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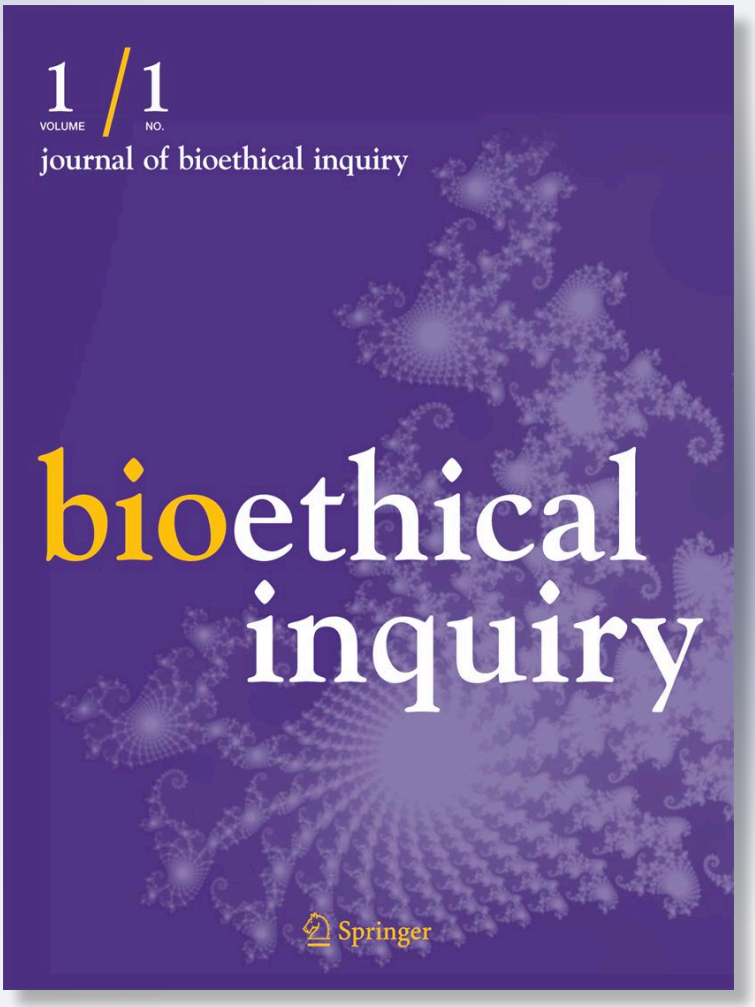

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SYMPOSIUM

Do Embryos Have Interests?

Why Embryos Are Identical to Future Persons but Not Harmed by Death

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Abstract Are embryos deserving of moral consideration in our actions? A standard view suggests that embryos are considerable only if they have interests. One argument for embryonic interests contends that embryos are harmed by death because they are deprived of valuable future lives as adult persons. Some have challenged this argument on the grounds that embryos aren't identical to adults: either due to the potential for embryos to twin or because we do not exist until the fetus develops consciousness. These arguments fail to show that embryos do not have future adult lives. There is a better reason to think that embryos cannot have interests; namely, because they are not capable of having desires. Others have held this view but have not sufficiently justified it. The justification lies in the fact that the capacity for desires is necessary to make sense of the normativity of interests.

Keywords Embryos · Interests · Moral considerability · Identity · Stem cell research · Bioethics: Medical ethics · Philosophy: Analytic philosophy

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One of the central moral issues in contemporary debates over the ethics of human embryonic stem cell research is the *moral considerability* of the human embryo—that is, whether an embryo is worthy of some form of moral consideration or respect for its own sake in our actions. According to Bonnie Steinbock's *interests view*, one prerequisite for being morally considerable is the possession of interests (Steinbock 1992). For an entity to possess interests means that it has *a welfare*—it is capable of being harmed or benefited by what happens to it. According to this view, then, to decide whether embryos are morally considerable, we must determine whether they have interests. In Steinbock's view, embryos do not have interests because they are not *sentient*. On the other hand, some philosophers have suggested that embryos have interests despite lacking sentience. One argument for this view contends that embryos are harmed by death because they are deprived of their valuable future lives as adult persons. However, this argument—let us call it *the future goods argument*—has been challenged on the grounds that embryos are not identical to future adult persons: either because of the potential for embryos to twin or because none of us comes into existence until the fetus develops the capacity for consciousness.

