductive autonomy models – namely, that they are based on an inadequate notion of reproductive autonomy which is overly focused on the individual context of decision-making and choice. Some authors have responded to Wilkinson by offering prenatal testing models that are slightly more complex than pure choice, having as their core goal 'enabling individual pregnant women (and their partners) to make meaningful reproductive choices with regard to having or not having a child with a serious disorder or disability'[38] or 'empowering couples with sufficient capabilities for making meaningful reproductive choices'.[39] While these proposals represent a move towards putting the notion of capability or ability at the centre of the concept of reproductive autonomy, and stress the importance of enabling and empowering women and their partners in the prenatal testing process, they still avoid explicitly noting the social context of reproductive autonomy and the many constraints on autonomy that occur before testing or counselling even happens.

At this point someone might ask, should we give up altogether on creating a satisfactory reproductive autonomy model and instead adopt a model like public health pluralism, while making sure to give reproductive autonomy a more significant place within it? I argue that this approach is not likely to lead us to an acceptable screening policy for at least three reasons.

Firstly, no matter how sophisticated or pluralist a public health model is, it will have to include the goal of 'reducing the prevalence of disability', even if this is couched in terms of 'improving population health' or 'cutting down health care costs'. Such a goal will then open the model to eugenic concerns, which point to the presence of troubling assumptions about the comparative value of different lives. Secondly, as Vardit Ravitsky has shown, explicitly endorsing a public health model is not only morally problematic but also likely to cause significant public backlash, as evidenced by the opposition to the introduction of NIPT in the UK when it was justified on economic grounds. Thus there are also pragmatic motivations to prefer the reproductive autonomy model.[40] Finally, an important fact that often gets left out of the discussion is that the primary users of prenatal testing are pregnant women, so any acceptable model would need to put their interests and needs at the centre. For these reasons, a

[34] Ibid: 31–33.

[35] Wilkinson, op. cit. note 7, p. 27.

[36] Antina de Jong and Guido de Wert point out that it is difficult to find any authors advocating such a view in the literature, see: de Jong, A. & de Wert, G. (2015). Prenatal screening: An ethical agenda for the near future. *Bioethics*, *29*(1), 46–55, p. 49.

[37] Wilkinson, op. cit. note 7, p. 27.

[38] De Jong & de Wert, op. cit. note 36, p. 50.

[39] Stapleton, G. (2017). Qualifying choice: Ethical reflection on the scope of prenatal screening. *Medicine,Health Care and Philosophy*, *20*,(2) 195–205. at 203.

[40] Ravitsky, op. cit. note 7, pp. S37–S38.

better strategy than accepting public health pluralism or any public health model of prenatal testing would be to try and come up with a better conception of reproductive autonomy on which to base the model. In the next two sections I show how such a conception can be developed, taking the 'reproductive autonomy worth having' approach outlined by Johnston and Zacharias as a starting point.

5 | REPRODUCTIVE AUTONOMY WORTH HAVING

Reproductive autonomy worth having represents a response to the important limitations of the conceptions of choice and autonomy found in contemporary bioethical discussion on reproductive technologies. What are the limitations of the usual conception of reproductive autonomy that this approach seeks to correct? Briefly, according to the traditional understanding of autonomy in bioethics, autonomous agents are defined by referring to their specific *capacities*, such as being able to deliberate about their goals and act on this basis.[41] In the clinical context, autonomy is mostly associated with obtaining informed consent, and so is seen more as a negative right – 'to be free from unwanted or unauthorized medical interventions'.[42] This approach culminated in the development of a so-called 'procreative liberty' framework,[43] which has, however, been shown to have limitations.[44] While the negative-rights-based approach to reproductive autonomy has been vital in the historical context of the struggle for basic reproductive rights, such as access to contraception and abortion, the authors rightly point out that it can fail to acknowledge significant factors affecting reproductive decisions and capacities – namely, 'the contexts that shape and constrain reproductive decisions'.[45]

Developing a richer account of reproductive autonomy requires us to move beyond conceptualizing autonomy as the *ability* to make reproductive decisions in accordance with one's values, and compels us to pay attention to the *social prerequisites* that need to be fulfilled for this to be possible. Reproductive autonomy worth having goes a step further by giving the notion of reproductive *justice* a central place in its framework, urging bioethicists 'to look beyond the clinical encounter to identify the financial, familial, cultural, and other pressures limiting people's reproductive options'.[46] In the words of Johnston and Zacharias, reproductive autonomy worth having can be attained only if we identify and attempt to address the social constraints that impact on people's being 'truly able to act in accordance with their values and priorities'.[47]

[41] Johnston & Zacharias, op. cit. note 8, p. S7.

[42] Ibid.

[43] Robertson, J. (1994). *Children of choice: Freedom and the new reproductive technologies*. Princeton, NJ: Princeton University Press.

[44] Purdy, L. (2006). Women's reproductive autonomy: Medicalisation and beyond. *Journal of Medical Ethics*, *32*(5): 287–291. Mills, C. (2011). *Futures of reproduction: Bioethics and biopolitics*. Dordrecht, The Netherlands: Springer.

[45] Johnston & Zacharias, op. cit. note 8, p. S9.

[46] Ibid. p. S10.

[47] Ibid.

It is exactly this failure to take account of the external factors influencing reproductive decision-making that affects both the pure choice view as presented by Wilkinson and other reproductive autonomy models that are overly focused on the notion of choice. Wilkinson rightly points out that free choice can seem like a smokescreen when we know that people overwhelmingly choose in one way. This does not mean that we should not offer such choices, but that we have to be aware of the wider context in which they will be made. With a richer notion of reproductive autonomy such as the one outlined above, however, we can develop a model that takes into account these factors, instead of resorting to adopting a public health model that can be criticized using eugenics-based arguments.

While Johnston and Zacharias outline their approach to reproductive autonomy in the more general context of assisted reproduction and the fertility industry, I argue that this conception is highly relevant to prenatal testing. Women's right to terminate a pregnancy, and to access the necessary information to make this decision, should of course be upheld. But the pressures they are faced with and the social factors that generate them have to be taken into account in order to develop a satisfactory reproductive autonomy model of prenatal testing. While we must concede that these social pressures will affect any reproductive decision concerning disability, regardless of the particular prenatal testing model we adopt,[48] this gives us all the more reason to develop a model that acknowledges this reality and seeks to create the conditions for women's autonomy to be upheld at this wider social scale.

In the following section I apply Johnston and Zacharias' proposal to prenatal testing. I argue that basing a prenatal testing model on this view of reproductive autonomy builds a defensible approach that responds better to the objections examined previously in this article.

6 | APPLYING THE CONCEPTION TO PRENATAL TESTING

As mentioned, Johnston and Zacharias introduce the phrase, reproductive autonomy worth having, as a general approach to reproductive ethics, and they do not draw out the implications of how their account should be applied to concrete bioethical issues. They mention that women are exposed to various pressures in the context of prenatal testing,[49] and that it is the job of bioethicists (among others) to identify and address these constraining factors. I agree that bioethicists should play a role in this, and I submit that a necessary first step in this process is clarifying the conceptual background of the policies that we wish to advocate.

The suggestion in this article is that the crucial advantages of reproductive autonomy worth having-based model lie in its focus on the social context of reproductive decision-making and the explicit commitment to reproductive justice. These features of the model,

[48] Wilkinson, op. cit. note 7, p. 33.

[49] Johnston & Zacharias, op. cit. note 8, p. S6.

when applied to the case of prenatal testing, make it more defensible than the traditional reproductive autonomy model for a number of reasons, listed below.

1. The recognition that individual choices are always somewhat affected by the social context they are made in leads to a shifting of focus from reproductive autonomy, seen as reproductive choice, to an ability that needs to be secured in all areas of life, and which is affected by the person's social environment. This broad focus removes the unrealistic demand of judging whether individual reproductive decisions are made due to eugenic preferences[50] – which could also lead to the stigmatization of people who make a particular choice. However, by approaching reproductive choices in this way we do not fall into the trap of neutrality and saying that 'anything goes' as long as it is chosen without coercion, which was one of the unpalatable consequences of the pure choice view. On the contrary, by looking at social trends and the specific traits that are prone to attracting discrimination, we can identify subtle forms of coercion and determine in which cases the option of testing will be likely to inspire pressures to choose in a certain way. With this knowledge, we can design policies accordingly – for instance, by making sure that women have access to support and counselling and that the information is presented in an adequate, non-coercive way.

But this is not sufficient to make the model distinct from existing proposals[51] or fully socially sensitive. Take again as an example the data that about 90% of people in the UK choose to terminate a Down pregnancy, which points to this being a trait that most people wish to avoid, for various reasons. In this case, what should be the aim of prenatal testing on this model? If we take reproductive autonomy seriously we surely do not want to direct women's choices or blame and shame them for making their decisions the way they do. We can recognize that in terminating a pregnancy women may simply be making a rational decision not to make their lives harder within their particular social circumstances by having a child that will need additional, costly and even lifelong support. We want to give women the necessary information to make these important decisions. At the same time, we must recognize how this fits into the broader picture of disability discrimination, the insufficient support given to individuals with disabilities and their families and subsequent eugenic effects.

I suggest that therefore the aims of prenatal testing on a rich reproductive autonomy model should be twofold. The short-term, immediate goal is to enable women to make important decisions during pregnancy by giving them access to necessary services and informative, nondirective counselling. A key element of enabling women to make these decisions is to ensure that they are truly allowed to exercise their reproductive autonomy. This requires eliminating, as far as possible, pressures to choose in a certain way that arise within the process of testing itself: from the way information is presented, the way tests are advertised and worded, the duration and appropriateness of counselling, etc.

The long-term, broad but equally necessary goal is to reduce the general pressure on women to make certain reproductive choices, or even test for certain conditions, by creating the social prerequisites for people to be able to parent their diverse children. The overall goal therefore is to respect autonomy in reproductive decision-making, with the awareness that this can only really be done on a small scale within the institution of prenatal testing itself. The bigger issue that bioethics and society at large must deal with is how to reduce the marginalization and stigmatization of people with disabilities and the consequent pressure to avoid having such a child, where a first crucial step is involving the people with these conditions in the conversation.[52]

Of course, this could be seen as hopelessly broadening the scope of reproductive autonomy, and this is where Johnston and Zacharias admit that the implementation of their proposal in practice is highly ambitious and leads to a very demanding role for the bioethicist (and other stakeholders involved). It is admittedly a difficult task to take on, but whatever model of prenatal testing we choose to employ should at least point in the direction of the desired long-term outcome, which leads to my second point in favour of this model.

2. The focus on empowering women in terms of making sure they are allowed to exercise their autonomy in their particular social circumstances explicitly points toward the desired implications of policies based on this model. In the context of prenatal testing, if we endorse a model based on reproductive autonomy worth having, this will send a message out to the public about the necessity of building societies in which choices about whether to get tested and how to act on the knowledge obtained will no longer be coerced by hostile conditions for people with disabilities. On the other hand, in the current social climate accepting a public health model of prenatal testing arguably implies that we are happy to continue towards a society where 'healthier' population outcomes are achieved by having fewer people born with disabilities, or where people are asked to think about the potential 'costs' their children might impose upon society. I suggest that a more acceptable goal for public health policy in this area is allowing women to have a less stressful experience of pregnancy, to have access to all the services and information necessary for making important reproductive decisions without being coerced or pressured, and to be confident that society will allow them to care for their child adequately even if it is born with a disability.

3. Finally, while it is admittedly difficult to translate this ambitious model of reproductive autonomy into prenatal testing practice and policy, a more socially sensitive outlook would allow policy makers to draw on already existing efforts and proposals to enhance autonomy and reduce directing decisions in certain other areas of reproduction. A good place to start may be looking at suggestions of social policies that will encourage reproductive autonomy at the individual level[53] or proposed tools for measuring reproductive auton-

[50] Ravitsky, op. cit. note 7, p. S35.

[51] De Jong & de Wert, op. cit. at p. 36, Stapleton, op. cit. note 39.

[52] An example of such practice can be found in the following report of the Nuffield Council on Bioethics (2017). *Report: the views of people with Down syndrome on NIPT*. Retrieved from http://nuffieldbioethics.org/project/non-invasive-prenatal-testing/report-views-people-syndrome-nipt

[53] See Ravitsky, op. cit. note 7, pp. S38–S39.

omy in specific decision-making contexts,[54] and seeing how these may be applicable to prenatal testing.

Some recent theoretical approaches that fit the reproductive autonomy worth having approach to prenatal testing include Laura Purdy's critique of procreative liberty and emphasis on strengthening women's reproductive autonomy;[55] Catherine Mills's positive variation on procreative liberty and her conception of reproductive autonomy as self-making;[56] and Tamara Browne's distinction between 'option and decision' reproductive autonomy and 'ultimate goal' reproductive autonomy,[57] to name only a few. Although of these only Mills's account deals directly with prenatal testing, these kinds of conceptions of reproductive autonomy could be fruitfully used in trying to construct even more sophisticated models of reproductive autonomy for testing and screening.

