

SELECTION 7

The Moral Status of the Embryo

Peter Singer

In the following selection philosopher Peter Singer argues that the moral status of the embryo is not the same as that of an adult person. His reasoning warrants comparison with Judith Thomson's in Selection 12. Both maintain that there are different senses of the term "right to life," and that some of these do not generate any duties on the part of other persons to fulfill such rights. For another use of this "argument from potential," but one leading to a different conclusion, see Selection 14.

Peter Singer is a clear, thought-provoking, and prolific writer of books and articles in many areas of bioethics. His books include Practical Ethics and, most recently, The Sanctity of Life. He has edited A Companion to Ethics and several anthologies on animal rights, and coedits the journal Bioethics. Peter Singer is professor of philosophy and director of the Centre for Human Bioethics, Monash University, Australia.

THE STANDARD ARGUMENT

The standard argument in favor of attributing a right to life to the embryo goes like this:

Every human being has a right to life.

A human embryo is a human being.

Therefore the embryo has a right to life.

To avoid questions about capital punishment, or killing in self-defense, it can be stipulated that the term "innocent" is assumed whenever we are talking of human beings and their rights.

Source: Peter Singer and Deane Wells, *Making Babies* (New York: Scribner's, 1985). Copyright 1984, 1985, Peter Singer and Deane Wells. Reprinted by permission.

The standard argument has a standard response. The standard response is to accept the first premise, that all human beings have a right to life, but to deny the second premise, that the human embryo is a human being. This standard response, however, runs into difficulties, because the embryo is clearly a being of some sort, and it can't possibly be of any other species than *Homo sapiens*. So it seems to follow that it must be a human being. Attempts to say that it only becomes a human being at viability, or at birth, are not entirely convincing. Viability is so closely tied to the state of development of neonatal intensive care that it is hardly the kind of thing that can determine when a being gets a right to live. As for birth, those who draw the line there must explain why an infant born premature at 26 weeks should have a right to life, whereas a fetus of 32 weeks, more developed in every respect, should not. Can location relative to the cervix really make so much difference to one's right to life?

QUESTIONING THE FIRST PREMISE

So the standard argument for attributing a right to life to the embryo can withstand the standard response. It is not easy to mount a direct challenge to the claim that the embryo is a human being. What the standard argument cannot withstand, however, is a more critical examination of its first premise: the premise that every human being has a right to life. At first glance, this seems the stronger premise. Do we really want to deny that every (innocent) human being has a right to life? Are we about to condone murder? No wonder it is at the second premise that most of the fire has been directed. But the first premise is surprisingly vulnerable. Its vulnerability becomes apparent as soon as we cease to take "Every human being has a right to life" as some kind of unquestionable moral axiom, and instead inquire into the moral basis for our particular objection to killing human beings.

By "our particular objection to killing human beings" I mean the objection we have to killing human beings, over and above any objections we may have to killing other living beings, such as pigs and cows and dogs and cats, and even trees and lettuces. Why is it that we think killing human beings is so much more serious than killing these other beings?

The obvious answer is that human beings are different from other animals, and the greater seriousness of killing them is a result of these differences. But which of the many differences between humans and other animals justify such a distinction? Again, the obvious response is that the morally relevant differences are those based on our superior mental powers—our self-awareness, our rationality, our moral sense, our autonomy, or some combination of these. They are the kinds of thing, we are inclined to say, which make us "truly human." To be more precise, they are the kinds of thing which make us *persons*.

That the particular objection to killing human beings rests on such qualities is very plausible. To take the most extreme of the differences between living things, consider a person who is enjoying life, is part of a network of relationships with other people, is looking forward to what tomorrow may

bring, and freely choosing the course her or his life will take for the years to come. Now think about a lettuce, which, we can safely assume, knows and feels nothing at all. One would have to be quite mad, or morally blind, or warped, not to see that killing the person is far more serious than killing the lettuce.

