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Ectogenesis and the Violinist

– William Simkulet –

Abstract: Michal Pruski and Richard C. Playford argue that if partial ectogenesis technology becomes available then it would undermine Judith Jarvis Thomson's defense of abortion. Thomson argues that even if a fetus has a right to life, this is not a positive right to be given whatever one needs to survive; it is not a right to use the mother's body or to risk her life without her permission. Pruski and Playford argue that when the risks involved in ectogenesis are comparable to those of abortion, then minimal decency requires gestational mothers to opt for ectogenesis over abortion. This argument hinges on egregious misunderstandings of (1) ectogenesis technology, (2) medical and surgical abortion, and (3) medical consent.

Keywords: Abortion, Ectogenesis, Thomson, Biomedical Ethics, Consent

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Introduction

Recently philosophers have suggested the creation of future ectogenesis technology may be relevant to the abortion debate[1] and more recently Michal Pruski and Richard C. Playford have argued that if partial ectogenesis technology were to become available then it would undermine Judith Jarvis Thomson's defense of abortion.[2] Thomson challenges traditional anti-abortion arguments by assuming what the arguments seek to prove – that fetuses are persons from conception with a full right to life, but argues a right to life is not a positive right to be given whatever one needs to survive.[3] Pregnancy is a great burden with substantive medical risk and Thomson argues this is far beyond what morality requires and what the law should require.

Pruski and Playford argue that the availability of partial ectogenesis would change this. They argue that even if ectogenesis involves risky, invasive surgery, future technologies might reduce these risks to that of abortion, so they claim it is "highly likely" ectogenesis would be required of women seeking surgical abortion.[4]

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[1] Kaczor (2010); Blackshaw, Rodger (2019); Simkulet (2020).
[2] Pruski, Playford (2022).
[3] Thomson (1971).
[4] Pruski, Playford (2022): 40.

This argument hinges on egregious misunderstandings of (1) ectogenesis technology, (2) medical and surgical abortion, and (3) professional medical ethics and medical consent. In short, (1) partial ectogenesis technology already exists,[5] (2) surgical abortions that kill a fetus before extracting it are the medical default because they are far less risky and invasive than those that would disconnect and remove the living fetus to allow it to die outside the womb, and (3) in the wake of medical atrocities like the Tuskegee syphilis study,[6] professional medical ethics now recognizes that physicians must secure genuine informed consent from their patients and must provide reasonable treatment when requested, even in cases when a patient requests interventions that the physician believes to be less effective.

Pruski and Playford also make notable mistakes when discussing Thomson's Violinist case and her discussion of Minimally Decent Samaritan acts, or what morality requires. This article contains three main sections. Section I briefly summarizes Thomson's Violinist case, Pruski and Playford's analysis, and David Boonin's Bone Marrow case,[7] a Violinist variant. Section II briefly discusses Thomson's distinction between minimally decent, good, and splendid Samaritans and Pruski and Playford's argument that ectogenesis might become a Minimally Decent Samaritan act. Section III imagines future ectogenesis technology that Pruski and Playford might think would be sufficient to generate moral obligations to ectogenesis. However, I argue that such technology would likely still ask far more of women, both pregnant and not, than morality requires.

Note that this article will follow the (somewhat misleading) convention of referring to a gestating entity at any stage of development before birth as a "fetus."[8] This paper will also assume, as Thomson does, that a fetus has a full right to life, from conception, and is numerically identical to (the same *thing* as) any person that may develop from that fetus.

1. Violinist

Thomson says:

> Opponents of abortion commonly spend most of their time establishing that the fetus is a person, and hardly any time explaining the step from there to the impermissibility of abortion.[9]

[5] Räsänen, Smajdor (2020). Räsänen and Smajdor note that we currently employ ectogenesis at both ends of pregnancy, ectogenetic technology is used during assisted reproductive techniques before the fertilized embryo is implanted, and incubator technology exists to help prematurely born infants to develop outside of the womb.

[6] Cobb (1973).

[7] Boonin (2002).

