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## **Schrödinger's Fetus**

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### **Abstract:**

*This paper defends and develops Elizabeth Harman's Actual Future Principle with a concept called Schrödinger's Fetus. I argue that all early fetuses are Schrödinger's fetuses: those early fetuses that survive and become conscious beings have full moral status already as early fetuses, but those fetuses that die as early fetuses lack moral status. With Schrödinger's Fetus, it becomes possible to accept two widely held but contradictory intuitions to be true, and to avoid certain reductiones ad absurdum that pro-life and pro-choice positions face. It also gives a simple solution to the problem of prenatal harm.*

### **INTRODUCTION**

Most authors who have written about the ethics of abortion believe that it is possible to determine the moral status of a fetus<sup>1</sup> (whether it is someone rather than something, whether

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<sup>1</sup> I will define 'fetus' as any post-conception pre-birth being, including embryos. My focus here is on early abortions. Most abortions are done during the early phase of fetal

it has a right to life, and so on) early in that fetus' development, that is, while it still an *early fetus* (for example Barry and Brogaard 2003; Boonin 2003; George and Tollefsen 2008; Greasley 2017; Lee and George 2008; McMahan 2002; Olson 1997; Pruss 2011; Singer 2011).

But Elizabeth Harman (1999) has argued that two early fetuses at the same level of development and health can nevertheless be radically different in kind. Harman's *Actual Future Principle* (hereafter the AFP) states that an early fetus that will become a conscious being has some moral status, while an early fetus that will die before becoming conscious has no moral status.

Harman states:

[The AFP] says that an early fetus's actual future determines whether it has moral status. The Principle says that there are two significantly different kinds of early fetuses. Early fetuses that die while they are still early fetuses go through their entire existence without any intrinsic properties that themselves confer moral status. But an early fetus that will become a person is a very different kind of thing: it will one day have the full moral status of a person, and that is a good reason to think it has some moral status now. (Harman 1999, p. 311–312).

The AFP is a promising account of the moral status of the fetus, because it aims to explain the competing intuitions that abortion-rights advocates often feel in regard to the moral status of the fetus: i) I was once an early fetus and ii) abortion kills no-one but prevents someone

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development; therefore, my argument covers most abortions, although it technically covers only early abortions.

from coming into existence. Yet, the AFP has received rabid criticism both in academic literature and from public commentators, and very little defence for it has been given since Harman's initial paper.<sup>2</sup> The aim of this paper is to advance and defend the AFP with a concept called Schrödinger's fetus. I show that with Schrödinger's Fetus, we can accept the two widely held but contradictory intuitions and thus avoid certain *reductiones ad absurdum* that pro-life and pro-choice positions face. Contrary to Harman, I believe that it is precisely this possibility of finding a common ground between pro-life and pro-choice positions, rather than explaining the competing intuitions of abortion-rights advocates, that gives us a reason to accept the somewhat weird metaphysics of fetuses. Next, I will give the argument for the claim that early fetuses are Schrödinger's fetuses.

### **THE ARGUMENT FOR SCHRÖDINGER'S FETUS**

Consider the following case.

*Standard Fetus.* A pregnant woman wonders whether her early fetus is a person yet. She reasons that whether her fetus is 'someone' (rather than something), has moral status or a right to life, can be determined now, while the fetus is an early fetus.

Although the Standard Fetus seems obvious, it might lead both pro-life and pro-choice advocates to trouble. Pro-lifers should accept that miscarriages are a serious problem because each miscarriage kills a person similar to one of us (Murphy 1985; Ord 2008; Lovering 2013;

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<sup>2</sup> For recent criticism see for example a blog post by 'Maverick Philosopher' (2017), Michael Spielman's (2012) article in *Abort73.com* and Margot Cleveland's (2017) article in the *Federalist* 'Yes, The Princeton Prof's Argument For Early Abortion Is Stupid.'

Berg 2017; Simkulet 2017; Greasley and Kaczor 2017; Räsänen 2018). Yet, few pro-lifers see this as a problem or devote any effort to prevent miscarriages.

If early fetuses are persons, then we should also reject our intuitions about the thought experiments where we could save several embryos or a child from the burning building. It would at least be permissible (maybe even obligatory) to save several embryos rather than a child from certain death if one must make such a decision.<sup>3</sup>

Pro-choice advocates, on the other hand, seem to be under pressure from the intuition that we have all been early fetuses at some point, yet that abortion does not kill anyone, but rather kills *something* or prevents *someone* from coming into existence.

I claim that these challenges can be solved with the following case.

