OF MARSUPIALS AND MEN: A THOUGHT EXPERIMENT ON ABORTION

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It has become commonplace in discussions about the morality of abortion to mention that people do not agree about the facts. But there are some facts, at least, about which we can all agree. One of these is that humans are placental mammals. For some nine months after conception, the developing human (or DH, as I will henceforth refer to anything from a zygote to an infant¹) lives inside the placenta in its mother's uterus, deriving all its oxygen and nourishment from the placental blood flowing through its umbilical cord. Upon reaching a certain size and stage of development, it passes down the birth canal into the extrauterine world. It is still far from completely developed and it requires feeding and care, but now instead of getting its oxygen and nourishment from the blood of the placenta, the DH gets its oxygen from the air it breathes and its nourishment from its mother's milk.

But what if instead of being placental mammals, humans had evolved as marsupials? At first this seems like just another fanciful philosopher's question, but I think that trying to answer it will illuminate some important issues in the morality of abortion.

I

Marsupials, like placental mammals, start off their development in the uterus, but in comparison with placental mammals, have a

¹In calling something a "developing human" I do not want to beg such questions as whether it is a person, whether it has rights, and whether we have any obligations toward it. I use this term simply because whatever else these things that I shall call "developing humans" are, they are human in the sense that they were produced by human parents, and they are developing toward being human adults.

very short gestation period (13 days in opossums, e.g., or 40 days in kangaroos). At roughly the stage of development where in placental mammals we start speaking of a "fetus" rather than an "embryo", marsupials are born. They are still very small (the kangaroo less than an inch long) but developed enough to crawl into the mother's pouch, where they attach themselves to her nipples. Here they remain for several months, deriving all their nourishment from her milk. Then they will leave the pouch, at first for only short periods but later, upon weaning, for good.

Now what if humans developed in this way? First, there would be important physiological differences. Instead of getting its oxygen and nourishment from the placental blood for nine months, the DH would be born after about two months and from then on would get its oxygen from the air and its nourishment from mother's milk (until weaning). After leaving the uterus it would still depend on its mother, as the fetus in the placenta now does, but it would be located in a different part of her body, and it would depend on her milk rather than on the placental blood which her body helps produce.

This biological difference would lead to two important differences relevant to the morality of abortion. First, though the newly born marsupial DH would be dependent on being in a pouch for its warmth and nourishment, it would not be dependent, as fetuses now are, on being in one particular pouch. It could be removed from its mother's pouch, that is, and transferred to the pouch of another lactating female.

The second important difference would be that the marsupial DH in the pouch would be visible. It would be recognizably human as fetuses are now, but being right there in the mother's pouch instead of in her uterus, it could be seen and even touched by its parents. Very early on, they would know its sex, and they would be able to watch its growth almost as easily as parents of a newborn can now watch its growth. Perhaps they would even choose to name it while it was in the pouch. As things are, of course, except for the fetus' occasional noticeable movement, its parents have no experience of it as anything other than a growing mass until it is born. The DH in the uterus is an unknown creature—its parents can guess at its probable weight, but without sophisticated monitoring equipment can know little else. They do not even know whether it is male or female, and so they talk about "it" and speculate about what sex "it is going to be" when they should talk about what sex it is going to be discovered to be.

This hiddenness of the unborn DH and our inability to interact with it explain why we usually think of the day of its birth-its appearance to the world—as the beginning of the human being, why we celebrate birthdays, and why we reckon our ages from the day we were born. More importantly for our purposes, the hiddenness of the unborn helps explain why many people are unwilling to grant fetuses any moral consideration. If Hume was right that our moral consideration for others is based on our capacity for sympathy, and if it is difficult to have sympathy for or identify with something we have not experienced, then we might expect people, perhaps, not to accord moral consideration to DHs they have never seen.

Respect comes with sympathy and sympathy comes with familiarity. It is well known that it is harder to kill something, even an animal, once you have had direct experience of it as an individual living thing. This is why maybe the family that decided to bring in extra income by raising rabbits (or even chickens) for slaughter, could not bring themselves to do the killing once they had had the animals around for awhile. And any soldier who has seen hand to hand combat knows that though one may be very enthusiastic for killing one's enemies in the abstract, for killing "Japs" or "Gerries" or "Gooks", it is much harder to look an individual man in the face and then kill him. The ancient Greeks even had it as part of their code of battle that if two enemies met on the battlefield and discovered that they had once shared a meal or lodging, they would not fight.

So even if a person is willing to admit in the abstract that a DH at, say, five months is well developed, can feel pain, and except for its size is very similar to a newborn baby, it is still possible for him or her not to attach much moral weight to these facts in a decision about an abortion. If he or she has had no experiencies of fetuses, it may be that no identification with and sympathy for them has been developed, and so no moral consideration either. Once the DH passes down the birth canal to become a visible, touchable part of our world, of course, most people do identify with it and do accord it moral consideration—though many advocate abortion, few advocate infanticide. Now modern ultrasonic equipment, fetal electrocardiagrams, and intrauterine photography are reducing the hiddenness of the fetus to some small extent; many people on seeing moving pictures of a five month old fetus have been astonished at how human it is. But for most people outside the medical profession, any individual DH within any particular woman's uterus is an unknown with which they do not identify.