[8] Note that this view is inconsistent with some theories regarding the numerical identity of the persons. See Marquis (2007) and (2013).

[9] Thomson (1971): 48.

She continues:

> I propose, then, that we grant that the fetus is a person from the moment of conception. How does the argument go from here? Something like this, I take it. Every person has a right to life. So the fetus has a right to life. No doubt the mother has a right to decide what shall happen in and to her body; everyone would grant that. But surely a person's right to life is stronger and more stringent than the mother's right to decide what happens in and to her body, and so outweighs it. So the fetus may not be killed; an abortion may not be performed.[10]

In short, Thomson suggests the anti-abortion argument hinges on the premises that (1) the fetus's right to life and a woman's right to liberty conflict, and that (2) when rights conflict the stronger right wins out. She then constructs a counter example:

> *Violinist:* The Society of Music Lovers kidnaps you and attaches your circulatory system to a famous, innocent, unconscious violinist suffering from a kidney ailment that will kill him unless he remains connected to your kidneys for nine months.[11]

If you found yourself in such a case, Thomson contends that it would be a "great kindness"[12] if you were to stay attached, but that it is not morally incumbent of you to do so.

The violinist *uncontroversially* has a right to life, and you *uncontroversially* have a right to liberty and thus bodily autonomy; however, these rights *do not conflict* because a right to life is not a positive right to assistance – it is *not* a right to force others to save you. A right to life is a right not to be killed unjustly, but it is far from unjust to kill someone who violates your right to liberty – a kidnapper, a slaver, even an innocent aggressor (for example, one ignorant of their wrongdoing).

Pruski and Playford say of the case:

> The thought experiment is meant to mirror the process of going through an involuntary pregnancy.[13]

This is, at best, misleading. First, Violinist is meant to illustrate there is no conflict between a right to life and a right to liberty, thereby undermining the anti-abortion argument.

Second, many critics argue our intuitions about Violinist might hinge on the kidnapping; that the case is comparable to pregnancy by rape. Thomson pre-emptively heads off such criticisms:

> Can those who oppose abortion on the ground I mentioned make an exception for a pregnancy due to rape? Certainly. They can say that persons have a right to life only

[10] Ibidem: 48.
[11] Simkulet (2020). Adapted from Thomson (1971): 48–49.
[12] Thomson (1971): 49.
[13] Pruski, Playford (2022): 37.

> if they didn't come into existence because of rape; or they can say that all persons have a right to life, but that some have less of a right to life than others, in particular, that those who came into existence because of rape have less. But these statements have a rather unpleasant sound. Surely the question of whether you have a right to life at all, or how much of it you have, shouldn't turn on the question of whether or not you are the product of a rape.[14]

The kidnapping in this case lets Thomson poke fun at apparent anti-abortion inconsistency regarding rape, but it's primary use here is as a framing device to allow the physician to explain the unique circumstances to the reader.

It's not clear what Pruski and Playford mean by "involuntary pregnancy."[15] If by this they mean "pregnancy resulting from rape," it seems they neglected the passage above. However, this could also be taken to mean "unplanned pregnancy," in which case Pruski and Playford misinterpret Thomson's defense of abortion as applying only in cases where the gestational mother doesn't want to get pregnant, excluding cases of planned pregnancy. This would be an uncharitable reading of Thomson, as it would rule our women who intend to get pregnant but that choose to abort later. For example, a woman might choose to abort if she faces unexpected, life-threatening medical complications.

David Boonin supplements Thomson's argument with the following case:

> *Bone Marrow:* Your cousin is diagnosed with a condition that will kill him unless he receives regular bone marrow transplants from a compatible donor. You are a match and agree to donate, but you find the first surgery overwhelming and refuse a second.[16]

Your cousin *uncontroversially* has a right to life, and you *explicitly* consent to donate, but even so, you may withdraw your consent and your initial consent does not give your cousin a right to use your body without your continued consent. Boonin's case demonstrates that voluntariness and consent are *irrelevant* to the abortion debate; even if you voluntarily consent to allow someone else to use your body you can revoke this consent at any time. Your initial consent does not give them a right to use your body.

