Infanticide and moral consistency

Jeff McMahan

Correspondence to

Professor Jeff McMahan, Department of Philosophy, Rutgers, 1 Seminary Place, New Brunswick, NJ 08901, USA; mcmahan@philosophy.rutgers. edu

Received 30 July 2012 Revised 2 August 2012 Accepted 29 November 2012

ABSTRACT

The aim of this essay is to show that there are no easy options for those who are disturbed by the suggestion that infanticide may on occasion be morally permissible. The belief that infanticide is always wrong is doubtfully compatible with a range of widely shared moral beliefs that underlie various commonly accepted practices. Any set of beliefs about the morality of abortion, infanticide and the killing of animals that is internally consistent and even minimally credible will therefore unavoidably contain some beliefs that are counterintuitive.

INFANTS AND VIABLE FETUSES

Almost everyone believes that infanticide is wrong. What could possibly justify the intentional killing of an innocent, unthreatening and wholly defenceless human being? Yet many who believe that infanticide is nearly always impermissible also accept that abortion can sometimes be permissible, even in the second and third trimesters of pregnancy. In the USA, abortions performed prior to the point of fetal viability are constitutionally protected. Even abortions beyond the point of viability are generally legally permitted when an abnormality is detected in the fetus, and are constitutionally protected when the continuation of the pregnancy threatens the pregnant woman's health or life. Only when an abortion has some of the characteristics of infanticide—as is true of the notorious 'partial-birth abortion'-is there now a general legal prohibition, albeit with an exception when the life of the pregnant woman is at risk. This legal situation reflects a broad social consensus that while later-term abortions are morally more problematic than earlier-term abortions, even a lateterm abortion can nonetheless be morally justified if there is a serious reason for it.

Those who believe that abortion can sometimes be justified after the point of fetal viability but that infanticide is never permissible face a problem of consistency, for there is no intrinsic difference between a premature infant and a viable fetus of the same age and level of development. The only difference is extrinsic, a matter of location. If, as virtually all moral theorists agree, moral status is a function of intrinsic properties only, there can be no difference in moral status between a viable fetus and a premature infant of the same age. If all infants have a status that brings them within the scope of stringent moral constraints, the same must be true of all viable fetuses. For any viable fetus could be an infant with a slight change of location that involves swapping a natural for an artificial system of life support.

To cite: McMahan J. J Med Ethics 2013;39:273–280.

The controversy over partial-birth abortion in the USA showed, for anyone who cared to think about

it, the absurdity of supposing that the mere location of the fetus or infant makes a moral difference. The legislation that in 2003 prohibited the performance of a partial-birth abortion prior to the point at which the fetus becomes viable did not-and could not, given the state of constitutional law then and now-prohibit the killing of the same fetus by a different procedure performed inside the pregnant woman's body. What it prohibits is the killing of a human organism that is partly in the woman's body and partly out. If that organism were not yet viable but were wholly inside the woman's body, it would be a fetus that could be legally killed. If it were wholly outside her body, it would, during the brief period in which it remained alive, be a premature infant, so that killing it would be murder under the law. But when it is partly in and partly out, is it a fetus or an infant? Could that in itself possibly matter? Does the morality of killing it depend on what percentage of its body protrudes from the woman's? The absurdity of the statute is proclaimed by its exactitude on these matters. What it prohibits is the killing of a fetus if 'the entire fetal head is outside the body of the mother, or, in the case of breech presentation, any part of the fetal trunk past the navel is outside the body of the mother'. If the navel is exposed when a non-viable fetus is killed, a criminal act has occurred. But if an 8th of an inch less of the abdomen is exposed, the act of killing is constitutionally protected. Yet it would be silly to suppose that anything of moral significance could depend on whether the fetus's navel is showing. Nor could it make any moral difference, in itself, whether the whole of the body is exposed rather than just the part above the chin or below the navel.

In 1973, Roe v. Wade established the trimester framework for the legal regulation of abortion that remained in place until 1992. In this decision, the Court declared that abortions performed during the first and second trimesters could not be legally restricted for reasons concerned with the interests of the fetus. Because in 1992 the point of fetal viability had for many years been late in the second trimester, any abortion performed between 1973 and 1992 that killed a viable fetus prior to the end of the second trimester was constitutionally protected. Yet if that same fetus had instead been a premature infant, killing it would have been murder under the law. This meant that killing a viable fetus during the second trimester was constitutionally protected, yet if the pregnant woman carrying it suddenly went into labour, killing that same individual after it had emerged from her body would have been murder. This was arbitrary and irrational.

In 1992, in *Planned Parenthood v. Casey*, the Supreme Court rejected the trimester framework established by *Roe* and effectively made fetal

The argument

viability itself the point before which any restriction that imposes an 'undue burden' on a woman seeking an abortion is unconstitutional. This was not, in at least one respect, a significant departure from the reasoning that supported the trimester framework in Roe, for the end of the second trimester, at 28 weeks, was selected as the point when the state could begin to regulate the practice of abortion to protect the fetus primarily because that was also the approximate point of fetal viability when Roe was decided. The subsequent shift with Casev from the end of the second trimester to the point of fetal viability itself has made the law more coherent, for it is now possible, except in cases in which the continuation of a pregnancy poses a threat to a woman's life or health, to prohibit the killing of a fetus that could, with a mere change of location, be a premature infant. Yet there are still problems of consistency between common beliefs about infanticide and common beliefs about abortion that are reflected in the law even in its revised form.