We shall postpone, for the present, asking just which of the mental qualities make the difference in the moral seriousness between the killing of a person and the killing of a lettuce. For our immediate purposes, all we need to note is that the plausibility of the assertion that human beings have a right to life depends on the fact that human beings generally possess mental qualities which other living beings do not possess. So should we accept the premise that every human being has a right to life? We may do so, but *only* if we bear in mind that by "human being" here we refer to those beings who have the mental qualities that generally distinguish members of our species from members of other species.

TWO SENSES OF "HUMAN"

If this is the sense in which we can accept the first premise, however, what of the second premise? It is immediately clear that in the sense of the term "human being" which is required to make the first premise acceptable, the second premise is false. The embryo, especially the early embryo, is obviously not a being with the mental qualities which generally distinguish members of our species from members of other species. The early embryo has no brain, no nervous system. It is reasonable to assume that, so far as its mental life goes, it has no more awareness than a lettuce.

It is still true that the human embryo is a member of the species *Homo sapiens*. That is, as we saw, why it is difficult to deny that the human embryo is a human being. But we can now see that this is not the sense of "human being" we need to make the standard argument work. A valid argument cannot equivocate on the meanings of the central terms it uses. If the first premise is true when "human" means "a being with certain mental qualities" and the second premise is true when "human" means "member of the species *Homo sapiens*," the argument is based on a slide between the two meanings and is invalid.

SPECIESISM

Can the argument be rescued? It obviously cannot be rescued by claiming that the embryo is a being with the requisite mental qualities. That *might* be arguable for some later stage of the development of the embryo or fetus, but it is impossible to make out the claim for the early embryo. If the second premise cannot be reconciled with the first in this way, can the first perhaps be defended in a form which makes it compatible with the second? Can it be argued that human beings have a right to life, not because of any moral qualities they

may possess, but because they—and not pigs, cows, dogs, or lettuces—are members of the species *Homo sapiens*?

This is a desperate move. Those who make it find themselves having to defend the claim that species membership is *in itself* morally relevant to the wrongness of killing a being. But why should species membership in itself be morally crucial? If we are considering whether it is wrong to destroy something, surely we must look at its actual characteristics, not just the species to which it belongs. If ET and similar visitors from other planets turn out to be sensitive, thinking, planning beings, who get homesick just like we do, would it be acceptable to kill them simply because they are not members of our species? Should you be in any doubt, ask yourself the same kind of question, but with "race" substituted for "species." If we reject the claim that membership of a particular race is *in itself* morally relevant to the wrongness of killing a being, it is not easy to see how we could accept the same claim when based on species membership. Remember that the fact that other races, like our own, can feel, think, and plan for the future is not relevant to this question, for we are considering the simple fact of membership of the particular group—whether race or species—as the *sole* basis for distinguishing between the wrongness of killing those who belong to *our* group, and those who are of some *other* group. As long as we keep this in mind, I am sure that we will conclude that neither race nor species can, *in itself*, provide any justifiable basis for such a distinction.

So the standard argument fails. It fails not because of the standard response that the embryo is not a human being, but because the sense in which the embryo is a human being is not the sense in which we should accept that every human being has a right to life.

THE ARGUMENT FROM POTENTIAL

At this point in the discussion, those who wish to defend the embryo's right to life often switch ground. We should not, they say, base our views of the status of the embryo on the mental qualities it *actually has while an embryo*; we must, rather, consider what it has the potential to *become*.

Indeed, we do need to consider the moral relevance of the embryo's potential. But this argument is not as easy to grasp as it may appear. If we attempt to set it out in an argument of standard form, as we did with the previous argument, we get

Every potential human being has a right to life.

The embryo is a potential human being.

Therefore the embryo has a right to life.

There is no equivocation in this argument, and its second premise is undoubtedly true. The problem is with the first premise. The claim that every potential human being has a right to life is by no means self-evidently true. We

would need to be given good grounds for accepting it. What grounds could there be?

One might try to argue that since full-fledged human beings (those with at least some of the mental qualities I have been discussing) have a right to life, anything with the potential to become a full-fledged human being must also have a right to life. But there is no general rule that a potential X has the rights of an X. If there were, Prince Charles, who is a potential King of England, would now have the rights of a King of England. But he does not.