Third, Pruski and Playford overlook the difference in medical risk between Violinist and pregnancy. Anna Smajdor argues there is a moral imperative to develop ectogenesis technology, in part because of the medical risks associated with pregnancy – both life-threatening risks and egregious, persisting health complications that can arise with pregnancy and childbirth.[17] Thomson could have introduced the medical risk into the case, but this would have distracted from its main purpose, highlighting the lack of conflict between rights.

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[14] Thomson (1971): 49.
[15] Ibidem.
[16] Adapted from Boonin (2002).
[17] Smajdor (2007).

Violinist is meant to illustrate that someone else's right to life *is not* a right to use your body. However, this doesn't mean there aren't circumstances in which you have a moral obligation to provide assistance. Thomson says, "Nevertheless it seems to me plain you ought to allow him to use your kidneys for that hour – it would be indecent to refuse."[18] This brings us to Thomson's discussion of what morality requires.

2. Minimal Decency

This section is divided into two subsections. First, an exploration of Thomson's Good Samaritan discussion, and second, Pruski and Playford's argument that ectogenesis could be a Minimally Decent Samaritan act.

a. Samaritans

Pruski and Playford characterize Thomson's distinction between moral obligation and supererogation as follows:

> Thomson then distinguishes between Good Samaritans and Minimally Decent Samaritans. Good Samaritans are people who agree to acts like being plugged into the violinist for nine months or, more plausibly, who willingly put themselves in physical danger in order to help others. Thomson thinks that people are never morally obligated to be Good Samaritans and that the law should reflect this. Nevertheless, she does think that people are morally obliged to be Minimally Decent Samaritans and allows for the possibility that this should also be reflected in the law (although she doesn't weigh in on this in any detail). Minimally Decent Samaritans are those who, for example, upon seeing an innocent person being physically attacked will phone the police.[19]

This is misleading. Thomson draws a distinction between *three* kinds of Samaritans, each representing a different point on a domain of moral action. Thomson begins with a discussion of the Biblical parable of the good Samaritan:

> The Good Samaritan went out of his way, at some cost to himself, to help one in need of it. We are not told what the options were, that is, whether or not the priest and the Levite could have helped by doing less than the Good Samaritan did, but assuming they could have, then the fact they did nothing at all shows they were not even Minimally Decent Samaritans, not because they were not Samaritans, but because they were not even minimally decent.[20]

A *Minimally Decent Samaritan*, she contends, does the least that morality requires of them.

A *Good Samaritan*, in contrast, goes out of their way to help others, giving more than what morality requires.

[18] Thomson (1971): 60.
[19] Pruski, Playford (2022): 39.
[20] Thomson (1971): 62.

To illustrate the third, however, she turns to the case of Kitty Genovese, in which a young woman was stabbed outside her own apartment while 38 people watched or listened and did nothing to help. Here she introduces the idea of a *Splendid Samaritan*, someone who would make tremendous moral sacrifices to help others. While a Minimally Decent Samaritan would, at least, call the police, a Splendid Samaritan would rush out, risking their life to try to save Kitty's. She continues:

> My main concern here is not the state of the law in respect to abortion, but it is worth drawing attention to the fact that in no state in this country is any man compelled by law to be even a Minimally Decent Samaritan to any person; there is no law under which charges could be brought against the thirty-eight who stood by while Kitty Genovese died.[21]

Interestingly, Bruce Blackshaw contends that Thomson subverts the parable of the Good Samaritan and that we ought to be Good Samaritans, not merely be minimally decent.[22] He also imagines the Good Samaritan acts splendidly, risking his life to help the victim and making tremendous sacrifices to restore his health. Blackshaw asks us to interpret the parable in such a way that it more closely resembles the threat and sacrifices required by pregnancy.