As I mentioned, when the Court delivered its opinion in Roe, the point of fetal viability was around 28 weeks. By the time the Court decided Casey in 1992, that point had become about 23 weeks. This interval between 23 and 28 weeks is, serendipitously, also the period during which the fetus develops a capacity that many philosophers believe to be an important source of moral status and perhaps a necessary condition of any moral status at all-namely, the capacity for consciousness. At present it is not known when during this period the possibility of consciousness first arises, though no doubt there is some individual variation. According to some philosophers, the appearance of the capacity for consciousness is the point at which a fetus can begin to have interests, and thus becomes capable of being harmed.¹ According to others, it is actually the point at which we-as distinct from the organisms that sustain us-begin to exist.² It is, on this second view, the point at which there is someone present rather than merely something. So at the times when Roe and Casey were decided, the point of fetal viability and the time at which consciousness becomes possible occurred sometime within the same 5 week period. Viability thus roughly coincided with a change in the intrinsic nature of the fetus that seems to endow it with a higher moral status.

Since 1992, the point at which some fetuses have survived premature birth has become a little less than 22 weeks. Given that birth is sometimes delayed beyond 9 months, there is now a period of roughly 4 months during which one and the same human being could be either a fetus or an infant, depending on its location. Given, moreover, that the point of viability is a function of the state of medical technology rather than anything intrinsic to the fetus, it is inevitable that viability will eventually occur earlier than it does at present. This means that there will be increasingly many cases in which a fetus is viable before it has passed a developmental threshold that many people acknowledge, when thinking about abortion, to be necessary for it to have a certain moral status. Yet this view will conflict with these people's intuitions about infanticide. Suppose, for example, it becomes possible to sustain the life of a 20-week-old fetus outside the womb. Such a fetus would be at least several weeks and perhaps as much as a couple of months away from having any capacity for consciousness or experience. If it were discovered to have some serious defect, most people would, as they do now, accept that it would be permissible for the woman carrying it to have an abortion. But if that same fetus were delivered prematurely at 20 weeks and kept alive in an intensive care unit, it would be an infant and most people would recoil from the idea that it could be permissible to kill it, despite their conviction, when thinking about abortion, that a being that

altogether lacks the capacity for consciousness does not have the moral status that consists in being within the scope of a moral prohibition of killing. This inconsistency between common views about abortion and common beliefs about infanticide will become even more pronounced as the point of viability occurs progressively earlier in pregnancy as a result of advances in medical technology. There will, in consequence, be increasing pressure to revise either certain common beliefs about abortion or certain common beliefs about infanticide. But the pressure is there now for those who have already perceived the inconsistency between their belief in the occasional permissibility of late abortion and their belief that infanticide is nearly always impermissible.

Some philosophers have thought that it is possible to distinguish morally between abortion and infanticide by arguing for the permissibility of abortion, not on the ground that fetuses have a lower moral status, but by appealing to the right of pregnant women to control the use of their own bodies. According to the most important and persuasive argument of this sort, a fetus has no right to the use of a woman's body as a means of life support.³ It is therefore morally permissible for a pregnant woman to deny the fetus the use of her body, even if this requires killing it in the process of removing it. If this is an adequate justification for abortion, it can be consistent to believe that abortion is often permissible, that there is no difference in moral status between a fetus and a newborn infant, and that infanticide is never permissible.

This argument for the permissibility of abortion, even if successful in its own terms, cannot establish the consistency of the claims with which we are concerned here. Our concern is whether the belief that infanticide is impermissible is compatible with the belief that abortion can be permissible after the point of fetal viability-for example, because the fetus has been discovered to have some serious abnormality. But all that the appeal to a woman's right to control the use of her body can justify is the removal of the fetus from her body. After the point of viability, this can usually be accomplished without killing the fetus or allowing it to die. After this point, therefore, the appeal to the pregnant woman's right cannot normally justify an abortion, which by definition involves killing the fetus. Only if the cost to the woman of expelling the fetus via live delivery exceeds some threshold can her rights justify the killing of the fetus rather than having it removed alive.

Many people believe that any inconsistency between our beliefs about abortion and our beliefs about infanticide should be resolved by holding our beliefs about infanticide fixed and revising our view of abortion. This seems the right presumption, since the belief that infanticide is wrong is more widespread and stable over time and across cultures than the belief that the abortion of a viable fetus can be permissible. Many people claim, therefore, that infants have the same moral status as adults and that, because there are no intrinsic differences between newborn infants and viable fetuses, viable fetuses must also have the same status as adults. Some extend this to include previable fetuses and even embryos as well, though the closer a fetus is to conception, the less it has in common with a newborn infant.

There are, however, reasons to distrust our intuitions about infanticide. Most people's intuitions about the moral status of newborn infants are actually rather confused. Our society accepts, for example, that it can be permissible to allow an infant to die for reasons that could not justify allowing an older child to die. The common medical practice of 'selective nontreatment' involves allowing an infant with a certain condition to die rather than saving it via medical treatment. Sometimes the justification that is asserted is that the infant's life would not be worth living—that is, that the withholding of treatment is an instance of passive euthanasia. But that is seldom plausible, as almost all congenital abnormalities are compatible with a life's being worth living. It is certainly implausible in one kind of case that is not uncommon—namely, when a newborn infant is discovered to have Down's syndrome and some treatable but otherwise fatal physical condition. In some such cases, the parents and doctors agree to provide only palliative care rather than treating the physical condition, thereby allowing the infant to die.

