The concept of a time-relative interest is introduced by Jeff McMahan to solve certain puzzles about the badness of death. Some people (e.g. McMahan and David DeGrazia) believe that this concept can also be used to
show that abortion is permissible. In this paper, I first argue that if the Time-Relative Interest Account permits abortion, then it would also permit infanticide. I next reject the suggestion that the Time-Relative Interest Account can at least explain the permissibility of early abortion, even if it cannot explain the permissibility of late abortion. Given this, early and late abortions have to be justified on other grounds.

Time-relative interests and the badness of death

Many people believe that the badness of death is measured in terms of its effect on the overall value of life as a whole.¹ In particular, most people believe that other things being equal, it is worse for a twenty-year-old than for an eighty-year-old to die, because death would deprive the twenty-year-old of more valuable future than it would the eighty-year-old. However, this whole-lifetime view faces a puzzle: It would also be worse for a late fetus to die than a twenty-year-old, since death would deprive the late fetus of more valuable future than it would the twenty-year-old. Yet, most people believe that death is worse for a twenty-year-old than for a late fetus.

The concept of a time-relative interest is introduced by Jeff McMahan to solve this puzzle.² To have time-relative interests is to be able to stand in some psychological relations to one’s future and past selves. The strength of one’s present time-relative interests depends on how strongly one is psychologically connected to or ‘invested’ in

those future and past selves. For example, an infant will typically have a weaker time-relative interest in continuing to live than a grown adult, since an infant has little or no awareness of his or her future self. Or, a patient in the middle stage of Alzheimer’s disease will have weaker time-relative interests than a normal ten-year-old child, because the Alzheimer’s patient will be less psychologically connected to or invested in her future and past selves than a normal ten-year-old child.

The concept of a time-relative interest can explain why death is worse for a twenty-year-old than for a late fetus, because while the late fetus has more valuable future than the twenty-year-old, it is also less psychologically invested in its future than the twenty-year-old. In other words, on a time-relative interest understanding of the badness of death, one should discount the late fetus’s weak time-relative interests from its valuable future measured from a whole-lifetime perspective. Once one does this, one can explain why death can be worse for the twenty-year-old than for the late fetus.

Because the concept of a time-relative interest seems to provide a good explanation to the above puzzle, there is a reason to believe in its validity. A number of writers believe that the concept of a time-relative interest can also explain why abortion is permissible. Indeed, McMahan can be interpreted making this claim in his book, *The Ethics of Killing*, and David DeGrazia has also put forward arguments along this line in the case of early abortion. For example, DeGrazia says that “the proper basis for assessing the harm of the death to the presentient fetus is its time-relative interest in remaining alive. . . . Since the vast majority of abortions involve presentient fetuses, this

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application of the [Time-Relative Interest Account] . . . is enormously important.”

Or, McMahan writes regarding late abortion,

These two claims—that the central moral objection to killing a developed fetus is that this would frustrate its time-relative interest in continuing to live and that this time-relative interest is comparatively weak—together imply that the killing of a developed fetus is substantially less seriously objectionable than the killing of a person, and perhaps not seriously objectionable at all, if other things—such as the effects on the biological parents—are equal.5

Indeed, McMahan speaks of the Time-Relative Interest Account as providing “a basis for an argument for the permissibility of abortion.”6

I say that McMahan can be ‘interpreted’ as making this claim, because elsewhere in his writings, it is not as clear that he makes this claim. In particular, McMahan holds the view that the Time-Relative Interest Account of the wrongness of killing is just one component of a more comprehensive “Two-Tiered Account” of killing, according to which the wrongness of killing beings who are above a certain threshold of respect does not vary according to their strengths of time-relative interests, other things being equal.7 McMahan proposes that to be above this threshold of respect, one must have a certain minimum level of psychological capacities such as autonomy, which presupposes self-