Another possible argument might go like this: there is nothing of greater moral significance than a thinking, choosing rational being. We value such beings above almost everything else. Therefore anything which can give rise to such a being has value because of what it can become.

What is this argument asserting? It suggests that the destruction of an embryo is wrong because it means that a person who might have existed will now not exist; and since we value people, the destruction of the embryo has caused us to lose something of value. But this proves too much. For destroying an embryo is not the only way of ensuring that a person who might have existed will not exist. If a couple decide, after their second, or third, or fourth child, that their family is complete, it is also the case that a person who might have existed—in fact, several people who might have existed—will not exist. Since some people who oppose abortion also oppose the use of contraceptives, it is worth pointing out that this is true whether the couple use contraceptives, or simply abstain from sexual intercourse during the woman's fertile periods (though admittedly the latter method gives the possible people a greater chance of existence). Yet those who condemn the destruction of embryos do not condemn with equal weight the use of contraceptives, and they generally do not condemn at all the use of sexual abstinence to limit the size of one's family. So it seems that the basis for their objection to the destruction of the embryo cannot be that a person who might have existed will now not exist.

Another example, more relevant to the question of embryo research, suggests the same conclusion. Suppose that a scientist has obtained two ripe eggs from two women, let us call them Jan and Maria. They are hoping to have their eggs fertilized with their husbands' sperm and transferred to their wombs. Jan had her laparoscopy first, her egg was put into a petri dish, and her husband's sperm added to it some hours ago. On checking it, the scientist finds that fertilization has taken place. In the case of Maria's egg the sperm has only just been added to the dish, so fertilization cannot yet have taken place, but the laboratory has a 90 percent success rate for achieving fertilization in these circumstances, and the scientist is reasonably confident that fertilization will take place within the next few hours. Some would say that to destroy Jan's embryo would be gravely wrong, but to destroy the egg and sperm from Maria and her husband would not be wrong at all, or would be much less seriously wrong. In terms of preventing a possible person from existing, however, the difference is only that there is a slightly higher probability of a person's resulting from what is in Jan's petri dish than there is of a person's resulting from what is in Maria's petri dish. If the difference in the wrongness of

disposing of the contents of the two dishes is greater than this slightly higher probability would justify, it cannot be preventing the existence of a possible future person that makes such disposal wrong. To borrow a phrase from the Oxford philosopher Jonathan Glover, if it is cake we are after, it doesn't make much difference whether we throw away the ingredients separately or after they are mixed together.¹

UNIQUENESS

At this point some will say that it is wrong to destroy an embryo because the embryo already contains the unique genetic basis for a particular person. When a couple abstain from intercourse, or the scientist washes out the petri dish before fertilization has taken place, the genetic constitution of the person who might have existed has yet to be determined. This is true, of course, but does it matter? All human beings are genetically determinate, and all, except identical siblings, are genetically unique. Imagine that instead of just dropping lots of sperm into a petri dish containing a ripe egg, we carried out a program of artificial reproduction by singling out just *one* sperm and placing it with the egg. Then, once the sperm had been singled out and placed with the egg, the genetic constitution of the person who could develop from the egg-and-sperm would also have been uniquely determined. Suppose now that after the egg and sperm have been placed together, but before fertilization has taken place, the woman is found to have a medical condition which makes pregnancy inadvisable. Freezing is not available, and there are no patients interested in a donated embryo. Would it be wrong to throw out the egg and sperm at this stage? If you do not think that it would be wrong to dispose of the egg and the sperm in *this* situation (and worse than it would be if the usual procedure, involving millions of sperm, had been used) then you cannot be attributing much moral significance to the existence of a genetically unique entity.

I have pursued the will-o'-the-wisp of potential for a long time—not just today, but over the past five years in which I have been working on this topic. I can understand the view that fertilization is one step in the development of a person and that if potentiality is a matter of degree, the embryo is a degree closer to being a person than a collection of egg and sperm in a petri dish before fertilization has taken place. What I still cannot find is any basis for the view that this difference of degree makes an enormous difference in the moral status of what we have before us.