I recall once being consulted by a hospital's ethics committee about a similar case. A woman in the late stages of pregnancy had been told that her fetus had been discovered to have Down's syndrome and a heart condition that would be fatal within the first year unless it underwent a major surgery that would have a reasonably high probability of success (I think, though my recollection is dim, around 70%). The parents were opposed to abortion on religious grounds and thus said that they preferred to continue the pregnancy; but they also wanted to decline the surgery, allegedly because they wanted to spare the infant the suffering that would be involved. The other members of the committee-physicians, a nurse, a priest, a rabbi and a lawyer-all thought this was an acceptable solution. I pointed out that no one would think it acceptable to forgo the surgery if the infant did not have Down's syndrome or if a similar heart condition requiring similar surgery were not diagnosed until the child was a year or two old. I suspect that it was because I had implied, especially in the presence of a lawyer, that the committee was endorsing the view that an individual could be allowed to die because of a disability that I was never again invited to serve as an ethics consultant at the hospital. But it was my second point that illustrates our confused intuitions about infants. The individual about whose fate the committee was deliberating would die within its first year if the surgery were not performed. If instead it would have died only after living to the age of two, it would have been unthinkable for the committee to have agreed to allow it to die when there was a high probability that it could have been saved by surgery. The parents would then have had to choose between having an abortion and allowing the surgery to be performed, whether or not the child had Down's syndrome. The best explanation of this is that most of us really do believe that there is a difference in moral status between an infant and an older child. This is why we accept that it can be permissible to allow a newborn infant to die for a certain reason but not permissible to allow that same individual to die for the same reason at an older age.

Although I began by observing that almost everyone believes that infanticide is wrong, there is one type of case in which the consensus breaks down. There have been a number of instances in which the parents of a newborn anencephalic infant have petitioned the courts to permit the infant's vital organs to be removed for transplantation prior to its natural death-that is, to permit it to be killed prior to or during the extraction of its organs. An anencephalic infant is a human being in which the cerebral hemispheres have never developed. Although it may have a functional brain stem, such an infant lacks the capacity for consciousness and can never acquire it. It is, one might say, an unoccupied human organism. Anencephalic infants always die soon after birth, but this is in part because there is seldom any vigorous and sustained effort to keep them alive. With such an effort, it is possible that at least some of them might be enabled to survive for more than just a few hours or days.

The reason why the parents of anencephalic infants have occasionally sought legal permission to donate their infant's organs prior to its natural death is that if it is allowed to die naturally, its organs usually deteriorate to a point at which they are no longer usable for transplantation when death occurs. The parents have sometimes said that they would like for their child's organs to be donated so that something good could come from their child's brief life.

The confused state of common intuitions about infanticide is revealed by the fact that many people and organisations have supported the idea that infanticide can be permissible in this kind of case, though to my knowledge no one has ever used the word 'infanticide' in describing the position they support. Indeed, in the Federal Republic of Germany in the 1980s, the courts held that anencephalic infants are never in fact alive, even when they have a functional brain stem and a beating heart, so that any birth of an anencephalic infant is legally a stillbirth. That meant that the removal of the infant's living organs could not be considered an act of killing. As a consequence, surgeons in Germany have been able to remove organs from anencephalic infants without any legal repercussions. But the claim that an encephalic infants are not biologically alive is incompatible with the idea that a human organism with a functioning brain stem is not brain dead and also with the fact that a human embryo at least a few weeks after conception but prior to the formation of the cerebral hemispheres is incontestably a living human organism. The fact that most anencephalic infants are biologically alive at birth is confirmed by the ability of doctors to determine when they in fact die, which, as I noted, is almost always within a few days after birth.

Many other individuals and organisations have offered different reasons for the permissibility of killing anencephalic infants, with the permission of the parents, to use their organs to save the lives of other children. In the 1980s, a group of physicians at Boston Children's Hospital and the Michigan Ethics and Social Impact Committee at the Transplant Policy Center endorsed policies that would have permitted the removal of an anencephalic infant's organs immediately after birth.⁴ In 1995, even the American Medical Association endorsed the moral permissibility of extracting organs from anencephalic infants prior to brain death in order that other children might be saved, though it was soon pressured into reversing its position by opposition from religious organisations. That so influential and mainstream an organisation as the American Medical Association, at least when deliberating independently of the churches, could have come out publicly in favour of the killing of anencephalic infants in order to use their organs for transplantation shows that at least this one form of infanticide is outside the scope of the almost universally accepted taboo.