There are two substantive problems with Blackshaw's interpretation of the parable. First, he exaggerates the risks and burdens undertaken by the Samaritan; (i) the Samaritan leisurely treats the victim's wounds, so there is no impending bandit attack and (ii) he leaves the victim with an innkeeper with a down payment of two days' wages to care for him. He goes out of his way to help, but his risks and burdens pale in comparison to those faced by a gestational mother or Thomson's Splendid Samaritan. He does not, for example, fend off bandits with one hand while treating the victim's wounds with another, or give up his day job to personally nurse the victim back to health.

Second, Blackshaw seems to miss the point of the parable. In the biblical passage, a lawyer seems to ask what the *least* he can do to earn eternal life.[23] Understanding morality requires he love his neighbor as himself, he asks "And who is my neighbor?" It is here Jesus tells the parable of the Good Samaritan, then asks who proves himself to be a neighbor – the Samaritan who stopped to help a stranger, or the two who passed him by. The lawyer identifies the Samaritan as a good neighbor. Jesus then tells him to "go, and do likewise."

Blackshaw reads this as Jesus telling the lawyer to make the same kind of sacrifices as the Good Samartian. However, the parable is meant to illustrate to the lawyer who his neighbor is, *not* how much he should love his neighbor. The lawyer knows that he should love his neighbor as himself; the parable demonstrates that he should treat everyone as his neighbor… or, at least, those in need as his neighbor, as the Good Samaritan does. In short, Jesus tells him to treat those in need as his neighbors, *not* to love his neighbors as himself… the lawyer *already knew that!*

[21] Ibidem: 63.
[22] Blackshaw (2021).
[23] Luke 10: 25–37, ESV.

b. Is Ectogenesis a Minimally Decent Samaritan Act?

Pruski and Playford contend that for Thomson pregnancy is a Good Samaritan act because of the burdens and medical risk involved but ask whether future medical advancements in ectogenesis and surgery could change this. They recognize that surgically removing the fetus – necessary to move it to the ectogenesis device – would carry medical risk, but despite this contend "these risks and costs are such that they would be required of a Minimally Decent Samaritan."[24]

They begin their discussion by drawing a distinction between medication and surgical abortion. *Medication abortion* involves using a medication to terminate the pregnancy. Such abortions, they contend, are "entirely non-invasive and could, in principle, be carried out at home."[25] There are several medications that can be used to induce abortion, and several ways in which abortion is induced. Some medications might prevent the fetus from attaching to the uterine wall, while others might attack the uterine wall and disconnect any attached fetuses. Some medications might even kill the fetus in the womb. When there are no unforeseen complications, the fetus – living or dead – is expelled from the body along with uterine blood, too tiny for the eye to see.

In contrast, *surgical abortion* normally involves killing the fetus in the womb and then removing it, however there are also surgical ways to end the pregnancy without first killing the fetus; for example, one could perform a hysterectomy to remove the entire womb, including the fetus. This would not kill the fetus, but (without advanced ectogenesis technology we currently lack) the fetus would eventually die. Such *disconnect abortions* are far more invasive and medically risky than *killing abortions*, so they are rarely performed.

Pruski and Playford contend "if we can justify the claim that ectogenesis would be required of a Minimally Decent Samaritan in the case of *medical* abortion then it seems highly likely that ectogenesis would be required of a Minimally Decent Samaritan in the case of *surgical* abortion." [26] Their argument seems to hinge on the assumption that future advances in medical technology can make it so that disconnecting the fetus, whether through medication or surgery, carries comparable risks to medication abortion or surgical abortion. If sufficiently advanced future medical technology exists, ectogenesis would require no more of the gestational mother than abortion, so opting for ectogenesis would be a Minimally Decent Samaritan act.

They continue:

> It is also worth noting that… the costs of ectogenesis do not need to be exactly equal to the cost of abortion (either medical or surgical) for it be obligatory. Whether an act is obligatory or supererogatory depends upon many factors, one of which is weighing the cost to the agent against the potential good gained or preserved.[27]

[24] Pruski, Playford (2022): 40.
[25] Ibidem.
[26] Authors' emphasis, Pruski, Playford (2022): 40.
[27] Ibidem: 43.