In this paper, I defend the view that embryos cannot have interests because they lack sentience. However, I contend that the standard arguments against embryonic interests have been inadequate. For one, philosophers such as Steinbock have not sufficiently defended the view that sentience is a

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prerequisite for having interests. Moreover, I argue that it is a mistake to think that embryos do not have future lives as adult humans. In making this argument, I defend two main points. First, even if my consciousness is the most important part of who I am as a person, I still have a clear physical, biological identity to some past embryo. Second, even when an embryo twins, it makes sense to think that both twins are identical to the original embryo, despite the fact that this would clearly violate a principle of transitivity (according to which if A equals B and B equals C, then A must equal C). Following this argument, I aim to provide a more satisfactory defense of the view that the capacity to feel is a prerequisite for having interests. I argue that this view is reasonable because interests are normative concepts and that the capacity to feel or desire is necessary to justify and make sense of such concepts. That is, even if embryos have future lives as adult persons, it is unclear why we should think that their future lives *have value for them* if embryos are not capable of feeling or having desires.

Although my arguments in this paper will have important implications for questions about the moral status of the human fetus and the ethics of abortion, it is beyond the scope of this paper to explicitly address those questions. Let me add that when it comes to ethical questions surrounding our treatment of human embryos and fetuses, it is important to recognize that the moral status of the embryo or fetus is not the only ethical question to be settled: We also must address questions about the rights of a pregnant woman to control her body and whether those rights trump any interests or rights the embryo or fetus may possess. My interest in this paper, however, lies more narrowly in the question of whether we should think that a human embryo can have interests. Perhaps the best way to turn our attention more exclusively to this question is to focus especially on the moral status of "research embryos"—embryos created in vitro (fertilization taking place in a laboratory, outside of a woman's body) explicitly for the purpose of being used for research.

Steinbock's Argument Against Embryonic Interests

According to Bonnie Steinbock, embryos are not the kind of beings that can be morally considerable. Her argument essentially consists of three claims: (1) Having interests is a prerequisite for moral considerability, (2) only sentient beings can have interests, and (3) human embryos are not sentient. Let us consider each of these claims individually.

According to Steinbock, "to have moral status" is "to be the sort of being whose interests must be considered from the moral point of view" (Steinbock 1992, 9). In other words, when we give moral consideration to entities, we give consideration to how our actions can harm or benefit them. Steinbock appeals to Joel Feinberg in explaining that having interests entails "having a stake" in things. If moral consideration is merely consideration of how our actions affect others' interests, then it only makes sense that a being must have interests to be morally considerable. Drawing from Feinberg's analysis of moral rights, Steinbock suggests that to have moral status is to have a moral claim to consideration from others (Feinberg 1980, 167). She argues, "If a being has no interests, it can have no claim against others, nothing they are required to consider from a moral perspective" (Steinbock 1992, 10).

If the "interests view" is correct, then a crucial question is what kinds of things can have interests? According to Steinbock, only beings that have conscious awareness and sentience can have interests. Sentience is defined as the capacity to feel, to experience pleasure and pain, enjoyment and suffering. In defense of her view, Steinbock claims that interests are closely connected to "what we care about or want, to our goals and concerns, to what is important or matters to us" (Steinbock 1992, 14). If an entity lacks consciousness and sentience, she explains, then nothing which happens to it can matter to it; it cannot care about anything. Similarly, Feinberg denies that trees or other non-conscious entities can have interests, arguing that interests are things that are necessarily "compounded out of *desires* and *aims*, both of which presuppose something like *belief*, or cognitive awareness" (Feinberg 1980, 167–171).

In Steinbock's view, then, only sentient beings are worthy of moral consideration, since having interests is a prerequisite for moral considerability and only sentient beings can have interests. The final premise of Steinbock's argument is to point out that embryos do not possess conscious awareness or sentience. Although embryos may one day grow to become fetuses and then newborn infants who are sentient and aware, human life at the embryonic stage has not yet

developed any sort of nervous system to support conscious capacities. It follows from Steinbock's argument that embryos do not have any moral status.[1]

The Future Goods Argument for Embryonic Interests

Contrary to Steinbock, many opponents of human embryonic stem cell research hold that human embryos have significant moral status. Let us assume, for the moment, that Steinbock's interests view is correct in that having interests is a prerequisite for moral considerability. What reasons might there be for thinking that embryos, although not sentient, can have interests? One possible reason can be found in a well-known argument in defense of the moral status of human fetuses.