The only reason that the issue of using living anencephalic infants as sources of organs for transplantation has never become a major controversy is that the number of anencephalics born alive, which has always been relatively small, has steadily declined as an increasing proportion of them have been diagnosed prenatally and killed via abortion. If there were a prospect of being able to save the lives of a great many young children by using anencephalic infants as a source of organs, there would almost certainly be a heated debate about the issue that would put the taboo on infanticide under considerable pressure. It would do so because many people would find it intuitively compelling to suppose that it could be permissible to kill an anencephalic infant to save one or more other children who could then have normal lives. This is so despite the fact that anencephalic infants, like all other infants, are innocent, unthreatening and wholly defenceless human beings. Yet most of those who would accept the permissibility of killing anencephalic infants to remove their organs would not think it permissible to take vital organs from an adult whose cerebral hemispheres had been destroyed but who retained a functional brain stem, even with that adult's advance consent as well as the consent of the family.

INFANTS, FETUSES AND ANIMALS

Many people will be unimpressed by this evidence of the ambivalence in common beliefs about the moral status of infants. They may firmly believe that it is never permissible intentionally to allow an infant to die or to kill an anencephalic infant for the purpose of saving other children's lives. They may also believe that abortion is never permissible after the point of fetal viability and, perhaps, that it is seldom, if ever, permissible even prior to that point. If they believe that any human infant has the same moral status as a normal adult human being, and that any human fetus or embryo has the same moral status as an infant, they may believe that their view is invulnerable to challenges to its consistency. If so, they are mistaken.

Even though most people accept that higher animals such as chimpanzees have sufficient moral status to make it wrong to harm them without good reason, virtually everyone believes that these animals may permissibly be sacrificed for the sake of important human interests. If, for example, a child's life could be saved only through the transplantation of a vital organ from a chimpanzee, almost everyone believes that it would be permissible, and perhaps even morally required, to kill the chimpanzee as a means of saving the life of the child. Yet on what basis might that belief be justified?

On the occasions when I have asked my students why they think it is more seriously wrong to kill a person than to kill an animal, they almost invariably respond by citing, as the basis of our higher moral status, certain psychological capacities that we have but animals do not, such as self-consciousness, free will, the ability to distinguish right from wrong, rationality, the ability to use language and so on. I then point out to them that there are human beings, such as fetuses and infants, that altogether lack these capacities. And I note that for any psychological capacity they can name, if it is possessed by infants or fetuses, it is possessed to a higher degree by certain animals, such as adult chimpanzees. Obviously, therefore, if human fetuses and infants have a higher moral status than a chimpanzee, it cannot be because of their psychological capacities.

The next move in this dialectic is to claim that what distinguishes fetuses and infants from even the highest non-human animals is that they have the *potential* to have the various psychological capacities cited above. It is this, many people claim, that explains why fetuses and infants have a higher moral status than any animal, even though at their current stage of development their actual psychological capacities are lower than those of many animals.

There are many ways of understanding what potential is and how it might have moral significance.ⁱ The claim here is that it is sufficient for fetuses and infants to have full moral status that they are intrinsically configured in such a way that, with no more external support than is necessary for them to remain alive and healthy, they will develop into rational, autonomous persons. There is much that could be said about this claim but I will confine this discussion to two points. First, it is not true that all human fetuses and infants have this potential. Those that are anencephalic do not. And those that are unable, for genetic reasons, to develop cerebral structures necessary for cognitive powers higher than those of a chimpanzee also lack the potential to become rational, autonomous persons. There are thus two options. One is to accept that these fetuses and infants, and presumably the adults they become, do not have full moral status, but instead have a moral status comparable with that of a chimpanzee. The other is to abandon the claim that the moral status of fetuses and infants is grounded in their potential.

Some believe that there is a third option: to accept that even the most genetically deficient fetuses and infants have the potential to develop a capacity for rational thought, as this is somehow inherent in their nature as human beings. Many Catholic theorists accept this view, which they articulate by saying that all human beings, including embryos and human beings with permanently underdeveloped brains, have a rational nature, or capacity for rationality. Although I think this view is mistaken, suppose for the sake of argument that it is true—that is, suppose that all human beings that do not have high psychological capacities nevertheless have, in some relevant sense, the potential to have them. If that is so, do all those that have only the potential to have the capacities have the same moral status as those who have the capacities themselves?

When I pose this question to my students, I describe some surprising findings of recent research in primatology. I point out that in a series of experiments spanning a number of years and not yet completed, some chimpanzees that have been raised in artificial environments and been given intensive cognitive training, occupying most of each day from shortly after birth until the age of 10 years, develop cognitive capacities roughly comparable with those of a 4-year-old human child. Admittedly, because this research is highly time-consuming, the number of research subjects has thus far been quite small. And there has been considerable variation in the results. But the fact that some chimpanzees have responded so well is startling. Until now, no one had suspected that any chimpanzee might have this potential because no chimpanzee had ever been placed in the conditions necessary for it to be realised. While it requires considerably more external stimulation than is necessary in the case of human beings to elicit the potential that is inherent in some chimpanzees, it seems that it has been there all along.

After I describe these experiments, I ask whether they show that at least some proportion of chimpanzees have always had the high moral status that we thought was reserved for human beings only. Have we been guilty of a tragic mistake in treating these chimpanzees as mere animals rather than as beings with the same moral status that we ourselves have? Those who take the bait tend to balk at this inference. They judge that for a chimpanzee to have the same moral status as a 4-year-old child, its potential to have the psychological capacities of a 4-year-old would actually have to be realised. If the potential is never realised, a chimpanzee is just a chimpanzee, whatever its latent potential.