7 | CONCLUSION

This article argues that, in a society that aims to put respect for patient autonomy at the centre of health care ethics and law, we need a radical shift in how we understand reproductive autonomy in order to ensure that prenatal testing and screening does not fall outside this general approach. If we take the very narrow and simplified idea of pure choice as the core of the reproductive autonomy model, then we must agree with critics such as Wilkinson that this model is more problematic than a public health justification. However, due to the moral and pragmatic reasons against accepting a public health model, I argue that a model of prenatal testing based on a rich notion of reproductive autonomy provides a more conceptually sound basis for prenatal testing. I have presented the basis for such a model that considers reproductive autonomy and prenatal testing in their social context. While this model is admittedly ambitious and demanding, it is necessary if we wish to base our prenatal testing policies on genuine respect for pregnant women's autonomy, with an awareness of the constraints and pressures involved and a long-term investment in removing these conditions.

It may be argued that even if we develop a theoretically sound reproductive autonomy model of prenatal testing, it might end up being used as mere rhetoric to cover up the actual ultimate goals, such as cutting costs or even the eradication of certain kinds of people from society. This is where bioethicists and other stakeholders need to be involved in the oversight of practice and advocacy to respect autonomy. But a solid theoretical model that explicitly centres on reproductive autonomy while taking into account the external factors that endanger it is a necessary step in ensuring that women's autonomy in prenatal testing is taken seriously.

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[54] See Upadhyay, U. D., Dworkin, S. L., Weitz, T. A., & Foster. D. G. (2014). Development and validation of a reproductive autonomy scale. *Studies in Family Planning*, *45*(1), 19–41, for a reproductive autonomy scale regarding the decision whether to keep a pregnancy.

[55] Purdy, op. cit. note 44.

[56] Mills, op. cit. note 44.

[57] Browne, T. (2017). How sex selection undermines reproductive autonomy. *Journal of Bioethical Inquiry*, *14*(2):195–204.

OPEN ACCESS

Reviewing the womb

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ABSTRACT

Throughout most of human history women have been defined by their biological role in reproduction, seen first and foremost as gestators, which has led to the reproductive system being subjected to outside interference. The womb was perceived as dangerous and an object which husbands, doctors and the state had a legitimate interest in controlling. In this article, we consider how notions of conflict surrounding the womb have endured over time. We demonstrate how concerns seemingly generated by the invisibility of reproduction and the inaccessibility of the womb have translated into similar arguments for controlling women, as technology increases the accessibility of the female body and the womb. Developments in reproductive medicine, from in vitro fertilisation (IVF) to surrogacy, have enabled women and men who would otherwise have been childless to become parents. Uterus transplants and 'artificial wombs' could provide additional alternatives to natural gestation. An era of 'womb technology' dawns. Some argue that such technology providing an alternative to 'natural' gestation could be a source of liberation for female persons because reproduction will no longer be something necessarily confined to the female body. 'Womb technology', however, also has the potential to exacerbate the labelling of the female body as a source of danger and an 'imperfect' site of gestation, thus replaying rudimentary and regressive arguments about controlling female behaviour. We argue that pernicious narratives about control, conflict and the womb must be addressed in the face of these technological developments.

> 'As all historians know, the past is a great darkness, and filled with echoes.'
> — Margaret Atwood, The Handmaid's Tale

INTRODUCTION

This article traces how attitudes to female reproduction, shaped by historical misunderstandings of procreation and the female body, have perpetuated an approach that continues to subjugate and 'other' women,[i] especially as they gestate and bear children. From classical times, the womb garnered suspicion and fear among 'medical men', theologians and ordinary people partly because it was obscured from their view. Pernicious narratives about conflict and danger, born from ignorance, have endured and transmuted into modern, medicalised tropes. New reproductive technologies, heralded as increasing reproductive choice for women, equally foreshadow exacerbation of maternal–fetal conflict and medical hegemony over women's choices. We illuminate this problem and argue that such attitudes must not be permitted to direct ethico-legal approaches to emerging technology.

Until recently, the womb was an exclusively natural, static female organ, but medical science is now delivering opportunities to transplant[ii] or emulate the function of the womb.[iii] Women who suffer from uterine factor infertility can now receive a uterus transplant, and it seems feasible that soon trans women and cis men wanting to gestate their own child could too.[iv] Such advances may potentially degender[v] gestation. On the horizon, there is the promise of 'artificial wombs'[vi] creating further options for the wombless and those who want a child but not to gestate. More choices for all putative parents and better healthcare for the fetus, whether in a parent's biological uterus or a 'machine,' appear to represent progress which should be welcomed.

History, however, suggests that a note of caution must be voiced about the impact of such

[i] It is important to acknowledge that it is persons of female biology, regardless of the gender they live in or identify as, that can become pregnant. In this article, we refer to women and pregnant women because throughout history the fact that the majority of pregnant people identified as, or were assumed to be, women because of their biology has impacted on how pregnancy has been and is conceptualised and how pregnant people were and are treated.

[ii] In December 2014 the first baby was born from a transplanted uterus in Sweden.[99]

[iii] In 2017 a team of fetal scientists and surgeons in Philadelphia revealed an AW prototype that had yielded promising results in animal testing (the Biobag). Another research team, based in Western Australia/Japan, has reported similar results from testing their prototype AW, the EVE platform. In 2019 a third research team in the Netherlands announced they had received Horizon 2020 funding to build their AW prototype.[71–73]

[iv] Medical objections to uterus transplantation in non-biologically female persons (that formed the basis of the Montreal Criteria about ethical uterus transplantation) do not appear to be well-founded.[100]

[v] Claims that artificial wombs will de-gender gestation are frequently made in the literature.[96 98 101 102] For an explanation of why these claims are inaccurate see.[103]

[vi] Kingma and Finn note that it is more appropriate to refer to ectogestation and the specific names of designed prototypes because describing the technologies as 'artificial wombs' is inaccurate,[38] and as we will demonstrate the notion of an 'artificial' womb might perpetuate harmful narratives about the need to control gestation. Here, we use the term 'artificial womb' because this is how they are popularly referred to and understood, and because this term is an important part of our argument about how language is used in this context to create narratives about women.

developments on women's rights and role in society more generally. Fascination with the womb, coupled with the capacity for others to intervene for the benefit of the fetus, has culminated in the notion of 'maternal–fetal' conflict, in which the interests of pregnant woman and the fetus are presented as incompatible with, or in competition with, each other. While advances in reproductive technologies offer hope and important solutions for putative parents, there may be unintended side effects that negatively affect pregnant women because of prevailing narratives within healthcare, maternity care and wider society.

In this paper, we recall how frameworks based on the womb as a site of conflict, and concerns about the need to control women because of their wombs, are evident in medical practice and law throughout history. We then consider how these narratives have prevailed as advances in medical technologies have provided us with a 'view into the womb', and demonstrate why the conflict framework is not only conceptually and evidentially unjustified, but also potentially harmful. Finally, we examine this danger in connection with future reproductive technology, focusing on 'artificial womb' technology, to interrogate these issues in a contemporary context. We consider the development of ectogestation and argue that such technology exemplifies further why we need a wholescale shift in medicine, ethics and law away from narratives that consider pregnancy and the womb as a site of danger.

HIDDEN FROM VIEW

Possession of a womb has not always been a blessing. In the past, the woman who successfully gestated children faced an agonising labour and risk of death. Her pain was to expiate the sin of Eve in tempting Adam with that apple. The book of Genesis declares 'I will greatly multiply your pain in childbirth, in pain shall you bring forth children yet your desire shall be for your husband' (Genesis 3.7). John McKeown cites Martin Luther:

[W]e see how weak and sickly barren women are. And those who are fruitful are healthier cleanlier and happier and even if they bear themselves weary—or ultimately bear themselves out— that does not hurt let them bear themselves out this is the purpose for which they exist.[1]

For Luther, women were 'not created for any other purpose than to serve man and be his assistant in bearing children.'[1]

However, even if a woman's purpose was thought to be to gestate her husband's children, her contribution to the creation of the child was judged by many learnt men across the ages to be simply a 'seed bed' for the embryo.[2] Wombs were no more than a necessary medium in which the father's seed could grow. Aristotle argued that the embryo was formed when the male seed interacted with menstrual blood. The woman nourished the seed.[2] Galen disagreed, contending that women produced seeds, although 'weaker in nature' than the male seed. In the 17th century, anatomists examining semen under the microscope discovered sperm, originally described as 'animalcules.' The view (described as preformationism) grew that the fully formed child was present in the sperm.

Animalculism obviously proved inaccurate, but for those who believed that mothers only contributed an environment in which the father's child could grow and be nurtured, the woman was in effect a 'gestational carrier'. From this (mistaken) premise, the legal incapacities which English law imposed on married women begin to make some sort of sense.[3] The marriage contract obliged a wife to make her womb available to nourish her husband's s children. Coupled with the myth that a wife could not refuse consent to marital intercourse, perpetuated in English law until 1991,[4] husbands enjoyed something akin to what we might classify today as a right to procreate, and wives a duty to provide the means by which he might do so.[vii]

A husband's interest in the child was magnified by the firm belief that the child was 'his', the product of his body; he had the strongest of interests in ensuring that no other man's 'animalcule' was carried in the wife's womb and passed off as his. He had a further strong interest in ensuring that the behaviour of the 'gestational carrier' did not compromise his reproductive enterprise. That sadly did not mean that all husbands acted positively to promote the health of the wife. The high rates of child mortality and at many times in history the surplus of women over men might mean that quantity in reproduction was the primary objective, to generate as many children as possible and replace 'worn out wombs' with fresh stock. The desire for sons and primogeniture begin to make sense. If you accepted animalculism, a son when he reproduced begat a grandson who shared your blood. Daughters will bear a child formed by her husband's 'animalcule', unrelated to its maternal grandfather.

A working womb did not necessarily benefit the woman, but to be barren might have been a worse fate. From classical times, theologians and physicians declared barren women to be monstrous. In Ancient Greek myth, the grisly Gorgon queen Medusa, whose gaze turned men to stone, was said by some to be barren. The empty womb was dangerous, but so was any womb, dangerous to the woman and to others. Secreted far from public view, wombs were judged the cause of many female ills, or rather conditions styled 'ills' by men.

Women, learnt men declared, were defective creatures possessing weak intellectual capacity and unregulated emotions. Christian theology was supported by so-called science. The 'scientific' grounds for female defects were various, contradictory and changed over time. When it came to female physiology 'medical men', anatomists, the law, the Church *et al* resembled Alice in Wonderland trying 'to believe as many as six impossible things before breakfast.' The female body was declared to be defective compared with male perfection, yet when anatomists were able to examine the interior of female corpses, they argued that female organs could be seen as inversion of the male.[5] So, it was said that the 'neck of uterus is like the penis, and its receptacle with testicles and vessels is like the scrotum'.[2] Wombs, however, were accorded dark powers not shared by the perfect male genitalia. The 'wandering womb' which was not fixed in its proper place but wandered around the body pressing on heart and lungs endangered the woman's life resulting in 'suffocation of the mother'.[6] The wandering womb was described as 'a migratory uterus prowling about the body like a wild animal pressing on the chest.[7] The uterus emitted noxious fumes; not a desirable commodity. By no means all eminent physicians agreed that such a condition existed. The Trotula, a medieval compendium on women's medicine, rejected the notion of 'suffocation of the mother'.[8] Popular opinion on science then as now influenced society, as Edward Shorter explained 'through popular culture as well rode a visceral male fear of women's' magical powers'.[9] Wandering wombs made a good story. A cure for wandering wombs and later hysteria recommended by some medical men was sexual intercourse—within marriage of course. Writers warned of the libidinous nature of imperfect

[vii]The right to sexual intercourse was not solely linked to the right to reproduce but theological suspicions of sexual pleasure even in marriage, the notion that the primary purpose of marriage was the procreation of children in theory demoted the non-procreative role of marital intercourse to a subordinate role.

women, seeking in sexual relations with a man to be completed. As Rawcliffe notes, male writers seemed to see no contradiction in depicting the womb as both 'a passive empty vessel and a voracious animal'.[7]

If the danger of the womb was not enough, its monthly function testified further to the evidence of female defect. Menstruating women were 'venomous during the time of their flowers and so dangerous that they poison beasts with their glance and little children in their cots.' Should a man have intercourse with a menstruating woman, a child conceived might interalia be born leprous or blind, hunch backed or malformed.' Any child born in defiance of such a taboo 'would bear some mark of ignominy, if only red hair'.[7]

Once human dissection showed plainly that wombs were not apt literally to suffocate or wander around the body, Victorian doctors recast the womb as the cause of hysteria.[10] The womb disordered the female brain. We hear a great deal about 'baby brain' today and cognitive impairment in the menopause. It has been reported that women having a heart attack with exactly the same symptoms as men are often sent home told they are suffering from panic or stress[11]—hysteria by any other name?

Arcane beliefs about the womb, which underpinned laws adverse to women and especially pregnant women, no longer hold sway. The womb is no longer mysterious and yet misogynistic attitudes, which define women by their biology, persist. Look at contemporary social media abuse of female MPs. See how some US states have passed regressive laws on abortion, contra to Constitutional Rights, to police every woman's womb.[viii] As we now examine, technological advances, while potentially benefiting women, might also invite opportunities to interfere with female autonomy, increasing the potential for conflict between the interests of women and fetal welfare and the continued pathologisation of aspects of female physiology.