There are two substantive problems with this contention. First, the potential goods of ectogenesis are *irrelevant*; remember the stakes in Violinist are already *life and death*; if you stay attached to the violinist, then he lives; but if not, then he dies. The absolute best that future medical technologies could do would be to (somehow) disconnect the fetus from the gestational mother without risk to either party and keep it alive. But that is the exact same benefit that could be obtained in Violinist by merely staying attached to the violinist, as there is no medical risk in that case. If Thomson has demonstrated that it is morally acceptable to disconnect in Violinist, then advances in medical technology that make disconnecting from the fetus *more* like disconnecting from the violinist cannot count as reasons against disconnecting from the fetus.

Second, Thomson gives us two clear examples of Minimally Decent Samaritan acts; she contends (i) one ought to stay attached to the Violinist for an hour, if doing so will save his life and pose no medical risk to the kidnap victim and (ii) in the case of Kitty Genovese, it would have been minimally decent to call the police. The prospect that either current or future medical technologies would allow extracting the fetus for ectogenesis to be comparable to either act is unlikely. However, the next section sets about trying to do exactly this – I imagine fantastic future medical technologies that, when combined, might be sufficient to meet the criteria Pruski and Playford imagine.

3. Incredible Advances in Medicine

Current ectogenesis technologies are crude, with some used to gestate a fetus immediately after conception before implantation in cases of assisted reproduction, and others used to incubate, as best we can, premature infants and fetuses rescued from dying gestational mothers. In the near future we may have full ectogenesis technology capable of gestating a fetus from conception to maturity. However, even full ectogenesis technology may be incapable of partial ectogenesis from early stages if it is unable to identify and provide the environment the fetus needs when it is most vulnerable. Let us imagine a better ectogenesis technology:

> *Technology 1 – Perfect Ectogenesis Technology:* This smart technology can perform either full ectogenesis or partial ectogenesis at any stage. When a fetus is placed within this device, the system immediately identifies the stage of development and provides the fetus with a safe environment, comparable to that of a healthy gestational mother. Indeed, because this technology is more accessible than a natural womb and monitors the fetus, it may be able to detect and treat assorted health risks to the fetus that might otherwise have led to spontaneous abortion, or miscarriage.

Would the existence of this technology be sufficient to make ectogenesis a Minimally Decent Samaritan act, one morally required of gestational mothers seeking abortion?

First, let us consider ectogenesis as an alternative to medication abortion. In such cases, presumably the patient seeking ectogenesis would take the same medication they would otherwise take to induce a medical abortion; but what then? Medication abortions are typically performed very early in a pregnancy, usually when the fetus is still micro-

scopic. Further complicating the matter, the fetus isn't always immediately expelled from the womb and detecting the pregnancy has ended may take weeks. Pruski and Playford suggest medication abortions may be safe enough to be performed at home, but how might one go about recovering the fetus? Let us imagine a technology to solve this problem:

> *Technology 2 – Fetal Recovery Device*: This smart technology is capable of filtering through a woman's bodily expulsions, identifying any fetuses expelled in this way, and storing them safely for transfer to our perfect ectogenesis technology. Because expulsion of the fetus can occur at any moment over a long period of time, these devices are designed to be worn by women under their clothing for long periods of time.

To put it bluntly, wearing such a device is comparable to wearing a diaper. If ectogenesis were morally required over abortion, gestational mothers would be obligated to wear this device after initiating a medication abortion until a physician can verify the woman is no longer pregnant.

Such technology would notify the women when it detects a fetus so that it can be transferred to our perfect ectogenesis technology. However, even after the device has recovered one fetus, this doesn't mean a woman can remove it. Sometimes multiple eggs are fertilized at the same time creating dizygotic twins and sometimes monozygotic twinning occurs, in which one fertilized egg splits into two or more viable fetuses. If ectogenesis is a Minimally Decent Samaritan act, it seems a woman seeking medication abortion would be required to wear this device until she's certain she is no longer pregnant and has recovered all viable expelled fetuses.