Having elicited my student's reactions, I then confess that what I have just told them was a lie. There have been no such experiments. So far as we know, no chimpanzee has the *intrinsic* potential to develop psychological capacities comparable to those of a 4-year-old child—though it seems highly likely that advances in genetic enhancement will eventually make it possible to create chimpanzees that, at birth, will have the potential to develop a level of intelligence at least as high as that of a 4-year-old. But what is important is that the 'facts' that I had

ⁱFor an extensive discussion of the varieties of potential and the different ways in which they might be morally significant, see,² chapter IV, section 6.

invented provided a test for the students' intuitions about potential as a source of moral status—a test designed to separate their intuitions about potential alone from their intuitions about the moral status of human fetuses and infants. For most of my students, it comes as a surprise that they do not find potential alone to be a source of high moral status when they believe that it is present in a being that is not human and in whom it will not be realised. Perhaps some readers of this article have now had a similar realisation.

At this point many people retreat to the assumption that what really separates human fetuses and infants from animals is that they are *human*. Historically this assumption has been associated with religious views that exalt human beings as the special creation and delight of the deity. Yet it is hardly surprising that it is taken for granted by most non-religious human beings as well. But is membership in a biological species really a basis of moral status? Does this alone make a human embryo that has not yet developed a brain morally inviolable while an adult chimpanzee is not?

The view that membership in the human species is sufficient for the highest moral status that a human being can have—that is, that all human beings have the same high moral status irrespective of their nature as individuals—has been the target of sustained philosophical criticism for at least several decades, beginning, perhaps, with Peter Singer's argument that discrimiation on the basis of species is no more justifiable than discrimination on the basis of race or sex. Since then, many arguments have been advanced that purport to show that membership in the human species cannot by itself be a basis of moral status. Here is one such argument that I have presented in greater detail elsewhere.⁵

It is now possible to extract genes from an animal of one species and transfer them into a zygote of a different species, thereby producing a 'transgenic' animal. Depending on what kind of gene is transferred, this animal may manifest phenotypic traits characteristic of different species. If, for example, a certain gene extracted from a jellyfish is injected into a rabbit zygote, the result will be a rabbit that glows in the dark. While I know of no cases in which an animal gene has been inserted into a human zygote, there have been many instances in which human genes have been inserted into zygotes of animals of other species. For example, in an effort to enable surgeons to use the livers of pigs for transplantation into the bodies of human beings, scientists have produced pigs that have a human gene in every cell in their body. Yet instead of inserting a gene intended to produce a genetically human protein cover for porcine livers, scientists might have inserted a human gene involved in brain development into a chimpanzee zygote with the intention of producing a more powerful simian brain.

The genetic overlap between human beings and chimpanzees is already high. We naturally share 94 per cent of our genes with chimpanzees. The remaining six per cent of our genes are of course important because they account for the ways in which we differ physiologically from chimpanzees. They account, in particular, for the physiological bases of our higher psychological capacities. Bearing this in mind, one can imagine an extensive spectrum of possible transgenic individuals in whom some genes that have hitherto been found in chimpanzees but not in human beings have been replaced by corresponding genes hitherto found in human beings but not in chimpanzees. At one end of this spectrum are individuals that have developed from chimpanzee zygotes from which one distinctively chimpanzee gene has been removed and replaced by a distinctively human gene. There are many such individuals, each with a different human gene. Next in the spectrum are individuals from which two distinctively chimpanzee genes have been removed and replaced by distinctively human genes. Again there are many such individuals, each with a different pair of human genes. Next there are individuals with three human genes, and so on until, at the other end of the spectrum, there are individuals in whom all but one of the original distinctively chimpanzee genes have been replaced by distinctively human genes. Call this range of hypothetical cases the *transgenic spectrum*.

It is probable that some rough approximation of such a spectrum of transgenic individuals is, or will be, scientifically possible. Certainly there is no reason to doubt that various forms of human-chimpanzee chimaera are possible. One might wonder where along this spectrum of possible individuals the chimpanzees cease and the human beings begin. If one believes that all and only human beings have souls, one might wonder at what point along the spectrum the individuals begin to have souls (just as one might wonder at what point in the process of evolution our ancestors began to have souls). There is no doubt that an individual in the spectrum with only one human gene is a chimpanzee and that an individual at the opposite end of the spectrum with only one chimpanzee gene is a human being, despite its origin in a chimpanzee zygote. But what about those individuals in whom half of the six per cent of genes that distinguish chimpanzees from human beings have been replaced by distinctively human genes? For the purpose of argument here, this question does not matter. The point of the transgenic spectrum is not to raise questions about the criteria for differentiating among species, though it does raise those questions. Rather, the point is to provide an intuitive test of whether moral status is a matter of species membership or a matter of individual characteristics, including psychological capacities.

Consider two individuals in the transgenic spectrum. In one, fewer than 0.3% of its genes are distinctively human, though among that 0.3% are the genes that code for the development of a characteristically human brain. This individual looks far more like a chimpanzee than like a human being but has psychological capacities much more like those of a normal adult human being than those of a chimpanzee. Given the overwhelming preponderance of distinctively chimpanzee genes in its genome, this individual is biologically a chimpanzee, though it has characteristically human intelligence. Only 0.3% of the other individual's genes are distinctively chimpanzee genes, though among that 0.3% are those that code for the development of the brain. This individual looks like a human being with vaguely simian features but has the psychological capacities of an unusually dull chimpanzee. It is biologically a human being but has the brain of a chimpanzee. If membership in the human species is the basis of the uniformly high moral status of embryos, fetuses, infants and adults, the second of these individuals would have the same moral status that you and I have, while the first individual would presumably have the status of a chimpanzee.