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consciousness and some degree of rationality. But he does not say whether having this minimum level of psychological capacities is equivalent to having a certain minimum level or strength of time-relative interests. The assumption that having a minimum level of psychological capacities is equivalent to having a minimum level of time-relative interests implies that an individual with a minimum level of psychological capacities will always have stronger time-relative interests than a being who has less than the minimum level of psychological capacities. This means, for example, that an old human person who has the minimum level of psychological capacities but who only has a few minutes to live will still have stronger time-relative interests than a normal healthy animal, e.g. a dog, who has less than the minimum level of psychological capacities. Independent of our discussion, this assumption and its implication seem to me to be correct because although the dog’s future life will contain vastly more good, the old human person who will die in a few minutes still has a very strong time-relative interest in avoiding death in a few minutes, that is, he has a very strong time-relative interest in living for many more years. It is true that his interest in continuing to live will be frustrated but it is still an interest that he has and it seems that it would be stronger than any interest the dog might have.

In any case, this assumption is important for our purpose because if the two thresholds – the minimum level of psychological capacities and the minimum level of time-relative interests – were not equivalent, then the Time-Relative Interest Account of the wrongness of killing would not be providing the justification for the permissibility of abortion. Abortion would be permissible because embryos and fetuses have less than the

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minimum level of psychological capacities, and not on account of the strengths of their
time-relative interests.

If the two thresholds were equivalent, then the Time-Relative Interest of the
wrongness of killing could provide a justification for the permissibility of abortion,
because the embryos’ and fetuses’ having less than the minimum level of psychological
capacities is equivalent to their having less than the minimum level of time-relative
interests, and on the Time-Relative Interest Account of the wrongness of killing, killing
embryos and fetuses via abortion is therefore less wrong given that they have less than
the minimum level of time-relative interests, other things being equal.

Since we are interested in knowing whether the concept of a time-relative interest
can be used to justify the permissibility of abortion, since some writers such as DeGrazia
have explicitly used this concept to justify some forms of abortion, and since, as I have
said, the assumption that the two thresholds are equivalent has independent plausibility,
we should assume, for the purpose of this paper, that the two thresholds are indeed
equivalent, that is, having the minimum level of psychological capacities is equivalent to
having the minimum level of time-relative interests.9 Given this assumption, a case for
the Time-Relative Account of abortion can be presented as follows:

(1) Killing is more wrong and less permissible when it is an offense against
    persons. Call this ‘the morality of respect for persons’ or ‘morality of
    respect,’ for short.

(2) Outside of the morality of respect, killing is less wrong and may be more
    permissible. That is, such an act may be weighed and traded off in a "manner

9 In personal correspondence, McMahan accepts that this assumption could be consistent with his view.
approved by consequentialists”\(^{10}\) and such an act is not “directly subject to or opposed by a deontological constraint.”\(^{11}\)

(3) To be within the morality of respect, a being must have a certain minimum level of time-relative interests.\(^{12}\)

(4) Embryos/fetuses have less than the minimum level of time-relative interests.

(5) Therefore, killing embryos/fetuses is not governed by the morality of respect.

(6) Therefore, killing embryos/fetuses via abortion is less wrong and may be more permissible.

For this argument to be complete, it is important to define what counts as having the minimum level of time-relative interests. McMahan suggests the following rule of thumb.\(^{13}\) While most people believe that it is seriously wrong to kill persons like you and me, they do not believe that it is as seriously wrong to kill some animals like dogs. This suggests that these animals have less than the minimum level of time-relative interests.\(^{14}\)

If this is right, it follows that embryos/fetuses also have less than the minimum level of time-relative interests. For, compared to a normal dog, a fetus and certainly an embryo have much weaker time-relative interests. As McMahan describes a fetus,

The developed fetus cannot envisage or contemplate its future and hence cannot have future-directed psychological states, such as intentions; it would, if it were to become a person, be unable to recall its life as a fetus; and it now has no

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\(^{13}\) McMahan, *Ethics of Killing*, pp. 246-265.

psychological architecture—no beliefs, desires, or dispositions of character—to carry forward into the future. It is, in short, psychologically cut off or severed or isolated from itself in the future. Its future is, figuratively speaking, relevantly like someone else’s future. It is for this reason that despite the great good in prospect for it, the developed fetus has only a comparatively weak time-relative interest in continuing to live.\(^\text{15}\)

And he writes that “if the possession of certain psychological capacities is what relevantly distinguishes us from animals and so is the basis of respect, the developed fetus must fall outside the scope of the morality of respect, for it clearly does not possess the capacities that distinguish persons from animals.”\(^\text{16}\)

Given this, if the killing of animals like dogs is not governed by the morality of respect, the killing of embryos and fetuses should also not be. If so, the Time-Relative Interest Account seems to entail that killing embryos and fetuses via abortion is not as wrong and may be more permissible.