*Schrödinger's Fetus*<sup>4</sup>: A pregnant woman wonders whether her early fetus is a person yet. She reasons that a being's future is a part of what that being already is now. Whether her fetus is a person, depends on the future the fetus will have. Whether her fetus is a person with a moral status or right to life cannot be

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<sup>3</sup> Many pro-choice scholars use the embryo rescue case to show that the pro-life view is untenable. For example Lovering (2014); Räsänen (2016); Greasley & Kaczor (2018: 27-32).

<sup>4</sup> Schrödinger's fetus is indebted to Schrödinger's cat, a thought experiment devised by physicist Erwin Schrödinger. His aim was to illustrate what he saw as the problem of the Copenhagen interpretation of quantum mechanics applied to everyday objects. The scenario presents a cat that may be simultaneously both alive and dead. The thought experiment was an inspiration for the claim that an early fetus has an undetermined metaphysical and ethical nature, although Schrödinger's original proposal was about an epistemological, not a metaphysical problem.

determined now, but only later, when the fetus has or has not gained consciousness, at which point the actual future of the fetus is known.

If Schrödinger's Fetus—rather than the Standard Fetus—is correct, it becomes possible to accept the following plausible and widely shared, but contradictory, intuitions to be true:

- i) I was once an early fetus.
- ii) Early abortion does not kill anybody, but prevents someone from coming into existence.

If the first claim is false, we are faced with serious *reductiones ad absurdum*. Let us begin with the Too Many Thinkers problem (Hershenov 2013). If you, the person, are spatially coincident but numerically distinct (a different being) from the animal (your body), then provided that the person (you) can use its brain to think, so too can the physically indistinguishable animal (your body). But if this is the case, then there would be two thinking beings wherever we thought there was just one. And more than that, it would be hard to see how you could know whether you are the person with psychological persistence conditions or the animal person with physical conditions. If you think that you are the non-animal, the organism would use the same reasoning to conclude that it was too.

One way to reject the Too Many Thinkers problem is to claim that 'I' am living in my brains. According to this reasoning, we all are just a brain-size, composed of just those parts of the human being that produce thoughts and mental states. But this faces another problem, namely Body-self dualism (Lee and George 2008). If I am just my thoughts, memories, mental pictures and so on living in my brain, then it seems that my body is not me, nor even a part of me. My body would thus be something I control, like a vehicle I am driving. But this is hard to accept. When someone breaks my arm it seems that she hurts me, not just some vehicle that I am using or controlling. But this cannot be right, therefore *i* must be true.

So, the Too Many Thinkers problem and Body-self dualism are powerful *reductiones*, and they give support for the claim that *i* is true. If *i* is true maybe *ii* is false? But there are reasons to believe that *ii* is true as well. If the second claim is false, we are faced with other serious *reductiones*. First: as noted earlier, miscarriages are a serious problem because miscarriages would not prevent someone from coming into existence, but rather kill one of us. Second: we should accept that it is obligatory, or at least permissible, to save several embryos rather than one child if we were in a situation where we cannot save the both. These *reductiones* give support for the claim that *ii* is also true.

An anonymous referee for this paper claims that the 'too many thinkers' argument and the body-self dualism argument are much more convincing than the miscarriages objection and the Embryo Rescue Case, therefore, *i* is much more plausible than *ii*.

The kernel of my idea is this. Both of these (the miscarriage challenge and the embryo rescue case) problems need to be solved if one wants to find a coherent theory for abortion ethics. I am not denying that they could be solved without Schrödinger's fetus. Attempts have recently been made to solve the spontaneous abortion problem (Friberg-Fernros 2018; Blackshaw & Rodger 2019) and the embryo rescue case (Hendricks 2019), and I am confident that the last word on these topics has yet to be said. My proposal simply is that with Schrödinger's fetus, we don't even have to solve these problems, because with Schrödinger's fetus these problems do not arise in the first place.

If *i* and *ii* are both true, then something like AFP and Schrödinger's fetus must be true.

Because the idea is controversial, I will spend the rest of the paper defending the AFP and its application, Schrödinger's fetus, against stated and possible criticism.

## THE OBJECTIONS AND REPLIES

In this section, I respond to possible and stated objections against the AFP and Schrödinger's Fetus. Some of the replies are mere clarifications of my position and others are more fulsome responses to deeper objections.

One might argue that the future one will have, because it is a *future*, is not one's property now, but only later. Therefore, the two fetuses (and, indeed, all other fetuses) are similar to each other regarding the properties they now have, therefore the AFP and Schrödinger's Fetus are untenable. For example, professor Kaczor argues that:

Insofar as some characteristic is actual, it is not going to come to be in the future; and insofar as the characteristic is a future characteristic, it cannot be actual now. A being's future is simply not a part of what the being actually is now, its current nature. In other words, a being's future consciousness is not (yet) an inherent property, since inherent properties are actual properties and what is future is not yet actual. (Kaczor 2015, p. 222–225).