It is possible to respond to the challenge presented by the transgenic spectrum by claiming that membership in the human species is only *sufficient* for full moral status. It need not be necessary; thus, having certain psychological capacities (self-consciousness, rationality, free will or whatever) may be sufficient as well. If so, both individuals I have described would have full moral status. More generally, all those individuals in the spectrum that either are human beings or have high psychological capacities would have full moral status.

This claim, while coherent, seems arbitrary. It requires an explanation of how being a member of a certain biological

species could have the same moral significance as having certain high psychological capacities. There are obvious explanations of how an individual's having certain psychological capacities might ground a moral constraint against killing that individual. Self-consciousness is necessary for caring about the life one would lose by being killed, autonomy for being frustrated in directing the course of one's own life, and so on. Nothing comparable can be said of the characteristics, whatever exactly they may be, that make one a member of a certain biological species. Species membership is determined by such criteria as the capacity for interbreeding with members of that species, being the progeny of members of that species, and having a genome with a certain characteristic structure. If one were asked to explain why it would be morally wrong to kill a certain individual, it would make no sense, as a response to that question, to say that the individual satisfies these criteria for membership in the human species.

There is in fact no empirically detectable intrinsic property that is clearly relevant to moral status that all members of the human species possess and possess to a higher degree than any non-human animal. The effort to identify an intrinsic natural property of an anencephalic infant that gives it a moral status higher than that of an adult chimpanzee is hopeless. This is not a mere dogmatic assertion. The evidence for it lies in the absence of any plausible suggestions-indeed, in the virtual absence of any suggestions at all-in the literature on the comparative moral status of embryos, fetuses, infants and animals. Defenders of the idea that being human is a basis, if not the basis, of full moral status therefore tend to claim, in the end, that being human is not just a matter of biology but involves the possession of some occult property that is inaccessible to science, such as a distinctively human, non-material soul. Claims of this sort have a religious basis, ultimately traceable to revelations documented in some sacred text. (There could be no Judaism or Christianity without the stories and sayings recorded in the Bible, no Islam without the Koran, and so on.) But the sacred texts do not provide an unequivocal foundation for religiously inspired claims about the moral status of embryos, fetuses, anencephalic infants or even normally developed newborn infants. Consider, for example, those religions that are based in part on the documents collected in the Old Testament. Insofar as devotees of those religions accept the Old Testament as a reliable guild to the moral views of the deity, they will have great difficulty in finding an unequivocal basis for a prohibition of infanticide. In I Samuel, Samuel conveys to Saul 'the words of the Lord', which are: 'Now go and smite Amalek, and utterly destroy all that they have, and spare them not; but slay man and woman, infant and suckling....⁶ In Ezekiel 9, the Lord instructs an unnamed man to go through Jerusalem and 'slay utterly old and young, maids, and little children...'7 There are many other such passages."

KILLING, HARMING AND MORAL STATUS

There is one way to try to defend the view that killing a fetus or infant is far more seriously objectionable than killing a higher non-human animal that does not appeal to religious claims or posit the existence of occult properties. It is not based on a view about moral status but on a view about comparative harm. The idea is that when a fetus or infant is killed, it loses the whole of a human life, a life that might have lasted eight or nine decades

and have contained some of the highest forms of experience and activity known to us. By contrast, when an animal is killed, the life it loses would in most instances have been much shorter and in no case could have contained experiences and activities as valuable as those characteristic of a normal human life. What these facts show is that killing a fetus or infant generally causes far greater harm to the victim than the killing of an animal does. (This same point could be articulated as a claim about potential-that is, most fetuses and infants have the potential for a longer and better life than any animal might have; therefore the killing of a fetus or infant prevents the realisation of a greater potential.) If the degree to which an act of killing is morally objectionable varies, other things being equal, with the degree of harm it causes to the victim (or the magnitude of the potential it frustrates), it follows that most killings of fetuses and infants are more seriously wrong than most killings of animals, again if factors other than the harm caused are equal.⁸

This argument is partly right. In a suitably revised form, it gives the main reason why killing a fetus or infant is normally worse than killing a higher animal. But it is mistaken in various ways in the unqualified form in which I have presented it. First, few people accept the principle that the wrongness of killing varies with the harm caused to the victim. That principle implies that it is in general more seriously wrong to kill a 20-year-old than to kill a 40-year-old, as the former would lose 20 more years of good life than the latter and thus would be harmed to a far greater extent. Yet most people believe that both killings would be equally wrong, if there were no differences other than the difference in the degree of harm caused. People do, however, tend to think that it is more seriously objectionable to kill an animal when the degree of harm it suffers is greater-for example, they accept that the killing of a chimpanzee is more seriously objectionable than the killing of a frog. And most people's egalitarian intuitions about the killing of persons do not extend to the killing of fetuses. As I noted earlier, people tend to believe that a later abortion is more seriously objectionable than an earlier one, and that the killing of an infant is more seriously objectionable than the killing of a fetus. These facts support the suggestion that the degree of harm caused makes a difference in comparative evaluations of killing animals and killing human beings, even if it does not make a difference to a comparison between the wrongness of killing one innocent adult and the wrongness of killing another.