A VIEW INTO THE WOMB

The previous section outlined the ways in which the 'inaccessibility' of the womb was a source of rampant speculation about women and their pregnancies. Twentieth century advances in medical technology have drastically changed how we engage with women and the fetus during pregnancy, though as we will demonstrate, these have not necessarily quashed some of the backward thinking about needing to control gestation. X-ray technology initially allowed obstetricians to diagnose potential health problems prenatally, and the later development of obstetric ultrasound provided a safer way of gaining insight into fetal health, ultimately becoming a routine part of prenatal care. In the second half of the century, various forms of prenatal testing and treatment procedures were pioneered, including complex prenatal surgeries for conditions like spina bifida.[12] Many of these relatively recent developments are now used routinely, and some previously experimental and risky procedures have been made safer and less invasive, allowing their gradual introduction into healthcare.[13] These developments have placed the fetus firmly at the centre of the gestation process. Some worry that this shifts the maternal–fetal relationship to be potentially adversarial and may also lead to the woman's interests being side lined.[14] Douglas explains that 'the perception of childbearing as primarily, rather than coincidentally, a health matter has led to an increasingly more difficult dilemma for health professionals. Who is their patient, the mother or the fetus?… But in the event of a conflict of interests who should take priority?'.[15] Technology has arguably oriented the focus away from the pregnant person towards gathering as much information as possible about the fetus, potentially becoming a form of coercive control. Douglas concludes that 'the main focus of attention these days [with all of contemporary obstetric technology] has moved away from the pregnant women and towards the fetus within her… [and this] enables supervision to be maintained over the woman and to some extent her lifestyle'.[15]

Developments in fetal medicine, from heart rate monitoring to three-dimensional imaging and prenatal surgery, have made the journey from zygote to child, once hidden from view, accessible not only to pregnant women, but also their families, doctors and society. We are increasingly afforded a 'view into the womb,' leading to the perception of the fetus as a distinct being. Taylor notes that ultrasound has had the effect of bringing fetuses 'to life' in that 'it necessarily involves making visible the invisible and unmasking what has been hidden and obscured, [and] inevitably draws us into a rhetoric and politics of vision.'[16] The fetus appears as something that can be watched and 'interacted with'.[17] Technology has afforded the means 'to monitor, to control and possibly intervene.'[18]

However, an important boundary remains in the form of the pregnant woman, whose consent is essential for any kind of intervention to be performed: 'literally, if not conceptually, the pregnant woman incorporates the foetus, so direct medical access to the fetal patient is as remote as ever'.[19] Laws in many countries appear to recognise the interests of the pregnant woman as primary, and the fetus is usually not considered a being with its own rights and interests.[20] Respecting the autonomy of the pregnant patient is given ethical primacy even by those who would accept a limited notion of fetal patienthood.[21] Yet it is necessary to be vigilant as personal and social perceptions of fetal status and interests have and are likely to continue to evolve, even as legal and ethical codes maintain the autonomy of the pregnant woman as central.[22] The medicalisation of pregnancy has already led to a change in how women perceive their responsibilities to the unborn child,[23 24] and technological developments, such as more sophisticated prenatal imaging or pregnancy apps monitoring fetal well-being, could further encourage this thinking. Empirical studies of pregnant women preparing for prenatal therapy suggest that the fetus is commonly seen by them as a distinct entity with its own needs and interests.[25] Further technological development may increase the potential for tension between the perceived interests of the woman and her fetus. Consequently, it is important to interrogate the ways in which we imagine the maternal–fetal relationship as technology increases access to the womb.

There is an urgent need to avoid perceptions of the womb as a site of conflict, in order to ensure that pregnant women's bodies are not treated as a dangerous environment for the fetus, rather than an essential part of the maternal–fetal unit. Pregnant women's interests and autonomous choices must not be erased and ignored in favour of promoting fetal well-being, and the conflict view of the maternal–fetal unit seems to play a crucial role in this framing. In the next two sections, we present the notion of maternal–fetal conflict as it is often used in the ethical and legal literature, and demonstrate why this notion is unsubstantiated, incoherent and possibly dangerous, and should therefore be rejected.

[viii] For example: Alabama, Georgia, Kentucky, Louisiana, Mississippi, Missouri and Ohio.

REVIEWING CONFLICT

Maternal–fetal conflict is said to occur when a pregnant woman behaves in ways that may be harmful to the fetus, such as drinking excessive alcohol or refusing a caesarean that is medically indicated.[26 27] This is seen in definitions like: 'maternal–fetal conflict has been defined as the situation in which the intent or actions of the pregnant woman do not coincide with the needs, interests, or rights of her fetus as perceived by her obstetric caregivers'.[28] This posits the main ethical dilemma for doctors as being how to balance the interests of the pregnant woman in having her autonomy respected and the fetus in having its 'interests' or welfare protected, leading back to the problematic issue of recognising the fetus as a separate patient.

Sometimes it is not the pregnant woman who is considered to be the 'perpetrator' of the conflict—her well-being might be jeopardised by interventions aimed at ensuring the well-being of the fetus[29]—for example, more invasive maternal–fetal surgeries that may present long-term risks to the woman's health and well-being, and sometimes caesareans performed for fetal benefit. The definition above more clearly paints the pregnant woman and fetus as adversaries, rather than acknowledging that the well-being of the fetus ultimately depends on respecting the autonomy of the pregnant woman, who is usually the one most invested in ensuring good outcomes for the future child.[30 31] However, any conception of clashing interests rests on the assumption that pregnancy involves two separate parties, between whom conflict might occur, rather than a necessarily interdependent biological unit. We argue instead that this interdependence must be taken as a starting point when examining ethical issues in prenatal care and application of reproductive technology.

The notion of 'maternal–fetal conflict' is so pervasive it is often the starting point of discussions related to ethical issues in pregnancy. Bioethical discussion often takes this framework, and examples of conflict, as the default assumption[32 33] or a problem to be addressed,[34] thus generating the false perception that such conflict is widespread. Medical research also adopts this terminology at times, which inevitably frames the presentation and discussion of findings.[35 36] Most notably, maternal–fetal conflict is arguably one of the key concepts in the area of obstetric ethics,[21 37 38] including a large body of work on balancing the doctor's obligations towards the pregnant woman and those owed to the fetus.[39–41] Some have suggested that the difference of opinion between medical professionals and pregnant woman about what to do in a particular situation is the true source of conflict: the term 'maternal–fetal conflict' 'misdirects attention away from the conflict that needs to be addressed: namely the conflict between the pregnant woman and others (such as child welfare agencies, physicians and other healthcare providers) who believe they know best how to protect the fetus'.[26 42] This is reminiscent of the imagery conjured by pre-Victorian doctors treating the female body as an innate source of danger. We can see echoes of suspicion and mistrust towards women where risk is calculated by doctors who seem to be advocating for the fetus, as if the default assumption is that women's behaviour will somehow endanger it.

Conflict enshrined in the law: the example of England and Wales

The law is often the mechanism through which ethical and medical ideas about conflict in pregnancy have been translated into a substantial impact on women's bodies and choices. McLean explains that 'the attribution of rights to embryos and fetuses places the mother and conceptus in direct conflict in a number of possible situations'.[43] There are several legal principles which afford recognition to fetuses in ways influenced by conflict framing. Alghrani notes that 'many of the cases that have generated legal rules and principles on the status of the unborn have developed in the context of the abortion debate and cases of maternal–fetal conflict'[44] Thus, they have some notion of inherent conflict at their root.

In England and Wales, it has been established by the courts that the fetus does not have legal personality until birth, and therefore, it does not (and probably never did) have any claim to human rights protection.[45] Moreover, an unborn child cannot be the victim of murder, and manslaughter may only apply if it is delivered alive before subsequently succumbing to its injuries.[ix] [46] The fetus cannot be a victim of a non-fatal offence against the person irrespective of whether it survives the injury.[47] A fetus can be, however, the victim of child destruction once it has reached the gestational stage of being capable of life outside its mother's body.[48] The offence of procuring a miscarriage also safeguards fetal life unless one of the grounds specified in the Abortion Act 1967 applied.[49 x] While the case of Paton,[45] which involved an unsuccessful claim by a putative father seeking to prevent abortion, confirmed that the fetus has no right to life under Article 2 of the European Convention on Human Rights,[xi] abortion law does provide certain protections for fetal life. Section 1 (1)(a) Abortion Act 1967 can be seen to provide little, if any, protection for fetal interests up to 24 weeks gestation, but it is possible for doctors—as gate-keepers—to exercise professional discretion in seeking to discourage abortion, or indeed to refuse to participate as a matter of conscience.[46] It also might be argued that the first ground in the Abortion Act provides real protection to a non-viable fetus because it requires women to justify their terminations in medical terms (though in reference to their own bodies). It remains unlawful for a pregnant person in English law to access termination 'for any reason or no reason'.[51] After 24 weeks the potential for maternal–fetal conflict within the Abortion Act 1967 is more significant. We see, therefore, that abortion law and the Infant Life Preservation Act 1929, in offering greater protection once there is the potential for the fetus to survive ex utero, convey the message that the mature fetus has interests worthy of protection.

For women who have chosen to carry a pregnancy to term, other points of conflict arise. The shift towards greater respect for patient autonomy in medical matters has been slow to materialise in disputes involving pregnant women. The forced caesarean cases illustrate this problem.[52–54] Although the rights of pregnant women to refuse interventions intended to benefit their fetus are routinely declared in judgements,[52 53] implementation of these principles is hard to evidence since the majority of these cases involve compulsory treatment being ordered on the grounds that the woman does not have capacity. Some of the ways in which women are found to be lacking in decision-making capacity are questionable.[xii] Conversely, professional

[ix] This is also the case in several other common-law jurisdictions; the Born-Alive rule is enshrined in the Canadian Criminal Code, for example.

[x] There are compelling calls to decriminalise abortion in England and Wales in order to afford proper weight to the bodily autonomy of pregnant women.[51]

[xi] This was also confirmed in the European Court of Human Rights Decision in *Vo v France*.[104]

[xii] *Re MB*[53] left the door open to problematic findings of incapacity. In finding that panic and a phobia of needles incapacitated a pregnant woman, this judgment left open the possibility of using terms like 'panic' and 'pain' generally to establish a

reluctance to allow women to choose to give birth by caesarean, illustrated in Montgomery v Lanarkshire,[55 56] suggests that the autonomy of pregnant women is often not prioritised. Women seeking to avoid medical interference in childbirth altogether will also find their choices constrained. Article 45 of the Nursing and Midwifery Order 2001 makes it a summary offence for a person other than a registered midwife or medical practitioner to attend a woman in childbirth, unless there is sudden or urgent necessity. This is a formalised attempt to medicalise pregnancy and childbirth and take away control from the labouring woman. As such it is reminiscent of the medical comment repeatedly made of female physiology throughout history. Such instances of conflict in childbirth seem to support the view that the true conflict lies between women and the medical profession,[26] and that the presence of the fetus still means that a woman is less likely to be afforded full agency in situations where her views conflict with accepted ideals about what is 'best for baby'. Even more extreme examples are found in the USA where a pregnant woman's status as an aggressor is embedded in a wide range of criminal laws including the Federal Partial-Birth Abortion ban and fetal homicide laws at State level.[57]

REFRAMING CONFLICT

The prevalent framing of pregnancy as a site of conflict in medicine, ethics and law has been challenged, especially by authors writing from a feminist standpoint. Bowden argues that the pervasive maternal–fetal conflict conceptualisation of pregnancy is both innately problematic and empirically unfounded.[30] She explains that this model 'presents the interests of the pregnant woman as conflicting with those of the future child and therefore, the pregnant woman as a threat to her future child rather than the person who is most invested in its welfare'.[30] This can lead to the ignoring of women's autonomous choices as well as the erosion of trust between pregnant women and medical professionals, likely leading to further negative outcomes. In this section, we demonstrate that there are conceptual, outcome-based, and political and social reasons why framing pregnancy as a site of conflict is both unfounded and harmful, and must be abandoned.

First, the notion of maternal–fetal conflict is arguably conceptually unsound. This has been explored extensively within bioethical and philosophical literature. There are metaphysical arguments about the status of the pregnant woman positing that it is mistaken to consider a pregnancy as involving two distinct entities.[58 59] Some argue that considering the fetus as a part of the pregnant woman[59] or considering the fetus-pregnant woman as a unit/dyad view[19] is more accurate. Some of these authors do not attempt to draw any normative claims from such argumentation.[59] Still, their conclusions could be used as support for the idea that the pregnant woman and the fetus are intertwined such that the concept of there being separate interests cannot make sense.

The terminology around this concept is also highly suggestive and value-laden. Using the term 'conflict' perpetuates the problematic assumption that ethical dilemmas in pregnancy are a matter of clashing rights between the woman and the fetus,[26] when it is not determined in either ethics or law that fetal rights are a coherent concept.[20 60] Also, the 'maternal' in maternal–fetal conflict implies that the pregnant woman already has parental responsibilities towards the fetus while it is still in the womb, which may then conflict with her other desires and actions. This is also (rightfully) contested,[26] with some authors arguing that fetuses cannot be the proper object of parental responsibilities.[61]

Second, the outcomes for maternal and fetal health are worse when women are perceived as a potential threat to their own pregnancy. As the fetus is increasingly visualised and subject to clinical recognition as a 'patient', and even some legal recognition,[xiii] this strengthens the perception that there is a need to interfere with the choices women can make about their pregnancies, either by failing to disclose information (as in Montgomery[55]) or in the framing of childbirth as an emergency when this may not necessarily be appropriate.[62] However, empirical studies have demonstrated that fetal outcomes are better when women are enabled to take a more directive role in their own care.[30 63 64] Respecting women's autonomy is important in allowing them, the people most familiar with their own body, underlying health needs and values, to make the decisions they feel best promote their own and their fetus's welfare.