In his article "Why Abortion Is Immoral," Don Marquis argues that killing a human fetus is prima facie seriously wrong, primarily because of the harm that death causes a fetus. Marquis reasons that it is prima facie seriously morally wrong to kill an adult person because it "inflicts one of the greatest possible losses on the victim," namely, it deprives the victim of her *valuable future life*—that is, "all the experiences, activities, projects and enjoyments that would otherwise have constituted one's future" (2008, 346). Marquis notes that one's valuable future life consists not only of the things in one's future that one *now* values, but also the things in one's future that one *will come to value* as one grows older and one's "values and capacities change" (2008, 347). Likewise, Marquis argues that to kill a fetus is also a serious loss for the fetus because, just like in the case of persons, death deprives a fetus of its valuable future life. He explains, "The future of a standard fetus includes a set of experiences, projects, activities, and such which are identical with the futures of adult human beings and are identical with the futures of young children" (Marquis 2008, 348).

Now, it might be thought that one crucial difference between fetuses and adult persons is that only persons are capable of actually valuing or caring about things in their futures. Indeed, this is Steinbock's point of view. However, Marquis challenges this point of view when he asserts that one's valuable future life consists partly of things in one's future which one does not value now but *will come to value* in the future. This move allows Marquis to argue that, although a fetus cannot value anything in its present state, it still has a valuable future life because it will eventually come to value or care about things as it becomes a child and later an adult, and its mental capacities develop accordingly.

Marquis' argument specifically concerns the moral status of a fetus. But a similar argument could be made in defense of the moral status of embryos. Although not sentient, it is prima facie seriously wrong to intentionally destroy an embryo because it possesses a valuable future life—the same as a human infant, child, or adult. To destroy an embryo is to inflict a serious harm on the embryo by depriving it of its valuable future life—all the experiences, activities, projects, and enjoyments that constitute its future. Although an embryo is not capable of caring about anything in its present state, it still has a valuable future life insofar as it will come to value and care about things if it is allowed to develop into an adult human being. By claiming that death harms embryos by depriving them of their valuable future lives, this argument specifically challenges Steinbock's view that only sentient beings can have interests.[2]

Identity-Based Objections to Embryonic Interests

One of the most common challenges to this future goods argument for embryonic interests contends that embryos do not have future lives as adult humans because embryos are not numerically identical to (i.e., one and the same as) any future human beings. There are at least two different arguments that contend that embryos are not identical to future humans and, therefore, do not have future adult lives. According to

[1] Despite her conclusion that embryos do not have moral status, Steinbock suggests that embryos, as potential persons, do have "symbolic value" that "precludes using them in unnecessary experiments or for purely commercial gain" (Steinbock 1992, 41). I briefly consider this idea in the conclusion of this paper.

[2] To be clear, Marquis himself does not endorse adapting his "valuable future life" argument to the case of embryos. Elizabeth Harman appears to endorse such an argument, however. She claims, "It is very bad *for an embryo* if it comes to exist and is then destroyed" (Harman 2007, 72, *emphasis original*). She explains that it is very bad for the embryo because "it does not get to live life as a person" (Harman 2007, 72).

the first argument, none of us was ever an embryo because human beings, most essentially, are psychological beings with the capacity for consciousness. According to this view, none of us came into existence at least until we acquired the capacity for consciousness. Since embryos do not have conscious capacities (they have not developed any kind of central nervous system), none of us exists yet at the embryo stage. Let us call this the *argument from psychological identity.*

Jeff McMahan is one person who has made this argument against embryonic interests. McMahan rejects the view that we are essentially human organisms who come into existence as zygotes at the time of conception. Instead, he argues that human beings are "embodied minds"—that is, we are essentially brains "capable of generating consciousness or mental activity" (McMahan 2002, 68). According to McMahan, we begin to exist not as zygotes or embryos but, rather, "when the fetal brain develops the capacity for consciousness, which happens sometime between 22 and 28 weeks after conception, when synapses develop among the neurons in the cerebral cortex" (McMahan 2007, 48). What does this mean for the moral status of the embryo? McMahan explains, "Only after the development of the capacity for consciousness is there anyone who can be harmed, or wronged, by being killed" (2007, 48). So, since embryos do not have the capacity for consciousness, there is nobody who exists yet and, therefore, no one who can be harmed from death. McMahan suggests, "To kill an early embryo is not to kill someone like you or me. … It is to prevent one of us from coming into existence," no different essentially from using contraception (2007, 47).