This line of reasoning claims that a being's future is not—and cannot be—a part of what the being is now.

However, it is not obvious why one's future cannot be a part of what one is now. Consider the following case.

*Loving Couple.* A married loving couple looks back on their relationship and wonders when exactly their relationship started. The couple concludes that the relationship started on the very first date. It has since lasted to the moment they are in now, and perhaps it will last into the future, too. The couple reason, however, that if the relationship had ended before, say, the third date, then the

relationship would not have existed at all. The two dates they already had would not yet count as a relationship.

It makes sense to believe that if they have not had their third date, they have not had a relationship, while at the same time believing that since they had their third date, their relationship started on the first date. Put another way, the couple cannot simply reason at the time of the second date: is this a relationship yet? Only later can it be said whether it was a relationship at the time of the second or first date. The same goes for the fetuses and for their moral status.

Another obvious trouble with the AFP is that the actual future of any particular fetus is unknown, and because it is unknown, the AFP cannot serve as a guide to knowing the moral status of the fetus.

It is true that we do not know the moral status of the fetus while it is an early fetus, but we know its moral status later; and because we can change the moral status of the fetus through our actions, knowing its moral status later is good enough.

So, if we can change the moral status of the fetus through our actions, it shows that the AFP and Schrödinger's Fetus are circular concepts and thus solve nothing, one might claim. For example, consider a woman who tries to decide whether she will abort or gestate the fetus she is carrying.<sup>5</sup> The advocate of Schrödinger's Fetus might say to her: "You are perfectly justified in killing your fetus because your fetus has no moral status." The pregnant woman then asks: "But how do I know my fetus has no moral status?" The advocate of Schrödinger's Fetus answers to her: "Because if your fetus is going to be killed, it does not have any actual future, and hence does not have a moral status."

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<sup>5</sup> For similar reasoning see Spielman 2012.



This objection is problematic because choosing to abort does not in itself justify that very choice. Choosing to abort merely causes a separate fact—a lifelong lack of consciousness (or a lack of future)—that, in turn, makes that choice to abort morally permissible. Suppose it is a crime to serve alcohol to someone who is going to drive later. Now imagine that I serve a glass of Glenfiddich to my friend, who is planning to drive home drunk afterwards. It has been a long night, and my friend is already very drunk, so that the scotch I give him knocks him out before he manages to get into his car. In that case, my act of serving the alcohol made that very act legal in a fully coherent, but perhaps counter-intuitive and surprising, way (adapted from Girgis 2017). Similar reasoning is behind Schrödinger's Fetus.

Perhaps one might claim that Schrödinger's Fetus is logically invalid because a fetus cannot at the same time be both a person and a non-person. Thus Schrödinger's Fetus is against the law of (non-)contradiction, which states that the same attribute cannot at the same time belong and not belong to the same entity.

However, this objection is misplaced. Schrödinger's Fetus is not both a person and a non-person. Schrödinger's Fetus either is or is not a person, while being an early fetus, but whether it is a person cannot be determined while the fetus is an early fetus, because we do not know its actual future.

One could also claim that Schrödinger's Fetus does not explain why prospective parents grieve when they lose their unborn child by miscarriage. Thus grief, as some have argued (Porter 2015), tells against person-denying arguments for the permissibility of abortion.

But grief and moral status do not go hand-in-hand. I can grieve losing my teddy bear or something else I have formed affection to, but that does not mean the teddy bear has a moral status. Grief is mainly about losing something one loves, not losing something that necessarily has moral status.

One might also claim that Schrödinger's Fetus and the AFP seem to lead to implausible or at least highly counter-intuitive conclusions, and thus cannot be correct. Consider Nobis' thought-experiment of a Never-been-conscious comatose patient:

Suppose a thirty-year-old individual has been in a coma all her life, from birth and even before [...] However, she will wake up in ten minutes, unless the "plug" is pulled on her in five minutes (and she will then immediately die.). If she wakes up and becomes a subject of conscious experience, then she will have (and has always had) moral status, according to the AFP, and it has always been wrong to pull the plug. But, if the plug is pulled in five minutes, then it would not have been wrong to pull it because her dying would have prevented her from becoming a conscious person, something with moral status. (Nobis 2002, p. 60).

Many would think that it would not be morally permissible to pull the plug just five minutes before she would wake up and become a person. But, according to the AFP, there is nothing morally wrong in pulling the plug. Since our intuitions tell us that it is indeed wrong to pull the plug in such a case, then AFP and Schrödinger's Fetus should be jettisoned.