In this paper, I first argue that if the Time-Relative Interest Account permits abortion, then it would also permit infanticide. Given the impermissibility of infanticide, this is a strong reason to reject the Time-Relative Interest Account. I next consider and reject the proposal that the Time-Relative Interest Account can at least explain the permissibility of early abortion, even if it may not be able to explain the permissibility of late abortion. This does not mean there is no way to justify the permissibility of


abortion. My purpose here is only to show that the Time-Relative Interest Account does not by itself entail the permissibility of abortion.

The Time-Relative Interest Account and Infanticide

If the Time-Relative Interest Account permits abortion, then it would also permit infanticide. The reason should be obvious. Newborn babies also have weaker time-relative interests than normal dogs. Indeed, a newborn baby hardly can ‘contemplate its future’ and ‘have future-directed psychological states, such as intentions’ any more than a developed fetus approaching birth would be able to. Like a developed fetus, if a newborn were to develop to maturity, it would be unable to recall its life as a newborn. It is, similar to a developed fetus, ‘psychologically cut off or severed or isolated from itself in the future.’ Hence, on the Time-Relative Interest Account, a newborn also has less than the minimum level of time-relative interests. If so, it should follow that killing a newborn is also not governed by the morality of respect. If so, infanticide should be permissible on this account, that is, infanticide should not be directly subject to or opposed by a deontological constraint.

McMahan acknowledges that this is an implication of the Time-Relative Interest Account, and he tries to defuse the objection in two ways. First, he suggests that infanticide might not be so wrong. In this regard, he points to historical precedents and cultural practices that have permitted infanticide, including in the United States and Britain where certain infants with Down’s syndrome have been allowed to die. This strategy amounts to biting the bullet and is, I believe, not promising. Despite the cultural practices and historical precedents that McMahan cites, including the practice regarding

infants with Down’s syndrome, the Time-Relative Interest Account seems to imply that all forms of infanticide – whether of unhealthy infants or of healthy infants – are permissible, that is, they are not subject to deontological constraints. Yet, most people, as McMahan acknowledges, simply do not believe that infanticide is generally permissible. I am going to assume that they are right. This means that if the Time-Relative Interest Account has this implication, then this is a serious problem for this account.

McMahan’s second strategy is to argue that there are differences in the strength of time-relative interests between a developed fetus and a newborn that might account for the distinction between abortion and infanticide. It might be worth noting that I do not think that McMahan believes in this strategy. He is inclined, I think, towards the first strategy. As he says at one point, “I believe, therefore, that common sense beliefs about the morality of infanticide have to be revised. Because the newborn differs only slightly in nature and status from the developed fetus, there is no basis for a radical moral distinction between abortion and infanticide.” Nevertheless, it is instructive to consider what McMahan says here or what someone else who also holds this view could say to see if the Time-Relative Interest Account can avoid this implication.

McMahan offers three suggestions. First, he points out that a newborn infant is exposed at birth to a large amount of external stimuli, which impels its mind to operate at a higher level, thereby accelerating its psychological development. As a result, the infant’s time-relative interest in continuing to live will be stronger than when it was a fetus.

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However, that a newborn infant is exposed at birth to a large amount of external stimuli may just be a contingent fact. For, we can imagine that after birth, an infant is placed and raised in a dark room in which external stimuli are minimized. Infanticide would not be more acceptable just because the newborn infant is now less stimulated psychologically.