The idea that embryos are identical to future adults faces another well-known problem; namely, that for about two weeks after fertilization, the embryo is capable of "twinning." Twinning is the process by which an embryo divides into two (or more) parts that go on to become two separate human beings—identical twins. The possibility of twinning challenges the idea that an early embryo is a single, individuated organism. Suppose that we have a single embryo that divides into two parts which go on to become two identical twins: Alana and Cindy. If human beings begin to exist as embryos, which one of the twins is numerically identical to the original embryo pre-twinning? Neither twin has any special claim over the other. Moreover, it is argued, the embryo cannot be identical to *both* twins, because the twins are numerically distinct.[3]

This last argument—that the embryo cannot be identical to both twins—makes an important assumption, namely, that *human identity is transitive*. According to the principle of transitivity, if Alana (A) is identical to the embryo (B), and the embryo (B) is also identical to Cindy (C), it follows that Alana (A) and Cindy (C) are one and the same individual. However, Alana and Cindy cannot be one and the same individual. No matter how qualitatively similar to each other, they are clearly two distinct individuals, with two distinct bodies and two distinct sets of experiences. Since Alana and Cindy are two distinct individuals—and assuming that identity is transitive—it cannot be the case that both individuals are identical to one and the same thing, the original embryo.

It follows from this argument that neither Alana nor Cindy is identical to the original embryo. Alana and Cindy did not begin to exist until after the original embryo divided. But what of those of us who are not the product of a twinning embryo—isn't it true that we began to exist at the moment of conception, as embryos or zygotes? According to some philosophers, the answer is no: The phenomenon of twinning shows that *none of us* was ever an early embryo. According to David DeGrazia, for example, the single-cell zygote is "merely a precursor to a human organism like you or me" (2005, 248); its existence is not sufficient for the existence of an individual human being, for there is the biological possibility that the zygote could divide into twins. This view suggests that none of us begins to exist until the embryo becomes a definite, distinct individual, incapable of twinning. For DeGrazia and others, the point when we begin to exist is about two weeks after conception, when "a line of cells differentiates into the primitive streak, the precursor to the spinal cord"—at this point natural twinning is impossible (DeGrazia 2005, 251).

[3] A similar problem is raised by the rare phenomenon of fusion, in which two embryos (the result of fraternal twinning) merge together to form one embryo, a chimera, which has two complete sets of DNA. According to David DeGrazia (2005), the chimera cannot be identical to both original embryos since they are numerically distinct from one another.

Shortcomings of the Twinning Argument

As we have seen, there are two arguments that challenge the idea that embryos have future lives as adult humans: (1) the argument from psychological identity and (2) the twinning argument. In what follows, I contend that both arguments fail to show why embryos do not have interests.

The twinning argument claims that none of us began to exist as early embryos because, at this early stage of human life, the embryo is capable of twinning. One problem with this argument is that it seems to show, at most, only that *identical twins* never existed as early embryos, for it is only when the embryo actually twins that we run into a problem of the transitivity of identity. For those people who are not identical twins, it does not raise a problem of transitivity to maintain that the embryo is numerically identical to the adult person. As I explained, some philosophers, such as DeGrazia, insist that the mere potential of the embryo to twin undermines its identity relation to an adult human. However, as others have pointed out, this argument is less than convincing. As Elizabeth Harman suggests, "the mere possibility of twinning" is not enough "to undermine identity in a case where twinning did not actually occur" (2007, 74). By analogy, Harman explains, "An amoeba today is identical to itself yesterday, although it could have divided yesterday into two amoebas" (2007, 75). Thus, the mere potential of embryos to divide does not undermine their identity to adult humans.

There is a second reason why the twinning argument fails to show that embryos are not identical to future adults. According to the twinning argument, identical twins cannot be numerically identical to one and the same embryo, because this would imply that the twins are one and the same human, when clearly there are two of them. As I pointed out, a crucial assumption of this argument is that human identity is necessarily transitive. That human identity must be transitive is often implied to be obviously true, not requiring much in the way of argument. Indeed, the denial of transitivity—that A = B, B = C, but A ≠ C—might seem to be a basic misunderstanding of logic. One classic defense of the idea that identity must be transitive comes from John Locke. He states, "One thing cannot have two beginnings of existence, nor two things one beginning; it being impossible for two things of the same kind to be or exist in the same instant, in the very same place, or one and the same thing in different places" (Locke 1999, 166–167). Indeed, Locke suggests that it is a contradiction to claim that two numerically distinct things are also one and the same.