A POSITIVE APPROACH

We have now seen the inadequacy of attempts to argue that the early embryo has a right to life. It remains only to say something positive about when in its development the embryo may acquire rights.

The answer must depend on the actual characteristics of the embryo. The minimal characteristic which is needed to give the embryo a claim to consideration is sentience, or the capacity to feel pain or pleasure. Until the embryo reaches that point, there is nothing we can do to the embryo which causes harm to *it*. We can, of course, damage it in such a way as to cause harm to the person it will become, if it lives, but if it never becomes a person, the embryo has not been harmed, because its total lack of awareness means that it can have no interest in becoming a person.

Once an embryo may be capable of feeling pain, there is a clear case for very strict controls over the experimentation which can be done with it. At this point the embryo ranks, morally, with other creatures who are conscious but not self-conscious. Many nonhuman animals come into this category, and in my view they have often been unjustifiably made to suffer in scientific research. We should have stringent controls over research to ensure that this cannot happen to embryos, just as we should have stringent controls to ensure that it cannot happen to animals.

PRACTICAL IMPLICATIONS OF THE MORAL STATUS OF EMBRYOS

The conclusion to draw from this is that as long as the parents give their consent, there is no ethical objection to discarding a very early embryo. If the early embryo can be used for significant research, so much the better. What is crucial is that the embryo not be kept beyond the point at which it has formed a brain and a nervous system, and might be capable of suffering. Two government committees—the Warnock Committee in Britain and the Waller Committee in Victoria, Australia—have recently recommended that research on embryos should be allowed, but only up to 14 days after fertilization.² This is the period at which the so-called “primitive streak,” the first indication of the development of a nervous system, begins to form, and up to this stage there is certainly no possibility of the embryo feeling anything at all. In fact, the 14-day limit is unnecessarily conservative. A limit of, say, 28 days would still be very much on the safe side of the best estimates of when the embryo may be able to feel pain; but such a limit would, in contrast to the 14-day limit, allow research on embryos at the stage at which some of the more specialized cells have begun to form. . . . [T]his research would, according to Robert Edwards, have the potential to cure such terrible diseases as sickle-cell anemia and leukemia.³

As for freezing the embryo with a view to later implantation, the question here is essentially one of risk. If freezing carries no special risk of abnormality, there seems to be nothing objectionable about it. With embryo freezing, this appears to be the case. The ethical objections some people have to freezing embryos has led to the suggestions that it would be better to freeze eggs;⁴ for this and other reasons there has been a considerable research effort directed at

freezing eggs. Human eggs are more difficult to freeze than human embryos, and until recently it had not proved possible to freeze them in a manner which allowed fertilization after thawing. In December 1985, however, an IVF [*in vitro* fertilization] team at Flinders University, in Adelaide, South Australia, announced that it had succeeded in obtaining a pregnancy from an egg which had been frozen and thawed before being fertilized.⁵ The technique used involved stripping away a protective outer layer from the egg, so that it would take up a chemical which would protect it during the freezing process. This technique does overcome the ethical problems some find in freezing embryos, but it does so at the cost of introducing a new potential cause of risk to the offspring, the risk that the chemicals absorbed by the egg may have some harmful effect.⁶ Whether or not this risk proves to be a real one, from the point of view of ethics, one may doubt whether the risk is worth running, if the primary reason for running it is to avoid objections, which we have now seen to be ill-founded, to the freezing of embryos. . . .

Going beyond the simple case does bring us into a more ethically controversial area, but there is no overall case against applying IVF outside the restricted ambit of the simple case. The essential point is to consider each additional step carefully before it is taken. Some steps will prove unwise, but others will be beneficial and not open to any well-grounded objections.