Now of these two differences between marsupial DHs and placental DHs, the transferability of the former, and its visibility, only its transferability is morally relevant to the abortion issue. The invisibility of the fetus can and does explain why as a matter of fact people tend not to give moral consideration to fetuses, but it does not give them a moral reason for not doing so. As I shall argue, a DH at any stage of development deserves some moral consideration, even if we do not grant it the status of an adult; and the fact that being invisible, the fetus is harder to identify with, does not change any of this. We can agree that we would naturally feel closer to marsupial DHs in their mothers' pouches than we do to fetuses in their mothers' uteri, but this does not provide us with a moral reason why we need not accord fetuses moral consideration, if it turns out that they deserve moral consideration.

So let us put aside the visibility of the marsupial DH and focus on its transferability, asking first what the morality of abortion would be if we were marsupials, and secondly, whether this tells us anything about what the morality of aborting placental DHs should be.

II

If humans were born after only two months of development and spent their next seven months in the mother's pouch, then pregnant women would have an alternative which they do not have now. A woman who was distressed on discovering that she was pregnant would be able to wait a few weeks, give birth to the tiny DH, and, assuming that there were infertile women available who wanted children, give it to such a woman to put into her pouch. (There might be a problem about the infertile woman producing milk, but let's assume that hormones could be given her to cause her to lactate.) Or if a woman had already borne her DH and was carrying it in her pouch, but decided that she did not want the responsibility of caring for it any longer, she could get rid of it in the same way, by transferring it to the pouch of some woman who did want it. If the birth process and the transfer of the DH were relatively simple, then, I suggest, women would not seek a more complicated and potentially more dangerous abortion during the brief gestation period. It would still be possible to abort the DH before it was born, but since a woman could get rid of it by waiting a short time and letting it be born, abortion would probably be limited to those cases where the birth or the continuation of the pregnancy would threaten the mother's life or health.

And not only would there be prudential reasons prompting marsupial mothers to opt for pouch switching rather than abortion, there would be moral reasons. Conservative anti-abortionists among marsupial humans might argue that DHs are persons with a full right to life from the moment of conception, and this is why we should not kill them. But I don't think that we would need make any such claim in order to justify a moral prohibition on most abortions under the circumstances described. For the kind of moral consideration we would have to grant the unborn DH in order not to take its life is certainly less than the consideration we owe a fully developed adult, or even a child. Except in rare cases where the pregnancy or the birth would threaten the mother's life, we would be weighing the DH's life not against the mother's life, but against something less important than her life. In extreme cases, e.g., a woman might want to abort the DH rather than wait a few weeks for it to be born, because if she waited for its birth she would have to postpone a party or a trip. Here, where it was the DH's life against a small amount of inconvenience on the mother's part, I think that we would have to say that the DH's life, though it would not outweigh the mother's life, would outweigh the small inconvenience. In such a case aborting the DH would be wrong. We would not owe the unborn DH the same amount of moral consideration accorded an adult or a child or even a newborn DH in the pouch, but if we owed it any consideration at all, we should at least count its life as more important than the inconvenience involved in rescheduling a party or a trip. If we did not owe it this much consideration, I suggest, we would owe it nothing at all.

But why, it might be asked, would we owe the young DH any consideration at all? Why not say that the young DH would not deserve the respect accorded adults or children, and would not deserve any other kind of respect either? The answer here is twofold: we would owe it some consideration, first, in virtue of the fact that it was a relatively sophisticated organism, and secondly, in virtue of what it was becoming. Let's start with what a young DH is. It has all too often been assumed, on both sides of the abortion debate, that we do not owe anything moral respect unless it is a full blown person with a full right to life. But this is clearly false. Animals are not persons and newborn babies today are not persons, yet we accord them, and should accord them, some moral consideration, in part because they are sophisticated forms of life. If a horse had gotten loose on our property and we wanted to get rid of it, we would not be justified in throwing acid on it our shooting it just because doing so would make the animal get off our property faster than, say,

yelling at it or chasing it. Though many do not want to talk of animal rights, I think it is clear that there are moral limits to what we may do to such sophisticated organisms as the higher mammals. And if we owe horses at least some moral consideration, we owe infants more.

Now an unborn marsupial DH would not be as sophisticated a form of life as a horse or an infant, but would nonetheless be sophisticated enough to be accorded some respect. The period that a marsupial DH would spend in the uterus, as we said, would correspond roughly to the period in which we now call the DH an "embryo", roughly the first eight weeks. Embryologists have divided this period into twenty-three stages, based on the development of morphological features. We need not discuss all of these, but a quick summary of the major developments during this period should give us some appreciation for just what the DH is even at a very early stage.