However, there is good reason to question the view that human identity must be transitive. The basic problem of human identity is the problem of how one and the same human can *continue to exist over time*, despite the fact that the human in the past and the human in the future may be qualitatively different, both physically and psychologically. Now, some people believe that human continuity requires some form of physical continuity, whereas others think it requires psychological continuity. The crucial issue here, though, is *whether physical or psychological continuity is sufficient for the continuity of the human being*. DeGrazia and others think that the phenomenon of twinning embryos should lead us to believe that physical or psychological continuity is not sufficient, because then we would end up with two humans who are numerically identical to the same embryo but not numerically identical to each other, violating the principle of transitivity. Others, such as Derek Parfit, suggest that physical or psychological continuity is not sufficient for human continuity due to the possibility of fission—that is, dividing the hemispheres of a person's brain and transplanting each half into a separate body. If we accept that human identity must be transitive, these types of cases suggest that the continuity of a human over time requires not only physical or psychological continuity, but also *the nonexistence of any "branch-line cases"*—that is, it cannot be the case that there exist two numerically distinct humans who are both physically or psychologically continuous with one and the same human organism.

It is not clear, however, that we should accept that human identity must be transitive. Both physical and psychological continuity are not transitive relations. There is no dispute over this. Two beings can be physically continuous (in the case of twinning) or psychologically continuous (in the case of brain fission) with one and the same being but not continuous with each other. Given that we are willing to accept some relations are not transitive, it is unclear why we should think that human identity cannot also be one of these intransitive relations. It is especially unclear considering that human identity is just the

continuity of one and the same human being over time. Given these facts, we require a special reason to think that human continuity over time must be a transitive relation and, therefore, that physical or psychological continuity is not sufficient for human continuity. It is not clear what this special reason is supposed to be.

Locke's argument against two different things having one beginning was that it is logically impossible for two numerically distinct things to exist in the same instant in the very same place—that is, they cannot both be numerically distinct and also one and the same—or for one thing to exist in two different places. But I propose there is only a contradiction if we assert that two things that are distinct at one specific time (time *t*) are also one and the same at that very same time (time *t*). To claim that twins are numerically identical to the same embryo but not numerically identical to each other does not make this contradiction, since the single embryo to which they are both identical does not exist at the same time as the twins. The identity relation exists only across time.

The presumption against the view that identity must be transitive grows even stronger once we consider more closely the significance of branch-line cases to human identity. The view that identity must be transitive implies that the existence of branch-line cases is relevant to determining a human's identity. However, the existence of a branch-line case is something that is completely *external* to a being, and it seems wrong that some fact completely external to a being should have relevance to determining that being's identity. DeGrazia and others argue that the potential for embryos to twin is a reason to think that none of us ever existed as embryos. DeGrazia contends that, regardless of whether I actually have an identical twin, I never existed as an embryo, simply because of the potential of every embryo to twin. But the fact that there could have been a twin identical to me is something that seems external to me and, therefore, should not have any bearing on my present or past identity. It is external to me since whether I have or could have had an identical twin does not, in itself, seem to have any effect on my present physical or psychological existence (what I am like physically or psychologically) or my physical or psychological history (my physical or psychological development over time).

I conclude that there are good reasons for believing that human identity need not be transitive. In cases like twinning embryos or brain fission, it is possible for two persons to both be identical to one and the same entity existing in the past but not be identical to each other, just as they can be both physically or psychologically continuous with that entity but not continuous with each other. I don't think it is so bizarre to say that identical twins, though numerically distinct, were once the very same embryo. It follows that the twinning potential of embryos does not give us a reason to deny that embryos have future lives as adult humans or that they are harmed by death.[4]

Shortcomings of the Argument from Psychological Identity

The second identity-based objection to embryonic interests contends that embryos cannot be harmed by death because humans are essentially psychological beings and that we do not begin to exist until the fetus develops the capacity for consciousness. Like the twinning objection, this objection claims that killing embryos does not deprive them of any future adult life because embryos are not one and the same as adult humans. McMahan contrasts his psychological view of human identity with the alternative view that we are essentially human organisms or animals and, therefore, that we begin to exist once the embryo becomes a distinct organism, regardless of whether it possesses the capacity for conscious experience yet.