But let us suppose that being born inevitably causes the newborn infant’s mind to be additionally stimulated. The issue is here whether the newborn will achieve a level of time-relative interests that is higher than that of normal animals such as dogs. It should be obvious that immediately after birth, it is doubtful that a newborn infant would achieve a level of time-relative interests comparable to that of a normal animal, let alone a higher level of time-relative interests, even taken into account the external stimuli that it may receive. If this is right, then even granting that there may be a slight difference between the infant and the fetus in their strength of time-relative interests, this would hardly explain how the Time-Relative Interest Account need not entail the permissibility of infanticide.

McMahan’s second suggestion is that at birth a newborn infant begins actively to form special relations with the parents and others in ways in which it is not possible for a fetus. According to McMahan, the special relations may “magnify the reason these people have not to frustrate its time-relative interest in continuing to live.”

First, it is worth mentioning that developing fetuses can also actively form some special relations with the parents and others. At late stages of a pregnancy, a fetus may kick back when its foot is touched and may respond to music and other kinds of sounds from parents and others. Secondly, when someone is contemplating infanticide, it is

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unlikely that they would try to form special bonds with the newborn infant. If so, in such a case, it is unlikely that there would be much stronger special relations to the infant after it was born than before it was born. This means that while special relations may explain why some people do not kill their newborns, for people who are thinking about killing their newborn, it does not seem to provide any reason why they should not do so. Finally, it is hard to see how special relations at an early stage of infancy could drastically change a newborn’s time-relative interests. If it does not, then it remains the case that the newborn does not have significantly stronger time-relative interests than the fetus. If so, the Time-Relative Interest Account still seems to entail the permissibility of infanticide.

McMahan’s third suggestion is that the reasons favoring killing a fetus are often stronger than in the case of infanticide. He points to Judith Jarvis Thomson’s argument that the fetus inside the pregnant woman’s body is dependent on the continued use of her body for survival, which can be quite burdensome and invasive to the pregnant woman. Newborns on the other hand exist independently and the sacrifices they may require from others for their survival may be of a fundamentally different kind and possibly less burdensome. According to McMahan, this means that possible justifications for infanticide may be more limited and substantially weaker than possible justifications for abortion. If so, according to McMahan, this may be the main reason why infanticide is generally more objectionable than abortion.

This strategy also does not work because we are not just interested in any distinction between abortion and infanticide. Rather, we are interested in a distinction

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that would enable one to say that on the Time-Relative Interest Account, while abortion is permissible, infanticide is not. While McMahan’s point above offers an explanation why infanticide may be generally more objectionable than abortion, it does not change the fact that on the Time-Relative Interest Account, infanticide is still permissible; that is, it is not subject to deontological constraints. Again, the permissibility of infanticide on the Time-Relative Interest Account derives from the fact that newborn babies have weaker time-relative interests than normal dogs. Given that it is permissible to kill dogs because they have less than the minimum level of time-relative interests, it should be even more permissible to kill infants given that they have even weaker time-relative interests. The fact that there may be additional reasons for favoring abortion does not change the fact that from the perspective of time-relative interests, an early fetus and an infant are intrinsically similar. So, if it is permissible from the perspective of time-relative interests to have an abortion, then from the same perspective infanticide should also be permissible.

Hence, McMahan has not defused the charge that the Time-Relative Interest Account entails that infanticide is permissible. Given the serious implausibility of this implication, one might question also its implication about the permissibility of abortion.

**The Time-Relative Interest Account and Early Abortion**

At this point, some might draw a distinction between early and late abortion, and some might argue that irrespective of the Time-Relative Interest Account’s implication for late abortion, it can at least explain the permissibility of early abortion.\footnote{See, e.g., DeGrazia, ‘Identity, Killing, and the Boundaries of Our Existence’, *op. cit.*} One way to define early abortion is as an abortion prior to the fetal brain’s acquiring the capacity to support
consciousness, which occurs some time between the twentieth and the twenty-eighth week of gestation.\textsuperscript{23} Since exactly when this event takes place is indeterminate given our present understanding of the nature of consciousness, McMahan proposes that we adopt a conservative estimate and stipulate that an early abortion takes place prior to twenty weeks, or roughly about five months after conception.\textsuperscript{24} Accordingly, a late abortion would take place after the fetus has developed the capacity to generate consciousness.