Second, the argument I cited overstates the extent to which a fetus or infant is harmed by dying, or being killed. The argument as I stated it assumes that the degree to which it would be bad for an individual to die at a particular time is a function only of the amount of good life that the individual would have in its life were it not to die at that time. But if that were true, the worst time for an individual to die would be immediately after beginning to exist. Suppose, as most people believe, that we begin to exist at conception. If the badness of death is a function only of the amount of good life lost, the worst and most tragic deaths are those that occur immediately after conception. This implies that there is a vast difference between the prevention of conception at the last moment (for example, by the destruction of a sperm cell and an egg cell just before the sperm was about to enter the egg) and the destruction the zygote immediately after it has been formed by the entry of the sperm into the egg. For the prevention of conception would not be bad or harmful for anyone, while the destruction of the zygote would cause the greatest loss an individual could suffer. As a claim about harm, that cannot be right. It cannot be the case that whether there is no harm at all or the greatest harm an

ⁱⁱSee, for example, *Numbers* 31: 17, *Deuteronomy* 3: 6, and *II Kings* 2: 23–24.

individual can suffer is determined by whether the destruction of some microscopic genetic material occurs immediately before or immediately after a sperm cell enters an egg cell.

More generally, it is hard to believe, and most people do not believe, that a fetus suffers a much greater harm when it dies than a 20-year-old does. Most people in fact believe the opposite: that a fetus suffers a lesser harm in dying than an older child or adult. This is shown by the fact that no scientifically advanced society spends more than a tiny fraction of its medical research budget on efforts to prevent spontaneous abortion, despite the fact that approximately two thirds of conceptions end in the spontaneous death of the fetus prior to birth.

Philosophers have proposed different explanations of how it could be that a fetus suffers a lesser harm in dying than an older child does when the fetus loses a greater amount of good life. These explanations tend to focus on the absence or relative weakness of certain relations between the fetus and the future life it loses. According to some philosophers, the loss of some future good cannot be bad for an individual unless that individual cares about or is at least capable of caring about that good.^{9–11} On this view, when an animal, fetus or infant lacks sufficient self-consciousness to be able to care about its own future life, its loss of that life cannot be bad for it. It suffers no harm in dying.

This view is implausibly all-or-nothing. If a non-self-conscious individual dies when its continued life would have been good, it has lost something that would have been good for it. Certainly no one else would have been the subject or beneficiary of the good experiences it would have had if it had not died. The individual's death therefore seems to be a misfortune for that individual, not just a fact about the world that is bad only impersonally. The question is not whether its death is bad for it but how bad death is for it. Following arguments advanced by Derek Parfit, I have argued in other work that the degree of harm that an individual suffers by dying is a function of two distinct variables: (1) the amount of good life the individual would have had if it had not died and (2) the strength of various psychological relations that would have bound the individual as it was at the time of death to itself at later times, when the goods of which death deprives it would have occurred.² ¹² Animals, fetuses and infants are similar in these respects: they do not have desires, ambitions or intentions for more than the immediate future; they have relatively few psychological attributes such as beliefs, values and dispositions of character that they will carry forward into the future; and if they survive into the future they will have few memories of their present life. There is, in other words, an enormous psychological gulf between a fetus or infant and the person it would later become were it to live. The harm that a fetus or infant suffers in being deprived by death of the goods of its future life must therefore be discounted for this psychological discontinuity between itself at the time of death and itself as it would have been when the goods of its future life would have occurred. This, I have argued, is the best explanation of why the harm that a fetus suffers in dving or being killed is less than that suffered by an older child or adult, despite the fact that the sheer amount of good life that it loses is greater.

This explanation has the advantage over the other one I described that it recognises that the badness of death very early in life is a matter of degree rather than all-or-nothing. Because a human being's psychological capacities develop gradually as it matures, thereby generating more and stronger potentially time-spanning connections of desire, memory and so on within the life, the account I have described makes sense of the paradoxical but common belief that, in the early stages of life, death becomes

worse for an individual the later it occurs. It explains, for example, why the death of a fetus at nearly 9 months is worse than the death of a fetus at 6 months and also why the death of a newborn infant is generally worse than the death of a fetus but less bad than the death of an older child.

As I indicated earlier, I think this account of the badness of death also provides an important part of the explanation of why it is generally more seriously wrong to kill an infant than it is to kill a higher animal. While the harm that each suffers in losing the goods of its future life must be discounted for the psychological discontinuity between itself at the time of death and itself as it would have been later, an infant normally loses a much longer and better life.

It also helps to explain why our intuitions about the moral status of infants are mixed or confused in the ways I described earlier. Although infants are, unlike an embryo, fully human in form, and are innocent and helpless and thus evoke our nurturing and protective instincts, they are also psychologically rather insubstantial and only weakly psychologically connected to the future life they would lose by dying. Our awareness of these latter facts, though perhaps only subconscious, seems to inform and explain our sense that a newborn infant suffers a lesser harm by dying than an older child does.