The notion of conflict is deeply rooted in a historical tradition of thinking about women and wombs. The origins of our social and medical attitudes can be found in early mistaken beliefs about procreation and the mother's gestational role. These ideas however, when applied in medical practice, encourage dysfunctional relationships between clinicians and pregnant women, as observed in forced caesarean cases where doctors often seek court approval in cases involving women with mental health conditions.[65] The presentation of a woman's health interests and personal well-being as detrimental to her fetus can also dissuade some, particularly vulnerable women, from accessing prenatal care.[30 66] Pregnant women are more likely to engage in prenatal care when they do not fear legal consequences[67] or being made to feel judged by care providers.[30] There is substantial evidence that outcomes are better for both woman and fetus when pregnant women are engaged and receive routine prenatal care,[68 69] so to guarantee this autonomy in pregnancy must be protected. Furthermore, as Bowden observes, women choosing pregnancy are almost always invested in the outcome and so treating women as a source of danger is usually spurious.[30]

Finally, there are significant political and social ramifications of the framing of the womb as a hostile environment. Some of these are already evident in practice. A worrying trend of prosecuting 'pregnancy-related offences' in some US states under so-called 'fetal protection laws' shows a perception of women as dangerous, leading to apprehension and all the consequences of life after imprisonment. These cases involve an over-representation of poor women/women of colour, showing how certain groups are disproportionately affected by conflict framing, depending on the overall political context.[70] Such thinking also encourages the view of women as 'dangerous creatures' that threaten a man's procreative interests, again echoing

person is incapable of making decisions. Since panic and pain are very common, normal and temporary states they might easily be attributed to a pregnant woman and used to conclude she does not have capacity by virtue of the fact she is in childbirth. This may 'tempt' a concerned judge to 'err on the side of finding incompetence' especially when pregnant women are in disagreement with their doctors, but pain prevents clear, reasoned explanation.[34] There are similar concerns about forced caesareans in the United States.[67]

[xiii] Even if not legally recognised as a person the fetus does have some legally protected interests, for example in the Abortion Act.[51 66 105]

the themes evident in the historical background provided earlier in this paper. Furthermore, we have demonstrated that it is not constructive, nor pertinent to the achievement of the best clinical outcomes, to routinely place blame at women's feet for failing in gestation when there are other factors that need to be addressed. There are broader socioeconomic factors that are more responsible for poor prenatal outcomes, including access to care, than any individual women's behaviour.

We argue that the above considerations show we must 'move away from presenting the needs of a developing fetus as being in conflict with those of the pregnant woman'.[30] One way to do this is by adopting a more holistic view, which regard the pregnant woman and the fetus as 'an inseparable whole whose well-being needs to be fostered before, during and after the pregnancy'.[28] Focusing on this maternal–fetal 'dyad'[19] as an interdependent biological unit is a better approach to providing ethical prenatal care than trying to balance the distinct interests of two (seemingly opposed) parties, especially since the fetus is fully dependent on the pregnant woman for its health and survival.[19] This also ensures that women are affirmed as persons, with their autonomy and bodily integrity respected. Rejecting the notion of 'conflict' reduces the risk of stigmatising pregnant women for a multitude of decisions about their gestation, from diet to childbirth. As future reproductive technologies emerge, it is particularly important that we reframe thinking about pregnancy to determine appropriate ethical and legal parameters for their use.

WOMB WITH A VIEW

One of the most anticipated developments in assisted reproduction is 'assisted gestation'; the 'artificial womb.' Ectogestation[58] is the process of gestation undertaken ex utero in a device attempting to emulate the conditions of the human womb. Complete ectogestation is the growing of babies entirely from scratch in an artificial womb; partial ectogestation is the use of 'artificial womb' devices to facilitate the continued gestation of human entities that are removed from a woman's womb prematurely. Recent animal experiments with artificial womb prototypes have demonstrated it is possible to facilitate partial ectogestation in lambs,[71–73] fuelling speculation about the development of this technology and its impact.

Artificial wombs are often heralded as a source of potential liberation for women. Simonstein and Mashiach-Eizenberg explain that 'reproductive hazards have traditionally been viewed as women's fate, and therefore, have been taken for granted'.[74] Firestone,[75] Kendal[76] and Smajdor[77] echo concerns about the physical burdens of gestation and pregnancy being placed exclusively on female people and posit that entirely removing gestation from the body offers women, finally, equal opportunity. Smajdor explains that with complete ectogestation available, women would be able to 'reproduce as men do, without risking their physical and mental health, economic and social well-being, and crucially—their bodily integrity'.[77] Partial ectogestation has also been advocated as beneficial for women as a way of alleviating some of the burdens of pregnancy by offering, for example, an alternative if pregnancy is dangerous (or potentially undesirable) in the later stages.[78] The problem with the arguments about how ectogestation might assist women in taking more control of their reproduction is that they are often advanced in a vacuum, seemingly ignorant of contemporary sociolegal conditions and importantly, women's histories. Some of our concerns about the capacity of the technology to liberate women of the burdens placed exclusively on the female body are shared by other feminist scholars.[79–81] Vallerdu and Boix assert that 'medical practices have historically maintained a form of male control over women, and that reproductive technologies have been oriented towards the male help in detriment of women's welfare'[82] and thus the introduction of ectogestation would likely be no different.

In this section, we place the (potential) development of the artificial womb into historical and contemporary context by demonstrating how prevailing narratives of maternal–fetal conflict—if not addressed—will limit the capacity of technology capable of ectogestation from benefiting women and pregnant people. First, artificial wombs might escalate the pathologisation of gestation, and second, they might fuel excessive control over natural pregnancy by creating a 'narrative of alternative.' The purpose of this examination is not to advocate that we should ban research into ectogestation, because we see the potential benefits it will bring. Rather we seek to contextualise any potential development in the prevailing and enduring norms about pregnancy to illuminate the concerns that should be considered before ectogestation is used in humans. While this investigation is inevitably speculative, it helps highlight some of the contemporary concerns about harmful conceptualisations of maternal–fetal conflict.

Pathologising gestation

Limon notes that liberal feminists often adopt pathological language in explaining the necessity or desirability of ectogestation.[83] Firestone described pregnancy as 'barbaric' and childbirth as like 'shitting a pumpkin'.[75] Smajdor refers in detail to the pain and suffering gestation causes women and explicitly claims it is a 'conceptual failure in medicine and social and ethical terms to address the pathological nature of gestation and childbirth'.[77] While Kendal advocates for ectogestation as a reproductive choice (and is explicit that she does not seek to devalue natural pregnancy and childbirth), she nevertheless describes pregnancy as 'temporary incapacitation,' as an illness or cause of injury, and suggests it is 'only logical for someone to actively avoid developing a physical condition that is guaranteed to cause significant, prolonged discomfort, especially if it also carries the risk, no matter how small, of sustaining some severe injury or death'.[76] We do not disagree that pregnancy can be difficult, harmful and in some cases dangerous. It remains true that gestating and birthing can have serious, long term, even fatal, consequences for women. However, pathologising all pregnancy could exacerbate notions of maternal–fetal conflict by explicitly locating a normal pregnancy as a source of danger and providing justification for medical intervention.

This pathologisation lends itself to the way the female body has always been 'othered.' Earlier, we demonstrated how the female body and particularly the womb has always been considered oppositional to and defective compared with the male body, pathologised in its ability to gestate, its inability to gestate and its capacity to menstruate. These female attributes were thus seen as medical matters worthy of medical supervision and patriarchal interference. The language of pathology that has been used by some scholars in explaining why some women might opt for ectogestation unintentionally implies that the fact that females carry pregnancies (and thus potentially subject to this 'incapacity' at some point or multiple times in their lifespan) renders them inferior. There are parallels between historical attitudes and the imagined 'artificial womb' utopia. Importantly, to pathologise and medicalise is to direct to the necessity of intervention and this can have material impacts. This is evident today in the stark increase in interference in childbirth, as the female body and its capacities, Wolf and Charles explain, are treated

as an 'inherently dangerous, unpredictable process that must be controlled to remove its dangers and lack of predictability' because 'serious complications can arise at any moment and create an emergency'.[62] Burrow suggests that there is an operative technological imperative in obstetrics,[84] which increasingly encourages individual clinicians to 'rationalise surgical [or technological] intervention to gain as much control as possible'.[85]

Furthermore, pathologising pregnancy treats all pregnancies as homogeneous. Many women enjoy being pregnant,[xiv] so we must be mindful of how using language that describes pregnancy as 'an illness,' analogising it to a disease or referring to it as 'temporary incapacitation' feeds into old-fashioned claims about the inherent pathology of female biology. This is to denigrate natural pregnancy and the women who value the experiences of pregnancy and labour. Moreover, it paints the female body as a dangerous place and feeds into claims that fetuses might be safer gestating ex utero. A woman's body is perceived as a conflict zone to be avoided in favour of ectogestation.

Narrative of alternative

We have examined how the womb being both invisible within the pregnant body, yet increasingly visible with a wide variety of technologies has led to the conceptualising of the pregnant body as an environment in need of supervision. The visibility of the fetus has potentially increased the prevalence of conceptualising pregnancy as a conflict-zone of competing interests. The possibility of a fetus being gestated externally further increases the visibility of the fetus and could potentially impact on how a fetus in a pregnancy is conceptualised. Sander-Saudt posits that 'conflicts between the rights of women and fetuses will be heightened greatly as a result of this technology'.[86] The view, even sometimes expressed in the courtroom, that the fetus is 'a fully formed child, capable of a normal life if only it could be delivered from the mother'[87] is potentially emboldened by technology that allows us to see, control and visualise gestation in every material way. If there is an alternative space for gestation there may be an increased tendency, as this view is already prevalent to some extent, to view the pregnant woman as a 'temporary fetal container'.[79] These concerns reflect aspects of Aristotle's view of the woman as the mere 'seed bed'.[2]

The idea of there being an alternative to the pregnancy for the fetus is consistently used inappropriately in the context of gestation to control the behaviour of pregnant women.[88] The fact that a fetus if delivered prematurely might be able to survive in neonatal intensive care at a given fixed point (usually identified as 24 weeks) is repeatedly used as justification to control a woman's body. After this point she is not allowed to end her pregnancy unless a fetal abnormality is present, or her health is seriously threatened. The fact that the fetus could perhaps survive ex utero—though it remains unlikely until 26 weeks[89]—prevents abortion on all but serious medical grounds. Simultaneously, she is not allowed to prematurely deliver that fetus intending for it to receive neonatal intensive care unless there is medical justification.[xv] The artificial womb is frequently posited as both an alternative to abortion,[90–92] and to pregnancy.[78 93 94] It is inappropriate to consider ectogestation as an alternative to abortion for three principal reasons. First, because the procedure to extract a fetus for ex uterum gestation is far more invasive than the procedures of medical or surgical abortion.[78 79] Second, because women want access to abortion care as early as possible; most care is provided before 13 weeks,[95] and there is not yet evidence to suggest that artificial womb technology will be capable of gestating embryos since current prototype models are reliant on fetal physiology.[81 xvi] Finally, several scholars have highlighted that abortion is meaningful not only a right not to be pregnant, but to encompass the broader harmful social realities for women if forced to accept the consequences of unwanted pregnancy.[79 81 83] Romani and Horn argue that it is important to reground conversation about ectogenesis in the realities of this technology and its unsuitability as an 'alternative to abortion' calling for scholars to consider the ramifications of neglecting to understand abortion as healthcare.[81]

It is also harmful (and likely always going to be factually inaccurate)[xvii] to label ectogestation as an alternative to pregnancy. Pence[94] and Hammond-Browning[93] both advocate that ectogestation might be beneficial in those instances in which a pregnant woman is behaving 'inappropriately', for example, abusing substances. It is thought that ectogestation brings the possibility of 'safeguarding' fetuses and embryos without interfering with women's rights.[96] It is not difficult to extrapolate from this argument that there is seemingly frustration that maternal rights are seen to be interfering with the goal of protecting a fetus (clearly placing the pregnant person, even if unintentionally, second in the pecking order) and ectogestation is thus seen as a tool to ensure these interests can be superseded. What is concerning about these arguments concerning the welfare of fetuses (and/or potential 'ecto-children'[xviii 93]), is that they invite the potential for 'increased control and pressure to use ectogenesis to secure the fetus',[80] or to encourage compliance in a multitude of different ways with medical recommendations about behaviour during pregnancy.[96] Welin posits that, if ectogestation were to come to fruition, 'women who choose to have a natural pregnancy [in its place] will have to face restriction on lifestyles. At least, I believe it will be very hard to argue against such restriction in order to protect the fetus…'.[96] This kind of argumentation is maternal–fetal conflict rearing its ugly head once more and it is reminiscent of animalculism and the view of a woman as her husband's 'gestational carrier.'