But our intuitions in the above case might not be reliable. We are mixing the permissibility of the act and the moral character of the one acting. It would be extremely cruel and vile to keep such a person alive for such a long time just to kill it a moment before she could become conscious. For example, if a woman has a right to terminate the pregnancy because of her bodily rights, as Thomson (1971) has claimed, it would seem that she also has a right to terminate the pregnancy just moments before birth. Although it might be *permissible* for her to do so, it still would be an indecent, vile, and even perverse thing to do.

It might even be all things considered wrong to pull the plug in the Never-been conscious comatose patient case because of the labour and energy put forth to keep him alive, although it would not be wrong to pull the plug because of the comatose patient himself. Such an individual does not have a moral status, as the AFP says, but it might still be wrong to pull the plug because he has been kept alive for such a long time with such a hard work and effort and because of so little (waiting a few minutes) he could be wakened and gaining moral status. If the never-been conscious comatose patient is on a par with pregnancy, this objection merely shows that abortion is indecent, but morally permissible, just moments before the fetus gains consciousness.

Although the previous objections might be resolved, Schrödinger's Fetus does not seem to explain the wrongness of lethal in-utero harm done by third parties, since the fetus that dies is not a person, and cannot be wronged. The moral problem of in utero harm is this: we usually believe that if a harmful act wrongs a person, then a more harmful act wrongs the person even more. We also believe that death is usually more harmful than a mere injury. Yet many people believe that while it is wrong to harm a fetus that is going to survive, killing the fetus via abortion is not wrong. But if killing a fetus is not wrong, then it might be difficult to explain the wrongness of lethal in-utero harm done by third parties such as a violent attacker who kills the fetus inside the pregnant woman.

Even though the fetus that dies is not a person, and harming it cannot be prosecuted *per se*, it can be prosecuted as a damage to the mother: a woman has lost something that belongs to her (in addition to the fact that her bodily autonomy was violated), even though she has not lost anything intrinsically valuable. For example, if someone kills a pregnant woman, she has only committed one murder—not two—although there might be factors that would make such a crime especially cruel, and therefore punishment more severe.

According to another objection, the AFP and Schrödinger's Fetus confuse intrinsic properties with essential properties. Although having a certain future would be an intrinsic property of an entity, it is not an essential property of the entity, as essential properties are properties that make an individual the same individual through time (Tollefsen 2008).

But being the same individual through time is not what matters morally. I am the same person today as I was yesterday, but that is not what gives me moral status. If I were a different person tomorrow, it would still be wrong to kill me today. So it is not the AFP that confuses intrinsic and essential properties, it is the objector who confuses essential properties with moral-status-conferring property.

Lastly, one might question the need for Schrödinger's Fetus. That is because pro-choice advocates already believe abortion is permissible, and pro-lifers would probably not be convinced by the idea of Schrödinger's Fetus in the first place. So who needs Schrödinger's Fetus?

There are two main audiences for Schrödinger's Fetus. First, there are those who believe that abortion is permissible because a fetus is not a person but who still feel that we all had moral status while being early fetuses. With Schrödinger's Fetus, it is possible for them to believe that abortion merely prevents someone from coming into existence while accepting that we all were early fetuses. They can thus reject the weird premise that 'I' am just my thoughts, beliefs, and mental states that came into existence after our body came into existence.

Second, there are those who believe that abortion is wrong, yet do not invest any effort in trying to prevent spontaneous abortions. The thought is this: these people seem to believe that nothing morally bad happens in spontaneous abortions. With Schrödinger's Fetus, they will realise that nothing morally bad happens in induced abortions either, because the fetus that

dies is not a someone and lacks a moral status, yet they get to keep their deeply held intuition that we were all early fetuses once.

## CONCLUSIONS

I have proposed that we should prefer Schrödinger's Fetus over Standard Fetus. There are cases where what something is now can only be determined later, when the future of that something is known.

Assuming that my defence for Schrödinger's Fetus is sound, we should prefer them over pro-life positions, because we can thereby avoid the moral implications of natural embryo loss. We should also prefer Schrödinger's Fetus over other pro-choice positions, because we can thereby avoid *reductiones ad absurdum* such as too many thinkers problem and body-self dualism. And assuming that simplicity is a philosophical virtue, we should prefer Schrödinger's Fetus over Harman's principle, because then we do not need further arguments to explain in-utero harm (such as harming future individuals. See Wilkinson et al. 2016). The AFP alone cannot explain the wrongness of in-utero harm, because according to it, early fetuses that survive have only some moral status. If early fetuses have only some moral status, then harming them could sometimes be permissible. But we do not usually believe that harming fetuses in utero is ever permissible. So in-utero harm harms a being that has a full moral status. That is true, even though early abortion is always morally permissible when the fetus dies, because such a fetus lacks moral status. That is because early fetuses are Schrödinger's Fetuses.

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