It should be noted that McMahan himself does not try to show that the Time-Relative Interest Account can explain the permissibility of early abortion. The reason he believes that early abortion is permissible is because he holds a certain view of identity, what he calls the Embodied Mind Account of Identity, that says that we begin to exist only when the capacity to generate consciousness is there.\textsuperscript{25} If the Embodied Mind Account is correct, then an early abortion merely prevents someone from existing.\textsuperscript{26} To be sure, as McMahan acknowledges, an early abortion does kill a developing human organism. However, McMahan argues that if we are not identical to this organism, it is hard to see how the organism can have a special moral status sufficient to make it seriously wrong to kill it.\textsuperscript{27} In contrast, late abortion does kill someone like you and me. Let us call this the identity argument.

There are two problems with the identity argument. First, the Embodied Mind Account is a controversial thesis. Even defenders of liberal abortion policies such as Peter Singer and David DeGrazia do not accept it.\textsuperscript{28} Many people accept instead what

\begin{itemize}
\item \textsuperscript{23} McMahan, \textit{Ethics of Killing}, p. 267.
\item \textsuperscript{24} McMahan, \textit{Ethics of Killing}, p. 268.
\item \textsuperscript{25} McMahan, \textit{Ethics of Killing}, pp. 66-94; 267-269.
\item \textsuperscript{26} McMahan, \textit{Ethics of Killing}, p. 267.
\item \textsuperscript{27} McMahan, \textit{Ethics of Killing}, p. 269.
\end{itemize}
might be called the Organism View of Identity, which says that we begin to exist when our organisms begin to exist, which is sometime before our capacity for consciousness begins to exist. ²⁹ If the Embodied Mind Account is false, then McMahan’s identity argument already fails.

This said, it is worth pointing out that some people who reject McMahan’s Embodied Mind Account may still employ a version of the identity argument to defend early abortion. In particular, some people believe that we begin to exist only when twinning is no longer possible. ³⁰ Since the possibility of twinning ends sometime after fertilization, it follows that early abortion, as defined by the period during which twinning is still possible, would be permissible, using the identity argument.

Elsewhere I have argued that the Embodied Mind Account is false, that we should accept the Organism View, and that on the most plausible Organism View, we exist before the possibility of twinning ends, namely, at the moment of fertilization. ³¹ I shall not repeat those arguments here, and I shall simply say that on this particular Organism View, an early abortion would still be killing one of us.

The second, more serious problem with the identity argument is that if it were valid, it seems that this argument would be sufficient to establish the permissibility of early abortion. If so, it would render the Time-Relative Interest Account unnecessary. Indeed, as I said earlier, McMahan himself does not defend early abortion using the Time-Relative Interest Account. This is a problem if the aim is to show that the Time-

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²⁹ A defense of this view can be found in E. Olson, *The Human Animal: Personal Identity Without Psychology* (New York: Oxford University Press, 1997).
³¹ See [Author A]
Relative Interest Account, and not some other theory, can explain the permissibility of early abortion.