Situating gestation and pregnancy

Petchesky wrote of ultrasound imagery that women must be re-centred in discussions of pregnancy with attention to context; placing the fetus 'back into the uterus, and the uterus back into the woman's body and her body back into its social space'.[18] In discussions of ectogestation, there is an abject failure to recognise the realities of the technology that scholars are referring to. Arguments made about moral obligations of pregnant women or about the experience of pregnancy in the event of this

[xiv] There are many women (and non-women) campaigning for a right to gestate. For example, those who want to receive a womb transplant in order to be able to carry a pregnancy or women who campaign for access to IVF treatment.

[xv] For example, her life is threatened by a condition like preeclampsia or the fetus is displaying signs of intrauterine growth restriction.

[xvi] Model AW prototypes currently being tested on animals are reliant on the subject being developed beyond an embryo; for example, it must have a primitive heartbeat to enable circulation.[71 97]

[xvii] It is hard to imagine a technology that could emulate natural pregnancy so well that it was literally a direct alternative to pregnancy.

[xviii] Inevitably referring to the subject of an artificial womb as an 'ecto-child'[93] uses emotive language to describe the entity that can be potentially used to compel behaviour during pregnancy. This is one of the reasons why the term 'gestateling' [105] for the subject of the artificial womb is thought to be important.

technology are based on unhelpful generalisations. What is most important to highlight is that in any event the capacities of the technology mean that, first and foremost, gestation takes place inside the female body. Any claims made directly about uses of or conditions following the development of the artificial womb inevitably impact on the female body and experiences of pregnancy. Even where gestation can take place partially ex utero, it is a process that originates from and remains partially unique to the female body. Placing this reality at the centre of argumentation can prevent the subjugation of the gestating body and their autonomy.

Furthermore, appropriate language must be used to describe pregnancy and gestation that is inclusive of diverse reproductive experiences that differ person to person based on social factors, lived realities and reproductive preferences. Reproductive consciousness is individual, complex and corporeal and thus is difficult to generalise.[18] It is crucial that natural pregnancy is not denigrated in discussions about the potential benefits of the technology. While describing the extent to which artificial womb technology can alleviate some burdens in later-term pregnancy for women who may need or choose relief, Firestone[75] and Smajdor[77] explicitly and Kendal[76] implicitly use language that devalues the capacities of the female body and the empowering experiences of some pregnant women. Adopting language that is inclusive of a range of reproductive experiences can help prevent the pathologisation of gestation and assist in the conceptual understanding that the artificial womb is not a 'direct' alternative to a natural pregnancy that can be used to dictate the conditions of pregnancy and the behaviours of pregnant women.

Artificial wombs might be thought of, for some women, as an alternative to continuing their pregnancy at some risk to their life or health. However, the artificial womb ought not to be discussed as an 'alternative' in general terms to either abortion (because this claim is false[81]) or gestation. Gestation is the process of genesis of a human entity in the womb; pregnancy is the task performed by the womb and female body in sustaining gestation. An 'artificial womb' may be an alternative form of the process of gestation, but it is not an alternative womb (organ of the female body) or pregnancy.

Petchesky also contends that we must 'separate the power relations within which reproductive technologies, including ultrasound imaging, are applied from the technologies themselves. If women were truly empowered in the clinic setting, as practitioners and patients, would we discard the technologies?'[18] It is clear that ectogestation has the potential to be an incredible tool to assist pregnant women and potential parent(s) where used as an alternative to neonatal intensive care[97] and in the absence of the concerning power dynamics outlined should be welcomed. Our task then is to mediate how such technology can come to fruition without exacerbating problematic notions of pregnancy and fetal welfare as oppositional to pregnant women; this is best done by demanding that the maternal–fetal framework is abandoned.

CONCLUSION

Examining historical medical and social attitudes to women, and particularly pregnant women, helps us understand how and why misogynist tropes and damaging narratives about maternal–fetal conflict endure over time, influencing the (mis) treatment of pregnant women now and potentially in the future. We explored how historical narratives of the woman's purpose as 'gestational carrier' have persisted as increasing access to the womb has influenced the perception of the fetus and its status as a potential 'second patient.' Historical suspicion of the womb when obscured from view has equally endured, despite increasing visibility resulting from technologies routinely used in obstetric care, as the womb, pregnancy and childbirth have institutionally been rendered an 'emergency'[62] warranting medical intervention. We must be mindful of these trends when speculating about future technologies and in order to minimise notions of conflict compromising care today.

It is frequently posited that a wide variety of technologies, from fetal heart rate monitoring in childbirth to ultrasound, have enabled more intervention in pregnancy.[62] This has strengthened the perception that the fetus has distinct interests that are directly impacted on by the pregnant woman's behaviour, which is perceived as a potential threat to those interests. We demonstrated that this conception of conflict is erroneous in several ways, both conceptually and factually. It is additionally problematic in that it fails to encompass the social context of pregnancy and the maternal–fetal unit. As Bowden explains, by 'focussing on the behaviour of pregnant women other more significant causes of prenatal harm such as poverty and poor prenatal care are obscured and overlooked'.[30] In order to ensure we respect women's reproductive autonomy in a meaningful way, especially in view of a future that may bring even more innovative technologies and possibilities for intervention in pregnancy, we must abandon this overly simplistic and biased concept.

Future reproductive technologies may have emancipatory potential for women, but they may equally end up entrenching problematic patriarchal notions and gender roles. Jackson warns that advocating for ectogestation as a safer alternative for fetuses would be extremely harmful 'since it carries the implication that the maternal body is a source of danger for the developing fetus when this is of course very seldom the case'.[79] The possibility of advocating for ectogestation in place of pregnancy demonstrates how the artificial womb might be preferred in order to exert control over the process of gestation. The evident enthusiasm for the idea that the power of creation would no longer be contained exclusively in the female body, reveals the power of the maternal–fetal conflict narrative. We can see this in the multitude of authors who have made confident claims about a man's entitlement to equal control over ex utero gestation.[96 98] These seemingly echo the historical calls of medical men and putative fathers in their attempts to assert control over reproduction. We; therefore, should be mindful of these concerns in the development of technology that, in attempting to emulate gestation, has promising benefits for the care of preterm neonates and for women experiencing dangerous pregnancies. Reorienting our understanding of pregnancy away from maternal–fetal conflict will ensure that potential benefits from future assistive technologies like ectogestation can be realised, but also will benefit pregnant women experiencing problems resulting from conflict in contemporary prenatal care.

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Surrogacy and uterus transplantation using live donors: Examining the options from the perspective of 'womb-givers'

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Abstract

For females without a functioning womb, the only way to become a biological parent is via assisted gestation—either surrogacy or uterus transplantation (UTx). This paper examines the comparative impact of these options on two types of putative 'womb-givers': people who provide gestational surrogacy and those who donate their uterus for live donation. The surrogate 'leases' their womb for the gestational period, while the UTx donor donates their womb permanently via hysterectomy. Both enterprises involve a significant degree of self-sacrifice and medical risk in order to enable another person(s) to become a parent by either providing gestational labour or enabling the other person to undertake gestation themselves. In this paper, we explore the burdens and the benefits from the perspective of the womb-giver in order to inform ethical debate about assisted gestation. This is a perspective that is often neglected in the bioethical discourse. With both surrogacy and UTx, when success follows the womb-giver's sacrifice, the key benefit is delivered to the intending parent(s), but as this article examines, the womb-giver may also enjoy some unique (relational) benefits as a result of their sacrifice. Ultimately, the choice of how a womb-giver lends assistance in gestation will impact on their bodily autonomy; some will prefer to carry a pregnancy and others to donate their uterus. We argue that the perspective of the womb-giver is crucial and thus far has not been afforded sufficient consideration in ethical discussion.

KEYWORDS

assisted gestation, live uterus donation, surrogacy

1 | INTRODUCTION

Absolute uterine factor infertility (AUFI) is estimated to affect approximately 1 in 500 females globally.[1] Without a functioning womb, this group is unable to gestate and are consequently reliant on some form of assisted gestation—either by arranging a surrogate to gestate for them, or by undergoing a uterus transplantation—if they hope to experience genetic parenthood.

While the ethico-legal issues raised by both surrogacy and uterus transplantation using live donors (UTx) have been much discussed,[2]

[1]O'Donovan, L., Williams, N. J., & Wilkinson, S. (2019). Ethical and policy issues raised by uterus transplantation. *British Medical Bulletin, 131*(1), 19–28.

[2]For example, see, Sheldon, S., & Horsey, K. (2012). Still hazy after all these years; The law regulating surrogacy. *Medical Law Review, 20*(1), 67–89; Alghrani, A. (2018). *Regulating assisted reproductive technologies: New horizons*. Cambridge University Press.

this paper develops the debate by closely examining the comparative burdens and benefits from the perspective of the person[3] who shares their womb; the *womb-giver*.[4] Although deceased donation in UTx may facilitate a successful pregnancy, evidence suggests that live donation is more likely to result in a live birth.[5] There is also a problem with the availability of suitable uteruses from the deceased and so, despite the ethical preference for deceased donation,[6] a 'needs must' approach seems to be driving the ongoing reliance on live donors.[7]

A significant focus of the UTx debate has been the right to gestate, and/or whether the alternatives, particularly surrogacy, might be ethically preferable.[8] A person suffering from AUFI might see UTx as preferable to surrogacy because, when successful, it enables gestation and immediate, automatic legal parenthood. For live donation UTx, while a third-party donor is essential, they are not directly involved in the reproductive process once the donation is completed, allowing the intending parent(s) to continue their family building independently, which is not the case in surrogacy.

In the UK both surrogacy and live donation for UTx are legally permissible as an act of altruism, where one person 'shares' their uterus for gestation or donates their uterus to help another. With surrogacy, concern over the exploitation of the surrogate has shaped the debate and the legal response, and in some jurisdictions this concern, together with moral distaste over the commodification of childbearing, has led to prohibition.[9]

Both UTx and surrogacy are potentially harmful to the womb-giver (WG), either because they risk their health during a pregnancy and childbirth and may be exploited as a surrogate, or because they risk their health donating a uterus. Both options, however, might also deliver specific benefits to the womb-giver that are important to them and which justify the sacrifice and associated risks. Little attention has been paid to the benefits for the WG in the literature and this paper seeks to address this gap. Moreover, paternalistic arguments seeking to safeguard the putative womb-seeker and WG may crumble if we believe that respecting individual autonomy is essential. While for the intending parent(s) this is a matter of respecting their reproductive autonomy in choosing the kind of assisted gestation they prefer, for the WG the issue is primarily one of respect for bodily autonomy, in the sense of allowing them to make choices about assisted gestation.

First, we set out the current UK legal position and the practical steps involved in surrogacy and UTx, before we consider the altruistic paradigm and the associated ethical implications. Although UTx is not yet available as a treatment in the UK,[10] for the purposes of this discussion we assume that it will become an accepted treatment for AUFI so that eventually there might be a meaningful choice between surrogacy and UTx.

We then examine the risks and benefits attached to each experience starting from the perspective of the potential WG. In order to evaluate the anticipated benefits and burdens of the respective processes, we ask the reader to consider a hypothetical scenario that illustrates how the risk assessment might direct the choice between UTx and surrogacy. We will not consider the significant obstacles for intending parents—the practicalities of access and cost for both options—except where this is relevant in considering the comparative experiences of the WGs in these scenarios. Our examination and evaluation of these issues from the WG's perspective, and in a manner that is not wholly focused on the *burdens* of being a surrogate or a uterus donor, develops the bioethical discourse on assisted gestation.

2 | SURROGACY AND UTx

Both surrogacy and UTx require the WG to consent to the womb-share, and then to undergo a series of medical interventions in order to enable the intending parent(s) to achieve their objective. Finding a definitive answer to the question of whether surrogacy or donating a uterus is more burdensome for the WG is impossible, because it will depend upon the subjective experience of each individual. However, we can theoretically assess the burdens, risks and benefits that impact on surrogates and uterus donors based on what is already known about both experiences. We approach this exercise by considering the processes and interventions that participants will experience, and the associated risks and benefits for them.

2.1 | Surrogacy

An intending parent considering surrogacy will generally seek a stranger willing to act as a surrogate in exchange for payment (expenses), although surrogacy may be arranged within families or between friends. In the UK, the accepted approach is founded on

[3]We use the term 'person' as an inclusive term to describe the individual sharing their womb. The term 'woman' is both too narrow and too broad to describe those with the physiology to carry a pregnancy: Ross, L., & Solinger, J. (2017). *Reproductive justice*. California University Press, p. 8.

[4]We have adopted the term 'womb-giver' for people who both offer their services as a gestational surrogate and those who donate their womb via UTx. We recognize that this term could have problematic connotations when discussing surrogacy because the womb is retained; however, we found that this was the most adequate term that encompassed both people temporarily 'leasing' their womb and those donating their womb for the purposes of our discussion.

[5]Olausson, M. (2020). Live or deceased uterus donation. In M. Brannstrom (Ed.), *Uterus transplantation* (pp. 79–82). Springer.