One reason why McMahan's view of human identity might appear especially attractive is because it makes sense of the thought that, if I permanently lose my capacity for consciousness due to severe brain damage I cease to exist, even if my body continues to breathe and circulate blood. This is why many people are in favor of taking patients off of life-support once they have permanently lost consciousness. Similarly, there is a certain reasonableness to the thought that I did not yet exist as an embryo—the embryo possessing no more capacity for consciousness than a human in a permanent vegetative state.

[4] Likewise, my arguments show that two embryos fusing into one also does not give us reason to think that embryos are not identical to future humans. In the case of fusion, we should conclude that both embryos are identical to the future adult, though they are not identical to each other.

However, when we say that a human no longer exists when brain-dead—or that a human does not yet exist as an embryo—what we mean more precisely is that the human *as a conscious being* does not exist at these times. It does not follow from this that there is no other sense in which a human exists at these times. As Locke recognized, we are more than one kind of thing, and the conditions for maintaining one's identity over time (i.e., remaining one and the same thing) will depend on the kind of thing we have in mind. First of all, we are *persons*, rational and self-aware beings. We are also *conscious beings*, beings capable of conscious experiences. We are *living animals* or *organisms*. And, most basically, we are *physical substances*. If we ask when we begin to exist as persons, the answer is when a human life acquires the self-awareness and rationality of a person. This would likely be sometime after early infancy since a newborn infant is not yet a self-aware person. Our existence as conscious beings begins earlier than this, at around six months of fetal development. If we ask when we begin to exist as human organisms, the answer is much earlier, at the point of conception or perhaps sometime soon after, depending on how we define an "organism" or "animal." Finally, if we think of ourselves as mere physical substances, it's not clear when we began to exist, since the substances that make us up have existed long into the past, although dispersed. In this sense, we will continue to exist after our bodies die. The dead and slowly decaying body is still one and the same as the body that was my body while I was alive, and gradually we become dispersed again, part of the earth.

Now, it might be thought that although it is true that we are all these different kinds of things—persons, conscious beings, living organisms, and physical substances—the question of when we begin to exist can be settled by distinguishing which of these things we are most essentially. However, this strategy is confused, for there is no "we" that is separate or independent from these different categories of what kinds of things we are. The question of when "we" begin to exist makes sense only if we interpret it as asking when we begin to exist *as persons* or *as conscious beings* or *as living organisms*. Whether we should accept McMahan's view that we begin to exist when the fetus develops consciousness depends on whether we are asking about our identity as conscious beings. A different answer is appropriate if we inquire into our identity as living organisms or as self-aware persons. There is not some separate "we" that possesses one true essence.

So, even if as conscious beings we do not exist yet as embryos, there is another sense in which we do exist as embryos; namely, as physical, biological organisms or entities. Physically speaking, the embryo and the adult human are one and the same organism. There is a clear physical, biological continuity between them. Theoretically, we could trace a line through space and time showing the growth of the adult human from this original embryo. Part of the biological development of the embryo into a fetus and ultimately a baby and an adult person is the development of the brain and, in particular, a human's conscious capacities. A person's brain and conscious capacities are physically continuous with the embryo, having grown from that embryo and its biological material. According to McMahan, we are "embodied minds" that "coexist with our organisms throughout our lives" (2007, 48). However, the mind is not something separate from the body; it is part of the body and has a biological history that goes back to an organism's beginnings as an embryo. (This assumes that Descartes was incorrect that the mind is immaterial and separate from the body.)

By destroying an embryo, then, we are preventing an organism from developing ultimately into a conscious adult human being, one who will have valuable projects, plans, relationships, enjoyments, etc. This is true regardless of whether the embryo is attached to the uterine wall and proceeding to become a fetus or whether it has merely been frozen for future potential use. Even a frozen embryo is the beginning of a human life and to destroy it is to prevent it from potentially developing into a conscious human being. According to the future goods argument, this is a reason to believe that embryos are harmed by death. McMahan's argument has not explained why we should think that a nonconscious embryo cannot be harmed by being deprived of its future life as a conscious adult human. To explain this, it is necessary to illuminate the connection between having consciousness and the capacity to be harmed. I proceed to do this below.