Is there then a way to use the Time-Relative Interest Account to demonstrate the permissibility of early abortion without appealing to the identity argument and while avoiding the implication of infanticide? Here is a possibility: It might be pointed out that how exclusive or inclusive the Time-Relative Interest Account is depends on where one sets the minimum level of time-relative interests required to be within the morality of respect. McMahan, as we have seen, sets it at the level at which animals such as dogs would not be part of the morality of respect. But one could lower the requirement in order to avoid the implication that infanticide is permissible. Admittedly, once the minimum level is lowered so that infanticide is excluded, this revised Time-Relative Interest Account would no longer imply that late abortion is permissible, since the difference between a newborn and a late term fetus is, as we have seen, not significant. However, it might nevertheless enable one to argue that early abortion is permissible, for the following reason: Even after drastically lowering the level required to be within the morality of respect, ‘early fetuses’ – defined as fetuses that have not yet developed the capacity for consciousness – will still not meet it, even if they are one of us, so that an appeal to the identity argument is not necessary. This is because early fetuses utterly lack any psychological connection with their later selves, and therefore utterly lack any psychological capacity. Given this, on this revised Time-Relative Interest Account, the killing of early fetuses would therefore not be governed by the morality of respect. If so, the killing of early fetuses via early abortion should be permissible. Indeed, David DeGrazia says that “the utter lack of psychological unity between the presentient fetus
and later minded being it could become justifies a radical discounting of the harm of the fetus’s death.”32 However, it should be noted that DeGrazia has not explicitly proposed that one should lower the minimum level of time-relative interests. Yet, this lowering seems necessary if a Time-Relative Interest Account is to avoid implying that infanticide is permissible, while it demonstrates that it can explain the permissibility of early abortion without relying on the identity argument.

So, is this proposal successful? I believe that it is not. For one thing, once one lowers the minimum level of time-relative interests required so that infanticide is excluded, this revised Time-Relative Interest Account would imply that the killing of animals such as dogs should also be governed by the morality of respect. After all, if infants are governed by the morality of respect in terms of their time-relative interests, then normal animals such as dogs, given that they have much stronger time-relative interests than infants, should also be governed by the morality of respect. Now some people might welcome this implication. But consider its consequences. Many people believe that once a being meets the minimum requirement of the morality of respect for persons, then that being has equal worth to all the other beings who also meet this minimum requirement. Call this the Equal Worth View.33 On this view, even if other beings have comparatively stronger time-relative interests than this being does, all beings that meet the minimum requirement still have equal worth. So, for example, suppose Bright, as a result of his intelligence, has comparatively stronger time-relative interests

33 McMahan discusses a specific version of the Equal Worth View, what he calls Equal Wrongness View (Ethics of Killing, pp. 235-240).
than Dull, who is constitutionally dim-witted. Since both are above the threshold of the morality of respect, the Equal Worth View implies that they both have equal worth, even though they have different strengths of time-relative interests. One implication of their having equal worth may be that other things being equal, e.g. if neither is culpable for the predicament he or she is in or if there are no considerations of special relations, then killing either would be equally wrong. Another implication may be that other things being equal, in a situation in which one could save one or the other but not both, as both have equal worth, one might for example have to toss a coin to decide whom to save.

If animals such as dogs are above the threshold of the morality of respect, then the Equal Worth View implies that they have equal worth like you and me. So, killing a dog would be just as wrong as killing, for example, Bright. Or, if Bright and the dog are both drowning, as both have equal worth, one might have to toss a coin to decide whom one should save. These implications, however, seem counterintuitive.

Alternatively, one might reject the Equal Worth View and accept instead the Differential Worth View which says that for two beings who are above the threshold of morality of respect, the one with the comparatively stronger time-relative interests has the greater worth. The Differential Worth View can avoid the implausible implications that killing a dog is just as wrong as killing Bright and that one should toss a coin when deciding whether to save Bright or a dog, because arguably, Bright has greater worth than the dog, since the former typically has stronger time-relative interests. However, the Differential Worth View now implies that Bright has greater moral worth than Dull, given that Bright has stronger time-relative interests than Dull. Among other things, this

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34 The example of Bright and Dull comes from McMahan, *Ethics of Killing*, p. 234.
means that killing Dull is not as bad as killing Bright; or when faced with a choice of saving Bright or Dull, this view implies that one should save Bright instead of tossing a coin. Neither implication seems plausible.

Moreover, suppose the choice now is between a normal adult dog and a newborn human infant. As we said earlier, normal adult dogs have much stronger time-relative interests than newborn human infants. On the Differential Worth View, it seems therefore that the dog has greater worth than the newborn infant, other things being equal. If so, killing the newborn would not be as bad as killing the dog; or if confronted with the choice of saving the dog or the newborn, other things being equal, it seems that one should save the dog instead of the infant. Again, these implications seem counterintuitive.