[6]See for example, Williams, N. J. (2016). Should deceased donation be morally preferred in uterine transplantation trials? *Bioethics*, *30*(6), 415–424.

[7]Ibid, and see also, Kvarnstrom, N., Enskog, A., Dahm-Kähler, P., & Brännström, M. (2019). Live versus deceased donation in uterus transplantation. *Fertility and Sterility*, *112*(1), 24–27.

[8]For example, see; O'Donovan et al., op. cit. note 1; Lotz, M. (2018). Uterus transplantation as radical reproduction: Taking the adoption alternative more seriously. *Bioethics*, *32*(8), 499–508; Testa, G., Koon, E. C., & Johannesson, L. (2017). Living donor uterus transplantation and surrogacy: Ethical analysis according to the principle of equipoise. *American Journal of Transplantation*, *17*(4), 912–916.

[9]For example, Sweden and Italy.

[10]At the time of writing UTx is in the research phase and so is possible only for those accepted onto the clinical trial. The research is led by Mr Richard Smith at the Lister Hospital, Chelsea, and Imperial College, London, and supported by Womb Transplant UK. See Womb Transplant UK. (n.d.). https://wombtransplantuk.org/about

altruistic rather than commercial surrogacy, although it is now lawful for surrogacy organizations to recover the cost of helping to negotiate agreements between surrogates and intending parents.[11] Regardless of whether the surrogate is a sister or a stranger, only 'reasonable expenses'[12] may be paid to compensate expenses incurred as a result of the pregnancy.[13] Surrogacy might be either 'gestational', where the surrogate is implanted with an embryo that is not related to them, or 'genetic', where the surrogate's eggs are used. In gestational surrogacy, the surrogate must undergo an invasive procedure to have the embryo implanted and if this is not immediately successful, they might experience this more than once. If the surrogate has agreed to use their own eggs, the path to pregnancy via artificial insemination is less burdensome than embryo implantation, though it remains invasive.

Both arrangements are lawful subject to some restrictions.[14] Surrogacy agreements, however, are not contractually binding, and so neither the surrogate nor the intending parent(s) is legally bound to fulfil their part of the arrangement. Once the child is born, the surrogate is the legal mother until they surrender parental rights,[15] usually via a parental order but otherwise via adoption.[16] Legislation on surrogacy varies between countries, in part due to the fact that it is considered an ethically controversial practice, and where it is allowed it is usually in its altruistic rather than commercial variant.[17]

Two of the most prominent ethical objections to surrogacy are the so-called exploitation and commodification arguments.[18] The commodification argument states that surrogacy is immoral as it entails inappropriate commodification of the surrogate's reproductive capacities and the process of gestation and birth.[19] Commercial surrogacy is considered particularly problematic as there is a worry that paying for the services of a surrogate in this way amounts to baby selling. The exploitation objection stipulates that surrogacy can be exploitative in different ways for those who perform it, inherently or situationally.[20] While both these worries seem somewhat diminished in the context of altruistic surrogacy, the issue of exploitation remains relevant and will be discussed later in this paper.

2.2 | UTx

Following the first live birth after live uterus donation in Sweden,[21] several other countries have reported successful cases after live donation and, more recently, deceased donation has also proved successful in several countries.[22] Thus far, all the live donations have involved the intending parent(s) sourcing their own donor. In Sweden, for example, close female relatives (usually mothers) or relatives by marriage (mother-in-law) to the recipients provided the donated organs.[23] In one sense this might be seen to fit within accepted frameworks for the altruistic gifting of an organ to save or help an afflicted individual.[24] In their comparative analysis of (commercial) surrogacy and UTx, Kroløkke and Peterson suggest that the altruistic paradigm may be inadequate in explaining the 'bio-intimate encounter' involved in UTx.[25] Our examination also shows that while altruism is the central theme, other relational factors influence the experience.

Presuming that the potential donor is a close relative or friend of the intending parent(s), the possibility of UTx might first be raised as an abstract possibility within the family/social group before any role for the donor is considered. The first ethical issue emerges when the prospective WG is asked to donate their uterus. Ordinarily, consent to live organ donation in the UK is regulated by the Human Tissue Authority (HTA).[26] The role of the HTA is to ensure that consent is freely given, with no duress, coercion or payment, which would compromise consent. The risks of consent in this context, however, are not a new phenomenon as live organ donation is well established and usually—for example, with live kidney donation—the *gift* will come from a relative of the recipient.[27] Nevertheless, there are arguably significant differences between donating a kidney and donating a womb. Donating a kidney is often lifesaving or significantly life-enhancing for the recipient. The discomfort the donor endures is

[11]The Surrogacy Arrangements Act 1985 forbade commercial surrogacy, though an amendment to this Act provided by the Human Fertilisation and Embryology Act 2008, made it permissible for non-profit organizations to recover costs and receive reasonable payment for negotiating a surrogacy agreement.

[12]COTS, one of the UK's surrogacy organizations states that reasonable expenses will be in the region of £12,000 to £15,000. See: COTS; Childlessness Overcome Through Surrogacy. (n.d.). https://www.surrogacy.org.uk/surrogates

[13]For example see *Re L (A Minor)* [2010] EWHC 3146 Fam.

[14]See: Surrogacy Arrangements Act 1985, Human Fertilisation and Embryology Acts 1990 and 2008.

[15]Section 27 HFE Act 1990; S.33 HFE Act 2008.

[16]See section 54 HFE Act 2008 re Parental Orders.

[17]Igareda González, N. (2019). Regulating surrogacy in Europe: Common problems, diverse national laws. *European Journal of Women's Studies*, *26*(4), 435–446.

[18]Law Commissions of England and Wales and the Scottish Law Commission. (2019). *Building families through surrogacy: A new law. A joint consultation paper.* https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2019/06/Surrogacy-consultation-paper.pdf

[19]Anderson, E. (1990). Is women's labor a commodity? *Philosophy and Public Affairs*, *19*(1), 71–92.

[20]Stuvøy, I. (2018). Troublesome reproduction: surrogacy under scrutiny. *Reproductive Biomedicine & Society Online*, *7*, 33–43.

[21]Olausson, op. cit. note 5.

[22]For example see; Ejzenburg, D., Andraus, W., Mendes, L., & Ducatti, L. (2018). Livebirth after uterus transplantation from a deceased donor in a recipient with uterine infertility. *The Lancet*, *392*(10165), 2697–2704; Fronik, J., Kristek, J. Chlupac, J., Janousek, L., & Olausson, M. (2021). Human uterus transplantation from living and deceased donors: The interim results of the first ten cases from the Czech trial. *Journal of Clinical Medicine*, *10*, 586; Flyckt, R., Falcone, T., Quintini, C., Perni, U., Eghtesad, B., Richards, E. G., Farrell, R. M., Hashimoto, K., Miller, C., Ricci, S., Ferrando, C. A., D'Amico, G., Maikhor, S., Priebe, D., Chiesa-Vottero, A., Heerema-McKenney, A., Mawhorter, S., Feldman, M. K., & Tzakis, A. (2020). First birth from a deceased donor uterus in the United States; From severe graft rejection to successful cesarean delivery. *American Journal of Obstetrics and Gynecology*, *223*(2), 143–151.

[23]Olausson, op. cit. note 5.

[24]Steinberg, D. (2010). Altruism in medicine: Its definition, nature, and dilemmas. *Cambridge Quarterly of Healthcare Ethics*, *19*(2), 249–257.

[25]Kroløkke, C., & Peterson, M. N. (2017). Keeping it in the family: Debating the bio-intimacy of uterine transplants and commercial surrogacy. In R. M. Shaw (Ed.), *Bioethics beyond altruism*. Palgrave Macmillan.

[26]The Human Tissue Act 2004.

[27]Brazier, M., & Cave, E. (2016). *Medicine, patients and the law*. Manchester University Press, p. 523.

likely to be justifiable because it allows them to continue a relationship with their loved one. However, a uterus transplant, as a 'lifestyle transplant',[28] is more ethically controversial. Donating a kidney is also a routine, and less risky surgical procedure for the donor, which makes the practice less ethically controversial than UTx. Closer attention may, therefore, have to be paid to the risk that consent is (unintentionally or not) the result of undue influence.

Once it is established that consent is informed, voluntary and uncoerced, the second issue emerges with the interventions required to remove the uterus. If the donor is approved as a clinically suitable candidate to donate their uterus, the surgery to extract the organ can go ahead. Where donors are post-menopausal, hormone replacement treatment is necessary for 3 months prior to surgery in order to ensure endometrial thickening in a menstrual cycle and reverse any potential arterial changes.[29] Essentially, the removal of the uterus is a form of hysterectomy, which makes it a highly invasive surgery, characterized by Williams as 'necessarily harmful'.[30] Because the organ is being 'harvested' for subsequent use, rather than simply removed, the surgery is more complex and risky than a hysterectomy performed for clinical reasons. It is notable that all successful UTx procedures to date have been performed as open surgeries rather than using minimally invasive techniques.[31]

2.3 | Noting the distinction between surrogacy and UTx

For the womb-seeker[32] there may be reasons, related to their reproductive autonomy and the choices they want to make about *how* to reproduce, why surrogacy and UTx are not alternatives. Even if the outcome (a biologically related child) is the same, UTx allows the womb-seeker to gestate and surrogacy does not. We know that, for some prospective mothers, this is significant, and we agree with O'Donovan that we ought to respect the autonomy of a person wishing to do this.[33] However, in this paper we are focussing on the experiences of the donor. Whilst the womb-seeker's choices about surrogacy versus UTx might be characterized as a matter of reproductive autonomy, we suggest that the situation from the womb-donor's perspective is actually a matter of bodily autonomy. In deciding *how* they want to assist by sharing or giving their womb, a person is deciding on *how* they use their *body* to assist. Sometimes there is a tendency to misconstrue decisions during pregnancy or about the womb (for example, about childbirth) as reproductive decisions when they must first and foremost be recognized as decisions about a person's bodily boundaries.[34] Furthermore, in many instances, assisted gestation will not involve the contribution of gametes from the person assisting and we might take it that, from the perspective of the person assisting, they would not necessarily consider this a *reproductive* decision. Indeed, they are far more likely to be preoccupied with bodily consequences when deciding whether to assist.

Some people might be happy to donate their uterus because they would prefer not to have it, or are not concerned about keeping it. They might prefer the risks associated with the hysterectomy over the perceived burden of pregnancy. Others might prefer to keep their womb and experience pregnancy. While for the womb-seeker UTx and surrogacy are very different, to a WG they might seem like alternatives to be weighed.

In reality, most people (whether intended parents or WGs) are not in a position to conduct a comparative ethical analysis of UTx versus surrogacy. In the UK, although surrogacy is permitted, it may be beyond the financial means of many intending parents. Similarly, UTx is not yet available unless one is fortunate enough to be accepted on the trial. If and when it becomes available, we do not know if it will be publicly funded. If the trial is successful and subsequently UTx is funded by the state, there will be a genuine choice to seek UTx. Finally, even if both options were available the WG might feel limited in their choices by what is specifically asked of them by putative parents. In the next section, in order to examine how intending parent(s) and a putative WG might consider the respective burdens and benefits of surrogacy and UTx, we consider a hypothetical case involving a decision between these two options.

3 | CHOOSING BETWEEN SURROGACY AND UTx

Consider the following scenario involving two sisters, Ali and Bea:

> Ali has AUFI, though she has ova and it is her wish to use these to become a biological parent. Her partner, Charlie, has a good sperm count. Ali's older sister Bea, who is supporting Ali in her attempt to become a parent, has offered to help Ali by either donating her uterus or acting as a surrogate. Bea is 38 and has two children, aged 10 and 14. She is sure that her family is

[28] Williams, N. (2019). '*Transferring the womb: The rights and responsibilities of stakeholders.*' Reconceiving the womb,' Reconceiving the womb in medicine, law and society (Institute of Medical Ethics Funded) University of Manchester, November 4, 2019.

[29] Brucker, S. (2018). Selecting living donors for uterus transplantation: Lessons learned from two transplantations resulting in menstrual functionality and another attempt, aborted after organ retrieval. *Archives of Gynecology and Obstetrics, 297*, 675–681.

[30] Williams, op. cit. note 6.

[31] Brännström, M., Dahm Kähler, P., Greite, R., Mölne, J., Díaz-García, C., & Tullius, S. G. (2018). Uterus transplantation: A rapidly expanding field. *Transplantation, 102*(4), 569–577. Although we note that laparoscopic-assisted uterus donor retrieval is currently being researched and has been deemed feasible, see Puntambekar, S., Telang, M., Kulkarni, P., Puntambekar, S., Jadhav, S., Panse, M., Sathe, R., Agarkhedkar, N., Warty, N., Kade, S., Manchekar, M., Parekh, H., Parikh, K., Desai, R., Mehta, M., Chitale, M., Kinholkar, B., Jana, J. S., Pare, A., … Phadke, U. (2018). Laparoscopic-assisted uterus donor retrieval from live donors for uterine transplantation: Our experience of two patients. *The Journal of Minimally Invasive Gynecology, 25*(4), 622–631.

[32] We use the term womb-seeker for someone who needs access to another person's womb for the purposes of gestation.