Why Embryos Cannot Have Interests

Is there some other reason to think that embryos cannot have interests? As we have seen, one argument

against embryonic interests contends that embryos cannot have interests because only conscious, sentient beings can have interests and embryos are not conscious, sentient beings. This is Steinbock's argument against embryonic interests. And we saw that the idea that consciousness or sentience is a prerequisite for having interests also has been endorsed by philosophers such as Feinberg. But why should we believe that sentience or consciousness is a prerequisite for having interests? Steinbock, as we saw, explains that interests are closely connected to our desires, concerns, or what matters to us. Similarly, Feinberg argues that interests are necessarily compounded out of "desires and aims," which presuppose beliefs or cognitive awareness. But why should we agree that interests are connected to or compounded from our desires or the capacity to feel? What exactly is this necessary "connection" between having desires (or sentience) and having interests? Why can't entities having no desires and no capacity to feel have interests? The thought that "nothing matters to such beings" is not a sufficient explanation, for it doesn't tell us why an entity must be capable of "having things matter to it" in order to have interests. The future goods argument points out that embryos have future lives as adult humans who will have various enjoyments, plans, relationships, etc., in their lives. Isn't this sufficient for having an interest in continued life? Doesn't this show that embryos "have a stake" in continued life? In short, neither Steinbock nor Feinberg adequately illuminates the connection between having interests and having sentience or desires, and consequently, it is unclear from their arguments why we should accept their view.[5]

Despite this shortcoming, I believe there is strong reason to think that sentience—or more specifically, the capacity for desires—is a prerequisite for having interests. The ultimate rationale for this requirement pertains to the nature of interests. Interests are *normative* or *evaluative* concepts. For a being to have interests means that certain things *have value* for that being, certain things are *good* for that being. For example, for a being to have an interest in life implies that life has value for that being. So, what explains the nature of this value, where this value comes from, why certain things have value for some beings? My suggestion is that a being's capacity for desires provides the most reasonable explanation for the idea that certain things have value for that being.

It seems clear that there is a basic link between *desiring* and *valuing*. When we desire a thing, we regard that thing as good to some degree, meaning simply that we have some positive feeling toward that thing. Now, the fact that we *regard* a thing as good doesn't necessarily mean it's *actually* good for us. But because of the link between desiring and valuing, the thought that satisfying our desires is prima facie good for us is not entirely mysterious. Moreover, when something that's actually good for us doesn't coincide with anything we actually desire, it's commonly the case that this thing would satisfy desires we are at least capable of having. For example, a person who is suicidal over a failed relationship still has an interest in life. A desire-based view can make sense of this by pointing out that the person is capable of desiring to live and that, in some sense, this capacity to desire to live is normatively more authoritative (i.e., what the person ought to want) in this case than the person's desire to die.[6] If an entity completely lacks the capacity to desire or care about things, however, then it is much more mysterious how things could have value for it. It is unclear where that value is supposed to come from if not, in some sense, from an entity's capacity to desire or care about things—that is, if not from an entity's capacity to have positive feelings toward certain things, to regard things as good.

Let us consider specifically the case for embryonic interests. According to this argument, embryos have an interest in life because they have a valuable future life as an adult human being, and death harms embryos because it deprives them of this valuable future life. This valuable future life consists of all the experiences, activities, projects, and enjoyments that the adult human being will come to value. The identity-based objections challenge whether it makes

[5] Steinbock (1992) addresses the future goods argument in her book, but her argument consists merely in the thought that embryos are not sentient and that a future goods argument might commit its proponent also to defending the moral status of gametes (sperm and unfertilized eggs). Her argument does not sufficiently explain why sentience is necessary to have interests, which is my concern in this paper.

[6] Ultimately a desire-based view needs to explain what makes some capacities for desires normatively more authoritative than others. Why should this person desire to live, as opposed to wanting to die? This is a complex issue to be addressed in another space. My central point here is simply that there is a close connection between desiring things and valuing them which helps us make sense of the idea that a thing has value for an entity.

sense to think that embryos really have future lives as adult humans. I have suggested that it does make sense. However, even if embryos have these future lives as adult humans, in which the adults will have experiences which they value, it's not clear how it makes sense to think that these future lives *have value for embryos* when embryos are incapable of desiring or caring about anything. It's a mystery where this value—the *good* that the future experiences are said to have for embryos—is supposed to come from. How can anything be good for an entity that is incapable of caring about anything?