Some physicians believe that upwards of 60% of all pregnancies end in spontaneous abortion, often before the woman even knows she is pregnant.[28] Our perfect ectogenesis technology might reasonably save the lives of many of these fetuses, so if Pruski and Playford believe wearing a Fetal Recovery Device is a Minimally Decent Samaritan act, then it seems all women who are sexually active may be morally obligated to wear these devices at all times! If human parthenogenesis, or self-fertilization, is possible, their view might require all women to always wear such devices… just in case!

Now, suppose perfect ectogenesis technology and fetal recovery devices are provided to women at no cost; would the use of this technology be a Minimally Decent Samaritan act? Thomson gives us two examples of Minimally Decent Samaritan acts; calling the police and staying attached to the violinist for an hour. Wearing a fetal recovery device requires a bigger time commitment than either of these actions, but perhaps one could argue that this, too, should count as Minimally Decent Samaritan act. But what of surgical abortion? Let us imagine one last medical breakthrough:

> *Technology 3 – Painless Immortality Field*: This technology prevents the mind from feeling pain associated with surgery, prevents death and surgical complications, and completely heals any surgical wound, preventing any scarring from occurring.[29]

[28] Leridon (1977); Boklage (1990).

[29] Pruski and Playford seem keenly interested in the harms of "unsightly" scarring associated with caesarean sections, although contend this may be "a cost perhaps trivial enough to make it obligatory for Thomson's Minimally Decent Samaritan." Pruski, Playford (2022): 40, 43. In any case, this technology would prevent even such scarring, bypassing these concerns.

I have no way to even begin to imagine how such a miraculous technology would work, but let's stipulate that, after surgery, it does not create a replacement of the fetus within the mother's womb to replace the fetus that has been removed (this is to say that the fetus, at least as far as this technology is concerned, is not a part of the gestational mother's body).

Given this technology, would opting for ectogenesis over abortion be a Minimally Decent Samaritan act? I'm not so sure. Disconnecting the fetus is more invasive than killing abortions, and if something goes wrong with this technology, far more medically risky.

Contemporary professional medical ethics recognizes that patients are the ultimate arbiters of their care, such that they can choose to consent to valid treatment options that their physician thinks are less viable than other options offered. This is not trivial, patients often have better, more intimate understandings of their desires, medical goals, and capacities than their physicians. Even if this technology mitigates risk, the underlying risk remains so a patient might reasonably opt for killing abortion than risking the more invasive procedure required to disconnect the fetus.

But perhaps this distinction is unfair; what about a patient that judges the risk to be identical? Would opting to disconnect the fetus be morally required of such a patient (assuming the patient also believes the fetus is a person from conception)? I think so, and I think Thomson would agree. Given this technology, by assumption, ectogenesis asks no more of the gestational mother than abortion, and a right to abortion is not a right to kill the fetus, but merely to end the pregnancy.

Furthermore, while ectogenesis asks no more than surgical abortion, technology 2 asks a great deal more than medication abortion. The existence of such technologies might reasonably make it so that ectogenesis over surgical abortion is a Minimally Decent Samaritan act, while wearing a fetal recovery device is not.

However, there is a problem. The technology imagined here is far beyond that of what Pruski and Playford discuss in their analysis. It is *fantastic*, while Pruski and Playford imagine far more moderate advances in surgical fetus removal – relatively minor advances that would allow disconnecting the fetus to be done laparoscopically or transvaginally.[30] Such imaginary interventions may reduce risk compared to caesarean section or hysterectomy, but it seems doubtful that they could bring the risk down to the level of risk involved in surgical abortion. Given what Thomson says is required of Minimally Decent Samaritans, the additional risk involved would render ectogenesis in surgical cases at least a Good Samaritan act. Indeed, given the medical risks Anna Smajdor discusses, one could argue both pregnancy and ectogenesis are not merely Good Samaritan acts, but Splendid Samaritan acts.[31] Fantastic imaginary technologies like the ones discussed here might be able to bridge the gap and make ectogenesis a Minimally Decent Samaritan act, but more realistic, moderate medical advances of the kind Pruski and Playford imagine fall short.

[30] Ibidem: 43.
[31] Smajdor (2007).

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