[33] O'Donovan, L. (2018). Pushing the boundaries: Uterine transplantation and the limits of reproductive autonomy. *Bioethics, 32*(8), 489–498.

[34] See: Romanis, E. C. (2020). Addressing rising cesarean rates: Maternal request cesareans, defensive practice, and the power of choice in childbirth. *International Journal of Feminist Approaches to Bioethics, 13*, 1–26, p. 11.

complete. For the purposes of the scenario, we assume that neither Ali nor Bea has any strong preferences regarding which form of assisted gestation is appropriate for them. Faced with both options, the sisters decide to consider both possibilities in order to be sure that they are choosing the least harmful option for Bea.

3.1 | Surrogacy

Gestational surrogacy is often a far longer process than the pregnancy itself (on average around 24 months).[35] It involves the physical and psychological risks of assisted conception treatments,[36] and in some cases failed pregnancies and difficult births.[37]

As Ali's wish is to have a genetically related child, and as she has ova despite not possessing a functional womb, Bea will need to be implanted with an embryo created via IVF from Ali's eggs and Charlie's sperm. As Bea has had children, we may assume that she should not have issues with the implantation of the embryo; however, it should be noted that Bea's last pregnancy took place 10 years ago and her ability to carry a pregnancy might have diminished with age. If Bea does not conceive on the first attempt, the embryo transfer will need to be repeated, implying more invasive procedures for her and more costs for Ali. In addition, as a result of her age there may be some age-based restrictions on her access to IVF where publicly funded.[38] This may place an additional psychological burden on Bea in hoping that the process is quickly successful to reduce the emotional and financial burden on her sister.

Once the pregnancy is established, Bea will be subject to all the usual risks of pregnancy and childbirth. Pregnancy can be difficult for some people; it means sharing bodily resources with the foetus for a significant period of time, experiencing hormonal changes, and difficult symptoms including morning sickness, swollen limbs and limited mobility. Moreover, a pregnant person may be unable to live their life as normal and may feel that they are treated differently by others. Complications might arise that are even more difficult, including preeclampsia, gestational diabetes and uterine infections. The likelihood of a more complex pregnancy also increases with age.[39] It is likely that Bea's pregnancy will be closely monitored as several people will be invested in it, and attending the prenatal checks will likely present bonding opportunities not only for Ali, Charlie and their future child, but also for Ali and Bea and finally, Bea and the future nephew/niece. However, if something goes wrong during the pregnancy, the stress for Bea may be exacerbated by the involvement of several parties. Childbirth is also not without risk of serious injury. Vaginal delivery (that is often assisted) is associated with tearing, pelvic floor injury and/or incontinence.[40] Complications during a caesarean delivery can result in hysterectomy, serious haemorrhage and infection.[41] No childbirth is free of the risk of mortality.

A crucial ethical reservation concerning surrogacy is the potential exploitation of the surrogate. Exploitation can manifest in different ways, but in general can be defined as taking unfair advantage of another.[42] Unfair payment for gestational 'work', especially in the context of the risks of pregnancy, is one such risk. In addition to the physical risks of pregnancy and childbirth, there is also a risk of the potentially autonomy-limiting impact of carrying a pregnancy on behalf of another person or persons. The relationship between a surrogate and intending parent(s) is complex, but often valued by both parties,[43] and gestational surrogates often report feeling very aware of their role as 'loving babysitters' or similar.[44] It is not hard to see, therefore, how some surrogates might feel pressured into agreeing to particular requests from intended parent(s), ranging from changing dietary habits to consenting to medical interventions. This is particularly likely where the surrogate has a close personal relationship with the intending parent(s).

These considerations are linked to another exploitation-related worry, namely that the consent of surrogates may be invalid as they are not in a position to make an informed autonomous decision about participating. A key element of exploitation in surrogacy, on Wilkinson's account, comes from the surrogate's consent to participate being invalid.[45] Factors that can invalidate consent include coercion, lack of adequate information or the surrogate's autonomy being compromised, for instance by their poor social position.[46] This is usually a more prominent concern where arrangements are handled by agencies and involve strangers, but could also be exacerbated where the surrogate is a close friend or family member of the intended parent(s), as Bea is to Ali, and may therefore feel a pressure

[35] Brilliant Beginnings (n.d.). https://www.brilliantbeginnings.co.uk/surrogates/emotional-and-health-implications-of-being-a-surrogate

[36] Associated risks include ectopic pregnancy, or adverse reaction to medications taken during the process. See: NHS. (n.d.). https://www.nhs.uk/conditions/ivf/risks/

[37] IVF is associated with a greater risk of preterm birth: Sunkara, S., La Marca, A., Seed, P. T., & Khalaf, Y. (2015). Increased risk of preterm birth and low birthweight with a very high number of oocytes following IVF: An analysis of 65869 singleton live birth outcomes. *Human Reproduction*, *30*, 1473–1480.

[38] "Women aged 37 to 39 years in the first and second full IVF cycles should also have single embryo transfer if there are 1 or more top-quality embryos, and double embryo transfer should only be considered if there are no top-quality embryos. In the third cycle, no more than 2 embryos should be transferred." NHS. (n.d.). https://www.nhs.uk/conditions/ivf/what-happens/; we note here, however, that intended parent(s) are often willing to pay for private treatment.

[39] Cleary-Goldman, J., Malone, F. D., Vidaver, J., Ball, R. H., Nyberg, D. A., Comstock, C. H., Saade, G. R., Eddleman, K. A., Klugman, S., Dugoff, L., Timor-Tritsch, I. E., Craigo, S. D., Carr, S. R., Wolfe, H. M., Bianchi, D. W., D'Alton, M., & FASTER Consortium. (2005). Impact of maternal age on obstetric outcome. *Obstetrics & Gynecology*, *105*, 983–990.

[40] Miesnik, S., & Reale, B. (2007). A review of issues surrounding medically elective caesarean delivery. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, *36*, 605–615.

[41] National Institute for Health and Care Excellence. (2011). Information for the public; caesarean section. https://www.nice.org.uk/guidance/cg132

[42] Wilkinson, S. (2003). The exploitation argument against commercial surrogacy. *Bioethics*, *19*(2), 169–187.

[43] MacCallum, F., Lycett, E., Murray, C., Jadva, V., & Golombok, S. (2003). Surrogacy: The experience of commissioning couples. *Human Reproduction*, *18*, 1334–1342; Weiss, C. (2017). *Reproductive migrations: Surrogacy workers and stratified reproduction in St Petersburg* (PhD thesis). De Montfort University, Leicester, p. 46. https://www.dora.dmu.ac.uk/bitstream/handle/2086/15036/PhD%20Thesis.%20Weis.%20Reproductive%20Migrations.%20Final%20Version.Dec%202017.pdf?sequence=1&isAllowed=y

[44] Berend, Z. (2016). "We are all carrying someone else's child!": Relatedness and relationships in third-party reproduction. *American Anthropologist*, *118*, 24–36, p. 29.

[45] Wilkinson, op. cit. note 42, p. 173.

[46] Ibid.

to become a surrogate even if this might present a risk to their health and well-being.

When it comes to the later stages of pregnancy and delivery, Bea might be inclined to consent to invasive procedures out of caution and concern for Ali. Depending on Ali's fears and wishes, it could also mean that Bea refuses certain procedures, or that she doesn't raise the possibility of a caesarean, which could result in negative consequences for both the baby and her health. If there are complications during the pregnancy or childbirth it could result in Bea blaming herself, and there are also potential long-term risks to her health as with any pregnancy. There is also a substantial amount of emotional labour involved in the undertaking of pregnancy,[47] but also specific to the surrogacy context.[48]

Social aspects of the process might also be uncomfortable. There is a sense in which a pregnancy may feel 'publicly owned'.[49] Strangers, colleagues and friends might ask personal questions about a pregnancy, and Bea might find these more difficult to answer as a gestational surrogate. We do not suggest that she should find such social interactions uncomfortable, nor do we suggest that this interference is appropriate, but it is important to note as a likely reality in her experience of surrogacy. A further psychological concern is that Bea may (though not necessarily) experience some emotional pain upon handing over the baby immediately after birth. In some cases surrogates change their mind and refuse to give the child to the intending parent(s),[50] and as the legal mother the surrogate has the law on their side.[51] The risk of the surrogate changing her mind may be less significant in a family arrangement, although the ongoing relationship between the surrogate and (grateful) parent(s) within a family will be subject to challenges posed by their relationship and as a result of the surrogacy, which may bring additional or different pressures compared to those experienced by unrelated surrogates.[52]

Having considered the main burdens and risks that might befall Bea, it is essential to discuss the benefits too. There are potentially great psychological benefits from the knowledge that she has helped her sister and played such an important role in the bringing of this baby to life. Since Bea has experienced pregnancy before, she knows what to expect and she might have enjoyed aspects of pregnancy.

Bea will also be able to anticipate forming a loving relationship with the child, who will also be a cousin to her own children, thus benefitting Bea's immediate family. Since most surrogates are not related to the intending parent(s), the family and psychological benefits associated with the close bond between Ali and Bea will not usually be present. Presumably, however, there would be some altruistic reward for a surrogate who helps another to achieve their dream of parenthood, and it is possible that there might be an ongoing and positive relationship of some kind between the surrogate and the family that she helped to create.

Assuming that Bea would need to forego working for some of the pregnancy and for a short time afterwards during her recovery, we would expect that Ali would cover Bea's loss of earnings and also any expenses associated with the pregnancy, such as maternity clothing or expenses for travelling to medical appointments. The relationship between Bea and Ali means that we might assume that Bea would be mindful about limiting such expenses, but hopefully Bea's finances should not be adversely affected by the pregnancy. Since most surrogates are not related to the intending parent(s), the financial implications for some surrogates may be more beneficial than for Bea. The ethos of legitimate surrogacy in the UK is rooted in altruism, yet in reality it seems likely that many surrogates have *also*—or in some instances *primarily*—been motivated by the financial rewards, despite the limitations on what is permissible. This has led to the concern that surrogates are exploited, and especially that women living on a very low income may be induced by payment.[53] One of the leading not-for-profit surrogacy agencies, 'Surrogacy UK', however, claims (based on empirical research with participants of surrogacy arrangements) that the primary motivation for surrogates is sympathy for infertile people, or the enjoyment of pregnancy.[54] They also state that friendships between the surrogate and the intending parent(s) are often formed, suggesting that gaining new friends maybe a further benefit of surrogacy.

3.2 | UTx

For a donor who has reached or passed the menopause, a preoperative hormone treatment to optimize the condition of the womb would be required, which, while offering some benefits,[55] can expose individuals to increased risk of stroke and blood clots.[56] However, because of Bea's age—we are assuming she is

[47]Neiterman argues that pregnant people 'are expected to "do" pregnancy, actively performing socially established practices that signify the status of the body as pregnant… [including] constant performing of pregnancy (ensuring that the process of "doing pregnancy" is acknowledged and approved by others)'; see Neiterman, E. (2012). Doing pregnancy: Pregnant embodiment as performance. *Women's Studies International Forum, 35*, 372–373, p. 372.

[48]For instance, in their study of the experiences of altruistic surrogates in Australia, Canada and the United States, Toledano and Zeiler have found that surrogates report a heightened sense of responsibility due to the 'high stakes' of the pregnancy, leading to monitoring their bodies and behaviour quite strictly, as well as the need for 'boundary-setting' in their personal life. See Toledano, S. J., & Zeiler, K. (2017). Hosting the others' child? Relational work and embodied responsibility in altruistic surrogate motherhood. *Feminist Theory, 18*(2), 159–175.

[49]This can manifest in lots of different ways including for example lots of public scrutiny and 'advice giving': See: Longhurst, R. R. (2005). Pregnant bodies, public scrutiny: 'Giving' advice to pregnant women. In E. Kenworthy Teather (Ed.), *Embodied geographies: Spaces, bodies and rites of passage* (pp. 77–90). Routledge.

[50]*Re M (Child)* [2017] EWCA Civ 228.

[51]S.33 (1) of the Human Fertilisation and Embryology Act 2008 specifies that 'a woman who is carrying or has carried a child as a result of the placing in her of an embryo of sperm and eggs, and no other woman, is to be treated as the mother of the child'.

[52]We are grateful to an anonymous reviewer for raising this point.

[53]McEwen, A. (1999). So you're having another women's baby: Economics and exploitation in gestational surrogacy. *Vanderbilt Journal of Transnational Law, 32*(1), 271–304.

[54]See Surrogacy UK. (n.d.). FAQs: https://surrogacyuk.org/faqs/

[55]Including reducing the risk of osteoporosis and related injuries: Nelson, H., Humphrey, L. L., Nygren, P., Teutsch, S. M., & Allan, J. D. (2002). Postmenopausal hormone replacement therapy: Scientific review. *Journal of the American Medical Association, 288*, 872–881.

[56]Ibid: 878. We note that trials so far (e.g. Sweden) suggest that most donors are older than Bea and so would need hormone treatment, with the associated risks.

pre-menopausal—she should not need to undergo hormone treatment prior to donation.