Some might be tempted to resist this last example by arguing that even though the newborn has weaker present time-relative interests than the dog, the newborn’s total valuable future will be greater than the dog’s. The unstated conclusion here is that after taking into account this factor, the newborn will have a greater worth than the dog, thereby diffusing the counterintuitiveness of the Differential Worth View. First, whether the newborn will have greater valuable future than the dog is a contingent matter. We can stipulate that the newborn has a serious genetic disease and that it will die before its total valuable future or the strength of its time-relative interests is greater than that of the dog. Even so, it still seems absurd to think that killing the dog is worse than killing this newborn. Secondly, even supposing that we are concerned with the typical case in which the newborn will have greater valuable future than the dog, this

36 I passed over the possibility that the newborn and the dog may have equal worth, since that possibility would still be counterintuitive.
argument involves a measure of confusion. The concept of a time-relative interest is a theory about how to aggregate well-being over time. In particular, it takes an individual’s total valuable future and discounts them for the strength of the psychological connectedness to one’s past and future selves. Since the total valuable future has already been factored in and discounted, one cannot appeal to it again, as the above argument does. Otherwise, the notion of a time-relative interest would become incoherent. Indeed, proponents of the Time-Relative Interest Account of abortion were able to argue that the late fetus is below the threshold of respect on the ground that animals such as dogs are below the threshold of respect and the late fetus has weaker time-relative interests than these animals. If one now claims that a newborn has greater worth than a dog, even though the newborn’s time-relative interests are weaker than that of the dog, then by the same logic, the late fetus should also have greater worth than the dog, since like the newborn it also has greater total valuable future than the dog. But if this is right, then it is no longer clear that the late fetus is below the threshold of morality of respect, as proponents of the Time-Relative Interest Account have claimed. If so, the case for a Time-Relative Interest Account of abortion would falter.

Hence, while lowering the minimum level does enable a Time-Relative Interest Account to say that early abortion is permissible, the consequences of the idea that killing animals like dogs are governed by the morality of respect for persons seem unacceptable.

Let me suggest another argument against this proposal, which could be controversial. While it is true that early fetuses lack time-relative interests altogether, it is also the case that late fetuses really do not have much of them either. Indeed, the

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37 See Broome, *Weighing Lives*, pp. 249-251 for this point.
38 If someone finds this argument unpersuasive, there is still the first argument above.
degree to which a late fetus, which has just (a few hours ago) acquired the capacity for
generating consciousness, can be psychologically invested in its future seems hardly
significant when compared to an early fetus. Given this, and given, as has been granted
earlier, that both are one of us, it seems highly questionable that the early fetus’ utter lack
of any time-relative interest should matter so much such that the killing of it would be
permissible while the killing of the late fetus would not be. Indeed, it seems that the
treatment of either should be the same. So, either it should be permissible to kill both or
it should not be. Since we have argued that it is not permissible to kill late fetuses on the
revised Time-Relative Interest Account, it seems that it should also not be permissible to
kill early fetuses on this account.

To develop this point further, consider an analogy. Suppose there is a human
being in persistent vegetative state (PVS) and another in deep coma.\textsuperscript{39} In the case of the
PVS patient, the ‘higher’ cerebral brain is completely damaged. This means that he
utterly lacks the biological structures necessary for having consciousness, which
therefore means that he utterly lacks any time-relative interest. In the case of the deep
coma patient, the reticular formation, which is needed for controlling arousal in the
cerebral hemispheres, is permanently damaged, but the cerebrum is on the whole intact.
This means that arguably, the deep coma patient still has some time-relative interests,
albeit very weak ones, since the physical substrate of the mind is preserved and
potentially functional.\textsuperscript{40} Let us suppose that the organisms of both continue to function
on their own without respirators. Moreover, let us suppose, quite plausibly in my view,