The issue can be understood in Humean terms. To assert that embryos have future lives as adult humans is a purely descriptive claim about what is the case. To assert that these future lives have value for embryos is a normative or evaluative claim. Hume suggested that this move from descriptive claims to evaluative claims (deriving values from facts) requires some kind of explanation and justification (Hume 2000; see part I, section I of *Book III: Of Morals*, originally published 1740). Since embryos are not capable of desiring or caring about anything at all, it's unclear what that justification is supposed to be. On the other hand, the normative claim that satisfying a being's desires is prima facie good for it is not so mysterious, due to the close and familiar connection between desiring and valuing.

One possible reply to this argument appeals to Marquis' original argument regarding the harm of death for fetuses. According to Marquis, one's valuable future life consists not only of the things in one's future which one now values, but also the things in one's future that one *will come to value* as one's "values and capacities change" (2008, 347). This allows Marquis to argue that a fetus has a valuable future life even if it cannot presently value its future, since the fetus will come to value things in its future as it becomes a child and its capacities develop. Similarly, it could be argued that despite embryos' inability to value anything now, their future lives have value for them because embryos will come to value things as their capacities develop.

However, the fact that embryos (or fetuses) will come to value certain things in the future explains only how those things could have value for those beings in the future; it does not explain how things can have value for embryos as they exist now. For example, the fact that Justin Verlander presumably enjoys playing baseball for the Detroit Tigers makes sense of the thought that playing baseball has value for Verlander. However, does this fact also make sense of the claim that playing baseball as a future adult had value for the embryo that would one day become Verlander? I do not see how it does make sense of that claim. In fact, that claim sounds absurd. Given that the embryo, as it now exists, is incapable of caring about anything, it's unclear what could justify the claim that anything, in the embryo's present time or in the future, has value for an embryo.

I conclude that it does not make sense to think that embryos possess interests. The case for embryonic interests contends that embryos are harmed by death because they are deprived of valuable future lives as adult humans. But even if embryos have future lives as adult humans, it is unclear how these future lives can have value for embryos when embryos have no capacity to care about anything. Admittedly, debates over the nature of value are difficult to resolve and my argument here may leave open some big questions. However, because interests are normative concepts, I believe that questions over what kinds of entities can have interests must ultimately be answered by addressing questions about the nature of value.

Conclusion

In closing, let me suggest that although it does not make sense to believe that embryos have interests, it does not follow from this conclusion that embryos are not worthy of some form of moral consideration in our actions. For even if an entity lacks interests and, therefore, is not a candidate for possessing moral rights, there remains the possibility that it could possess intrinsic value—that is, value in itself as an end, as opposed to purely instrumental value. Steinbock acknowledges that embryos can have intrinsic value, yet at the same time denies that they are morally considerable. I believe this is a misunderstanding of the idea of moral consideration. If something has value in itself, then it follows that it is worthy of some moral consideration in our actions—even if it is not considerable in a narrower sense that implies that a thing has *rights* and is *owed* moral respect.

On what grounds could embryos have intrinsic value? The most serious candidate is the idea that embryos are potential persons. However, even if embryos have some intrinsic value as potential persons, this value does not give us reason to believe it is unethical to create and destroy embryos for medical research that has strong potential to significantly benefit many actual persons in the present and future. Embryos, I have argued, cannot have interests or a welfare and, consequently, also cannot possess rights. On the other hand, actual persons do have interests—they can be harmed or benefited by our actions. This includes actual persons who are sick or impaired who could potentially benefit significantly from the promise of stem cell research. Since actual persons have a welfare, their intrinsic value exceeds that of things like embryos, which have no welfare. Moreover, we have moral obligations to actual persons (obligations to help persons or refrain from harming them) that we cannot have to entities that have no interests. It is reasonable to think that, in the context of stem cell research, the intrinsic value of actual persons and our obligations to benefit them far outweigh any intrinsic value embryos possess as potential persons or potentially sentient beings. On the other hand, if other proposed uses of embryos are not likely to significantly benefit actual persons (or other actual sentient beings), then there is less justification for destroying organisms that may have intrinsic value. Even if one is skeptical that embryos have any intrinsic value, it seems reasonable to prohibit relatively trivial uses of embryos, out of respect for the intrinsic value that other people place on embryos.

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