The risks of hysterectomy are well known since it is a common procedure.[57] However, this data relates only to women who needed a hysterectomy for medical reasons, and we have noted that a womb removal for UTx is a more complex (and—at present—a necessarily open[58]) procedure. Consequently, the operation takes approximately 5.5 hr or more.[59] Bruno and Arora have identified the key risks involved in UTx and note that, aside from the usual risks of surgery (infection, reaction to anaesthetic, transfusion), there are risks of haemorrhage, ureteral injury, bladder, bowel and intestinal injury.[60] Although no donor has died, serious complications requiring subsequent surgery have been reported.[61] Additionally, there is likely to be a significant amount of pain and a lengthy recovery period, during which Bea will need to be cared for by a person other than Ali, as she will also be recovering from surgery. Assuming the surgery goes well, the average hospital stay after the procedure is 6 days,[62] and it might be difficult for Bea to be away from her family for that time. Bea will also need time off work and have to attend ongoing medical assessments in the post-operative period. It usually takes 6 to 8 weeks to recover from an abdominal hysterectomy.[63] This will vary according to age and health, but it is possible that, since the UTx extraction is more complex, the after-effects, including the level of pain and the recovery time, might be more significant. During the weeks and months after the surgery, Bea must also be prepared to endure other restrictions to her usual life; she may not be able to drive, have sex or exercise. The changes to Bea's lifestyle will also have a broader relational impact on Bea's children, her partner if she has one and perhaps the wider family.

The longer-term impact for Bea of having her uterus removed will be variable. While clinical outcomes for hysterectomy are generally positive, the obvious difference is that the typical hysterectomy patient has a clinical reason for the removal of their uterus, whereas the UTx donor will not benefit clinically. The impact will also vary according to whether the donor had associated symptoms (akin to premature menopause) including osteoporosis,[64] decreasing sexual interest and low mood without hormone replacement therapy.[65] The impact of these potential surgical complications on quality of life and emotional health should not be understated. Kisu et al. also note that, even where the surgery goes well, there can be significant impact on the donor's mental health as a result of scarring or stress in managing post-operative pain.[66]

The key ethical argument concerning live donation for UTx is that it requires the donor to undergo a highly invasive, potentially risky operation for the benefit of another.[67] Additional concerns have been highlighted with respect to the risks to the recipient—again the surgery is complex and risky—plus, there is a chance Ali's body might reject the organ, leading to a crisis necessitating the immediate surgical extraction of the rejected uterus. A further emotional risk to Bea and any donor transpires if the surgery is unsuccessful. If Ali becomes extremely ill, this will impact negatively on Bea, who might feel that she was involved in facilitating the situation. Similarly, if the transplant does not lead to the live birth of a healthy child, the entire endeavour will have caused only harm with no beneficial outcomes and this might also be a devastating outcome for all those involved.

Once Ali's condition is stabilized, she will have her embryo implanted in the hope that pregnancy ensues, but given the additional risks of pregnancy for a person with a donor womb, this will be an anxious time for both Ali and Bea. If a pregnancy is successfully established following IVF treatment, there is a risk the transplant could not support foetal life, leading to the death of the foetus and more surgery, since the foetus could not be expelled via miscarriage. Bea might therefore experience further emotional anguish as a result of concern for her sister.

Reflecting on these risks, live donor UTx seems difficult to justify from a clinical and ethical perspective; however, the procedure also has some unique benefits for donors (and recipients), which may justify the risks.

The potential benefits that Bea might experience in UTx will depend on her perspective. There are some reasons why some people *want* or are happy to give up their wombs; this is a fact often ignored in the literature when discussing who can be a live donor for UTx (it must be a person who has already had children).[68] For some it might be a relief, if they have a family history of cervical cancer or they are using forms of birth control to avoid unwanted pregnancy that affect their mood and well-being.

Bea might also prefer to have a surgery with a 6–8-week recovery window than to undergo the lengthy process of being a surrogate; getting pregnant, being pregnant, giving birth. Uterus retrieval is an invasive option, but surrogacy is also invasive and for a much longer period. There would also be less concern about how other aspects of her autonomy might suffer in all the choices to be made during pregnancy that her sister, however well-intentioned, might participate in.

The benefits accruing to the donor will also depend on their relationship with the intending parent(s) and of course, whether the

[57] See Bruno, B., & Arora, K. S. (2018). Uterus transplantation: The ethics of using deceased versus living donors. *The American Journal of Bioethics*, *18*(7), 6–15.

[58] See note 10.

[59] 5.5 hr was the mean from a living donor trial in the United States: Testa, G., Koon, E. C., Johannesson, L., McKenna, G. J., Anthony, T., Klintmalm, G. B., Gunby, R. T., Warren, A. M., Putman, J. M., dePrisco, G., Mitchell, J. M., Wallis, K., & Olausson, M. (2017). Living donor uterus transplantation: A single center's observations and lessons learned from early setbacks to technical success. *American Journal of Transplantation*, *17*, 2901–2910.

[60] Two of the 14 donors in Sweden suffered ureteral injury; Olausson (2020), op. cit. note 5.

[61] Kvarnstrom et al., op. cit. note 7.

[62] Testa et al, op. cit. note 8.

[63] NHS. (n.d.). https://www.nhs.uk/conditions/hysterectomy/recovery/

[64] Ji, M., & Yu, Q. (2015). Primary osteoporosis in postmenopausal women. *Chronic Diseases and Translational Medicine*, *1*, 9–13.

[65] Kisu, I., Mihara, M., Banno, K., Umene, K., Araki, J., Hara, H., Suganuma, N., & Aoki, D. (2012). Risks for donors in uterus transplantation. *Reproductive Sciences*, *20*, 1406–1415.

[66] Ibid: 1409.

[67] Hammond-Browning, N. (2019). UK criteria for uterus transplantation: A review. *BJOG*, *126*, 1320–1326.

[68] The current UK trial—at the time of writing—has this requirement.

transplant is ultimately successful. Where there is a close relationship with the recipient, as between Ali and Bea (and thus any prospective child), the donor will presumably care deeply for the welfare of their loved one and so, as we discussed above in relation to surrogacy, it will be important to them to act altruistically. Bea might have held a keen desire to facilitate Ali's wish to reproduce (and specifically *to gestate*) due to her own wish to form a relationship—as an aunt with a child born of Ali. In some of the UTx donations in Sweden, mothers gave their wombs to their daughters, which raises the potential for similarly beneficial relationships with future grandchildren. Thus, depending on relational questions and transplant success, it seems that the serious risks outlined above may be seen by the WG as proportionate to the hoped-for benefits.

3.3 | Weighing the consequences for the WG

Both surrogacy and UTx pose a high risk for the WG and both require a significant sacrifice that will have a profound impact on the WG's physical health and potentially their psychological well-being. Having assessed the comparative burdens and benefits, we suggest that the crucial focus should be ensuring that the WG fully appreciates the risks and has the time and space to decide whether to assist with gestation free from duress (intentional or otherwise). For some, who find pregnancy enjoyable, the physical burden of surrogacy may not be a significant concern; however, the psychological effect is less predictable unless the WG has experienced surrogacy before and even then, a second or third experience will not necessarily be the same. Similarly, for UTx, for a person who appreciates the risks and is comfortable with the prospect of serious surgery and the (unknown) impact of the loss of the womb, with the possible effects identified, donation may seem like a proportionate and desirable sacrifice. But again, the physical and psychological impact of donating one's womb, with all that entails may be more difficult than anticipated. We do not currently have much knowledge about these impacts because there have been so few donations to date.[69] Because these risks are far less well understood (compared to surrogacy), as well as being potentially more serious because UTx donation necessarily involves complex surgery, from a purely objective clinical perspective, surrogacy would appear to be physically less risky.

With our notional sisters, Ali has a responsibility to ensure that Bea is provided with all the relevant information about the risks before deciding whether she is willing to become a surrogate or donate her womb, or neither. Following this, if Bea decides to be a surrogate or a donor for UTx, she should feel free to change her mind at any point between her initial agreement and the commencement of the 'treatment'. Because Bea's willingness to make either sacrifice seemingly rests on her sisterly relationship with Ali and a desire to assist in Ali's aim of becoming a parent, that relationship may come under significant strain and so counselling about their expectations and the difficulties that both options might bring, would help both parties to avoid problems. For surrogacy involving a stranger surrogate, counselling would similarly place all parties in a more resilient position to manage any disagreement or tension in the relationship.

From a social perspective UTx might appear to be a more attractive option for both Ali and Bea. If the donation is successful, it enables the intending mother to gestate and the 'intending aunt' to avoid any socially confusing situations created by a surrogacy pregnancy.[70] Gestation is almost inevitably a publicly owned phenomenon,[71] particularly when it is assisted, and so all parties, and particularly the intending parent(s) would avoid any awkward social expectations over their reproductive experience. The social, experiential and legal benefits of UTx over surrogacy, however, should not encourage the intending parent(s) to shy away from fully examining the impact of live donation on the health and psychological well-being of the donor and the recipient. In contrast to UTx, a surrogate pregnancy is, at present, less fraught with *unknown* physical risks and burdens. However, this is dependent on the WG's perspective and how they perceive risks related to their body, their womb, and their feelings about undergoing pregnancy or donating their womb.

There are lots of different aspects to the decision of *how* to assist with gestation once a potential WG has decided that they wish to provide this assistance. There are two important points that are crucial to emphasize here. First, there are both potential benefits and drawbacks to both methods of assisted gestation. When the perspective of the WG is considered, there is a tendency for only the potential negative aspects of both UTx and surrogacy to be centred in conversation. In this paper, we sought to highlight that there are numerous benefits that might result from both of these experiences for womb-givers—particularly in a relational sense. Ethical analysis of the permissibility/desirability of either option from the perspective of the WG should take these benefits into account, in particular in looking at live-donor UTx where the donor and recipient have a personal relationship, and surrogacy arrangements where the surrogate is a friend or relative of the intending parent(s).

Second, and most importantly, a decision about how to perform assisted gestation will be very personal, influenced by a person's individual preferences, values, wishes and feelings, which are likely to have been informed by their subjective experiences. Some intending womb-givers will value pregnancy, others will not; some may have enjoyed a previous pregnancy, others may have found a previous pregnancy traumatic; others will value their womb as an important part of their identity; others will not. Our scenario in this paper assumes some sort of personal connection between the womb-giver and -seeker, and in such cases it is likely that the decision will be

[69] The authors were unable to find any empirical data about donor experiences, which is notable. The value of such a study, however, might be questioned since donors reporting on their experiences might still be doing so with the recipient's feelings in mind for the reasons we have explored.

[70] We do not defend the social circumstances we mention here, but we mean to highlight—as we have earlier in this paper—some of the difficulties that can be experienced by those who carry pregnancies when they do not intend to be the social mother of the resulting child after birth.

[71] See Pollack Petchesky, R. (1987). Fetal images: The power of visual culture in the politics of reproduction. *Feminist Studies, 13*, 262–293.

made somewhat mutually. Still, in cases where the womb-seeker has a particular preference for a form of assisted gestation, we would argue that they have an ethical obligation not to try and impose this preference upon the WG.

It is important that the preferences of prospective womb-givers, and their resulting decisions, are afforded due respect. We would not want, therefore, to reach a generalizing conclusion about whether surrogacy or UTx is more ethically defensible from the perspective of the WG, as this will depend not only on their subjective situation but also the legal and social context in which they make this decision. We could speculate that surrogacy might, in the current circumstances, be deemed preferable by more prospective womb-givers because it is more likely to be successful and might be conceptualized as less clinically risky overall. This also might be the opinion of many health professionals who might be concerned about performing highly invasive uterus retrieval surgery on a person for what are perceived as lifestyle (as opposed to life-saving) benefits for another person. However, the only firm conclusion we wish to emphasize is that the preferences of the womb-giver should be central in order to give the utmost respect to their personal experiences, relational perspective and bodily autonomy. Offering to help someone have the desired biological child that they themselves cannot gestate and bring to birth can entail both great sacrifice and reward; we would argue that the person who will undertake this endeavour is best positioned to decide in which way they want to help, and their decision should be centred and respected by all the participants in the process.

4 | CONCLUSION

This paper follows other efforts to tease out the comparative ethics of live donor UTx and surrogacy. However, our investigation is unique in focussing our comparative appraisal on the WG and their *bodily* autonomy—rather than the usual focus on the reproductive autonomy (and corresponding ethical responsibilities) of those seeking a form of assisted gestation. We demonstrated how the most important aspect of the decision of assisted gestation is the bodily autonomy of the potential WG and their informed consent to the method (carrying a pregnancy or donating their uterus) that they are considering. We also highlighted the importance of thinking about assisted gestation relationally to highlight the potential benefits of womb-giving for the WG, and thus give a realistic assessment of what these experiences may be like in practice.

Social and legal factors may make UTx seem like a superficially more attractive option; however, this is often because the situation is viewed from the perspective of intending parent(s) who are vested in a desire to gestate while avoiding any complications regarding legal parentage. However, there are physical and psychological harms that are unique to UTx from the perspective of the WG. We have also examined the likely benefits that the WG will experience from both forms of assisted gestation. Experiences of pregnancy and of surgery/donation are not universal, and it is important that in future discourse about assisted gestation more attention is given to the perspective of the WG. The fact that this person's bodily autonomy will be engaged, and potentially impacted, in different ways by both surrogacy and UTx illustrates the importance of the WG's choice about their body and whether and how they use it to help the womb-seeker.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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