\textsuperscript{39} For a good discussion of these two cases along the lines I am suggesting, see McMahan, \textit{Ethics of
Killing}, pp. 443-450.
\textsuperscript{40} See also McMahan, \textit{Ethics of Killing}, pp. 426-450.
that both the PVS patient and the deep coma patient are one of us. (This assumption is necessary because it is necessary to ensure that the Time-Relative Interest Account is what will be doing the work and not some version of the identity argument. If this assumption is not granted, then this example is not analogous to the early/late fetus case I have been discussing. Also, given this assumption, the not uncontroversial view that we die when our “higher brain,” i.e. our cerebrum, dies would be ruled out). The important question for us here is that given that the PVS and the deep coma patient are both one of us, but given that the PVS patient utterly lacks any time-relative interest, while the deep coma patient has just a bit of time-relative interests left, does this difference justify a very different treatment of the two such that, for example, it would be permissible to kill the PVS patient while it would not be permissible to kill the deep coma patient?

My conjecture is that there should be no difference morally in the way one treats the two cases. Indeed, some people believe that it would be wrong to kill the deep coma patient, and that it might also be wrong to allow the deep coma patient to die, unless the patient has previously expressed an autonomous preference to be allowed to die in such circumstances. If they believe this, and if they believe that both the PVS and the deep coma patient are one of us, then they should also believe that it is wrong to kill the PVS

41 I defend this in [Author A]
42 It should be noted that the difference between the PVS and the deep coma patient may be somewhat greater than the difference between the early fetus and the late fetus. This is because while both the PVS patient and the early fetus utter lack any time-relative interests, the cerebrum of the deep coma patient is typically developed while the cerebrum of the late fetus is typically not as developed. This suggests that the difference between the early and late fetus is even less than the difference between the PVS and the deep coma patient.
patient, and that it might also be wrong to allow the PVS patient to die, unless the patient has previously expressed an autonomous preference to be allowed to die in such circumstances.

Others such as Peter Singer and James Rachel have argued that the fact that the PVS patient and the deep coma patient are alive does not in itself tell us whether it is wrong to take their lives.\textsuperscript{45} Since they believe that it is permissible to kill the PVS patient in certain circumstances, they should also believe that it is permissible to kill a deep coma patient in similar circumstances. In fact, Singer has argued that there is no principled reason why it would be wrong to take the lives of either, given that neither has the capacity for consciousness.\textsuperscript{46} So, for Singer, the treatment of either would be the same, even though one utterly lacks any time-relative interest while the other one has some measure of time-relative interests. Also, McMahan, who sees a metaphysical difference between the two cases in terms of time-relative interests, nevertheless says that “Although deep coma is fundamentally different from PVS in metaphysical terms, it may not be much different prudentially or morally . . . patients in a deep coma should be treated in much the same way that we ought to treat patients in a PVS.”\textsuperscript{47} This suggests that the difference between the PVS and the deep coma patient in terms of time-relative interests does not justify a very different treatment of the two such that, for example, it would be permissible to kill the PVS patient while it would not be permissible to kill the deep coma patient. If I am right, given that this case parallels the early/late fetus case, it seems that the difference between the early and late fetus in terms of time-relative interests also should not justify a very different treatment of the two. If so, and given that

\textsuperscript{45} Singer, \textit{Rethinking Life and Death}, p. 207; Rachels, \textit{The End of Life}, pp. 42-43.
\textsuperscript{46} Singer, \textit{Rethinking Life and Death}, p. 105.
\textsuperscript{47} McMahan, \textit{Ethics of Killing}, pp. 449-450.
the revised Time-Relative Interest Account does not permit late abortion, then it should also not permit early abortion.

**Conclusion**

The concept of a time-relative interest is useful for solving certain puzzles about the badness of death. Some people believe that the concept can also be used to show that abortion is permissible. In this paper, I first argued that if abortion were permissible on the basis of the Time-Relative Interest Account, then infanticide would also be permissible on the same basis. The implausibility of infanticide suggests that we should also question the plausibility of the Time-Relative Interest Account. I next considered and rejected the suggestion that the Time-Relative Interest Account can at least explain the permissibility of early abortion, even if it has implausible implications when applied to late abortion. If I am right, abortion, whether early or late, has to be justified on grounds other than time-relative interests.