THE FUTURE OF THE REPRODUCTION REVOLUTION

What lies ahead? IVF has opened the door to a wide range of further possibilities. In the near future we shall have to consider which of these possibilities to pursue, and which to reject. Here are some of the possibilities:

1. A surrogate could bear a child for another couple; the child would be the genetic child of the other couple, and would be returned to the genetic parents after birth. The genetic parents might be unable to conceive in the normal way, or they might simply find the surrogate arrangement more convenient. The surrogate might be paid for her services, or—in the case of otherwise infertile couples—she may have more altruistic motives.
2. Embryos may be used in order to provide "spare parts" for people who through accident or illness need some kind of transplant. It has been suggested that embryonic tissue could restore nerve function to paraplegics. Embryos might be grown to the point at which the organs begin to form, and then the organs could be separated and grown in culture until they were large enough to be used.
3. Several embryos could be produced, and some of their genetic characteristics identified; the one considered most desirable could then be implanted, and the remainder discarded; alternatively it will eventually be possible to modify the genetic properties of an embryo so as to eliminate defects and to build in desirable genetic qualities. . . .

The proposal that embryos be used for "spare parts" has already caused howls of protest from those who regard embryos as having the same rights as normal human beings. [This view, however,] cannot be defended by rational argument. As long as there are adequate safeguards to ensure that the embryo is at all times incapable of suffering in any way, it is difficult to find sound ethical reason against this proposal—and it is obvious that the possible benefits are considerable.

Of all the possible applications of IVF, however, it is genetic selection and genetic engineering which raise the most far-reaching questions. Should we tinker with the human genetic pool? If so, in what way? Here I will limit myself to pointing out that we already tinker with the genetic pool when we offer genetic counseling, amniocentesis, and abortion to those who are at special risk of producing genetically defective offspring. And this is nothing new, at least insofar as its impact on the genetic pool is concerned: other societies have practiced infanticide to the same end, and of course in the past, even if one tried to rear the defective child, in most cases nature used its own brutal methods to ensure that the genes were eliminated from the gene pool.

So genetic engineering differs only in its techniques from what is now going on, and has gone on for a long time. But this difference is a significant one, because the new techniques are so much more powerful, and because they would, in principle, allow us to select for desirable traits as well as to select against undesirable ones. Many fear that these techniques will place too much power in the hands of governments, who will not be able to resist the temptation of designing future generations to be docile and to vote for the governing party at every election.

The fear that genetic engineering will produce the ultimate in entrenched dictatorship is exaggerated. Most political leaders want quick results, and it would take at least 18 years for genetic engineering to have any effect at the polls. If we have succeeded in keeping our freedom in the age of television and state education, we should be able to cling to it in the age of genetic engineering as well.

But should we allow positive modifications, as distinct from the elimination of defects, at all? In time we might come to accept the desirability of positive modifications. One reason for accepting this is that, looking around us, there is reason to think that natural selection has left ample room for improvement. Another reason is that the distinction between eliminating a defect and making a positive modification is a difficult one to draw. If we learn how to eliminate a wide range of defects which predispose us to common diseases, we will have created an abnormally healthy person. If we learn how to affect intelligence, should we stop short at eliminating mental ability below the above-average range? If we eliminate abnormally depressive personalities, would it be wrong to try to produce people who tend to be a little more cheerful than most of us are now? If we eliminate tendencies toward criminal violence, might we not build just a little more kindness into the human constitution? If the risks of such an enterprise are great, so too are the potential rewards for us all.

NOTES

1. Glover quoted in M. Warnock (chairperson), *Report of the Committee of Inquiry into Human Fertilisation and Embryology* (London: Her Majesty's Stationery Office, 1984), p. 66.
2. Ibid.; L. Waller (chairman), Victorian Government Committee to Consider the Social, Ethical, and Legal Issues Arising from In Vitro Fertilization, *Report on the Disposition of Embryos Produced by In Vitro Fertilization* (Melbourne: Victorian Government Printer, 1984), p. 47.
3. R. G. Edwards, paper presented at the Fourth World Congress on IVF, Melbourne, Australia, November 22, 1985.
4. Waller Committee, *Report on the Disposition of Embryos*.
5. *The Australian*, December 19, 1985.
6. A. Trounson, paper presented at the Fourth World Congress on IVF, Melbourne, Australia, November 22, 1985.