But these are claims about harm, not about moral status. They are relevant to the morality of infanticide but not in the way that a claim about moral status would be. A strong case for the view that infanticide is virtually never permissible would have to claim that infants have a moral status that is the same as, or at least akin to, that possessed by normal adults. For common beliefs about the morality of killing cannot be explained just by reference to the harm that killing causes to the victim. It would, for example, be more seriously wrong to kill a very elderly person than to kill a young chimpanzee, even if the chimpanzee would lose more good life by being killed. The greater wrongness of killing the elderly person must therefore be explained by reference to her higher moral status rather than by reference to the harm she would suffer in being killed. Similarly, as I noted earlier, if killing were wrong only because of the harm it inflicts, it would be much less seriously wrong to kill an elderly person than to kill a young adult, other things being equal. Most people reject this implication. Their views about the morality of killing therefore seem to be based at least in part on beliefs about moral status.

I have tried to show, however, how difficult it is to defend the common view that infants have full moral status and that their having it is what explains why infanticide is so much worse than the killing of a higher animal and worse even than the killing of a fetus via abortion. The problem is one of consistency. A chimpanzee clearly does not have full moral status. Yet for every capacity that might be relevant to moral status, a normal adult chimpanzee has that capacity to a higher degree than any viable human fetus. The only other differences between an adult chimpanzee and a viable fetus that might be relevant to moral status are potential and membership in the human species, yet there are strong reasons, some of which I cited earlier, to doubt that either of these is in fact a basis of moral status. Yet if there is no difference in moral status between a viable fetus and a chimpanzee, so that the moral difference between killing a fetus and killing a chimpanzee is a matter primarily of the difference in the degree of harm caused to the victim, then it seems impossible to sustain the common view that infanticide is as seriously wrong as the killing of a normal adult person. For there can be no difference in moral status between a viable fetus and a premature infant.

The argument

It is defensible to claim that infanticide is in general substantially more seriously wrong than the killing of a chimpanzee. That claim can be defended by appealing to the fact that the life that the infant would lose would be far more valuable than that which the chimpanzee would lose. There are also various reasons why infanticide is in general more seriously wrong than abortion, even beyond the point of viability. One is that in most cases infants are older and more psychologically developed and are therefore harmed to a somewhat greater extent by dving or being killed than a fetus normally is. Another is that people quickly form attachments to infants, so that infanticide is likely to elicit more intense grief and guilt than abortion typically does. Finally, and most importantly, the reasons there may be to have an abortion are greater in number and generally much stronger than the reasons there might be for engaging in infanticide. A fetus is lodged inside a woman's body and thus may impose unique burdens that can be alleviated only by abortion. Even after the point of viability, live delivery may be riskier, more painful or disabling, or more disfiguring than abortion. By contrast, an infant need not impose a grave burden on any particular individual. The sacrifices that may be required to care for it can be widely distributed through government action. There are thus ways of dealing with the problems that some infants may pose that do not involve killing them. Thus there are seldom reasons in favour of infanticide that are capable of outweighing the reason not to kill an infant that is grounded primarily in the harm it would suffer by being killed.

This is not, however, the conclusion that most people want, which is that there is a virtually exceptionless prohibition of infanticide grounded in the moral status that infants share with adult persons. But that conclusion is inconsistent with beliefs about the killing of animals and fetuses that are widespread and theoretically defensible.

The main point of this essay has been to show that there are no easy options for those who are enraged by the suggestion that infanticide may on occasion be morally permissible. Those who have challenged the view that infanticide can never be permissible generally share the intuition that the killing of an infant must be wrong. These people do not lack the normal moral emotions. It is just that they are sufficiently reflective to have seen how difficult it is to reconcile the intuition that infanticide is always wrong with other moral beliefs that are also widely shared and are supported by compelling arguments.

Recently, the publication in this journal of a short article challenging the consensus on infanticide prompted various guardians of morality to send anonymous death threats to the authors. As Christian Inquisitors eventually learned, and as one hopes that radical Islamists will also soon discover, it would be much more effective for these people simply to give the arguments for their views and to explain why the challenges to them, such as those I have presented here, are mistaken. Bullying, threats and abuse seldom provide good reasons to change one's beliefs.

Competing interests None.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Steinbock B. Life before birth: the moral and legal status of embryos and fetuses. 2nd edn. New York: Oxford University Press, 2001.
- 2 McMahan J. The ethics of killing: problems at the margins of life. New York: Oxford University Press, 2002: chapter 1.
- 3 Thomson J. A defense of abortion. Phil Public Affairs 1971;1:467-6.
- 4 Brandon B. Anencephalic infants as organ donors: a question of life or death. *Case West Reserve Law J* 1989–1990;40:793–4.
- 5 McMahan J. Infanticide. *Utilitas* 2007;19:146–9.
- 6 Bible. I Samuel 15:3. King James translation.
- 7 Bible. Ezekiel 9:6.
- 8 Marquis D. Why abortion is immoral. *J Phil* 1989;86:183–203.
- 9 Tooley M. Abortion and infanticide. Phil Public Affairs 1972;2:37-65.
- Singer P. Practical ethics. 3rd edn. Cambridge: Cambridge University Press, 2011: chapters 4–6.
- 11 Velleman D. Well-being and time. *Pacific Phil Q* 1991;72:48–77.
- 12 Parfit D. Reasons and persons. Oxford: Oxford University Press, 1984: chapters 12 and 13.