By the end of the third week of its development, the backbone of the embryo is forming, and five to eight vertebrae have been laid down. Before the end of the first month there is a head, with rudimentary eyes, ears, and brain. There is a digestive tract, simple kidneys, and liver. The heart is pumping blood through the bloodstream. All of the backbone has been laid down and the spinal cord is closed over.

In the 5th week the chest and abdomen have formed. Eyes can be seen through closed eyelids. The mouth opens. Around this time the embryo begins to move, though it is too small as yet for the mother to feel this movement. By the 7th week the face is completely formed. The arms and hands, legs and feet are partly formed, and have stubby fingers and toes. The gonads have appeared, as has the penis or clitoris. The brain has developed sufficiently to send out electrical impulses and has begun its role of coordinating the other organs. By the end of the 8th week, approximately the time when it would be born if we were marsupials, the DH already looks like a miniature infant. It has a nose, lips, and a tongue, buds of its first teeth, a functioning nervous system, and all its internal organs. The major blood vessels are taking their final form, and it has a heartbeat of 120-160 beats per minute. An electrocardiagram of a DH at this stage shows wave patterns similar to those in an adult. The 9-weeks DH is still very small—about an inch long—but what happens after this is mostly growth rather than further differentiation or development.

Now the embryo we would kill were we to abort a young marsupial DH would not be capable of doing anything distinctively

human or personal as yet, and so we would not owe it the respect we owe an adult. By the same token, infants don't do anything distinctly human either, and by certain criteria children and even adolescents aren't fully persons. But the DH, even at an early stage, just because it is the sophisticated organism that it is, deserves some moral consideration. If we found creatures similar to 6-week embryos living in the ocean, let's say, and we could appreciate how marvelously complex they were, we would at least owe them the consideration of not killing them to prevent minor inconvenience on our part.

So part of why we would grant the marsupial DH moral consideration is because of what it is. But we would also have to take into account what it is developing into. From the moment of conception the DH has all the genetic information needed to become an adult human person, and it is presently on its way, through its various prenatal and postnatal stages, to becoming just that. The potentiality here, it is important to understand, is not a mere logical or natural possibility, like the possibility, say, of my becoming a basketball star. I have seldom played basketball, have no desire to do so, and am not now practicing the game. The DH, on the other hand, not only has the possibility of becoming an adult person, but has the natural tendency to do so, and is presently and continuously doing just that.

When we consider how we should treat anything, we naturally do, and should, take into account what that thing is developing into. For part of what makes something valuable is what it will be, as well as what it is. This, of course, holds with those who are already born. A young chimpanzee and a human infant, at certain stages, will have developed the same skills—indeed a newborn chimp will for a time outstrip the infant in its development. But we still accord the infant more respect because it is on its way toward being a child and then an adult person, while the chimp is not. And this principle of respect in light of what something is developing into should hold just as well with an unborn DH as with one which has been born.

A human life is not a static condition, not the stable possession of certain properties by a creature for some seventy or so years. A human life is a process. Until adulthood there is continuous growth and development, and even after maturity there are less noticeable changes taking place until the last moment of old age. If a human life is valuable, its value lies not just in what the human being is at any one moment, but in what he or she will be, as well as in what he or she has been. In a sense we are our futures, as well as our presents and pasts. Each of us has come a long way from being a fetus, of course, and as full persons we now deserve more respect than we did

then; still, this is how we all began, and the fact that fetuses are on their way to becoming what we are now, means that they deserve more respect than, say, the respect accorded an animal fetus at a comparable stage of its development.

Now most of these comments apply just as well to placental DHs as they would to marsupial DHs; but if we were marsupials and the pouch switching described before were a simple procedure, then we would be more inclined to recognize the value of the DH much earlier, and to respect it accordingly. For, as we said, its visibility at a very early stage would make it something in our experience, and so we would be more likely to identify with it and have sympathy for it. And because in most cases abortion would not even be more convenient than waiting to bear the DH and then transferring it to someone else's pouch, we would seldom have any vested interest in not according it moral consideration. Occasions would arise, though rarely, in which the further development of the DH in the mother's uterus, or perhaps the birth process, would threaten her life, and in such cases I think it would be clear that the mother's full right to life as a person, would outweigh the consideration we owe the DH. We would probably also say that the respect we owe the embryonic DH would be outweighed by the threat of some major medical problem if the pregnancy were continued. But what the marsupial case brings out nicely is that as what we are respecting on the mother's side of the scale becomes of less and less weight (her life, her long-term health, her short-term health, her freedom from major inconvenience, from minor inconvenience, etc.), we come closer to a balance with what we are respecting on the DH's side of the scale—its very life. Where it is the mother's life against the DH's life, the mother's life counts for more; but where it is merely the mother's desire not to postpone a trip, say, against the DH's life, it is clear that the latter takes precedence.

III

But what does all this speculation have to do with the present abortion debate? After all, humans are not marsupials, the DH is dependent on growing in the particular uterus where it began, and gestation takes nine, not two months. Before answering this question directly, we should point out that medical science is on the verge of developing an operation which would be very similar to pouch switching; it is the transfer of a DH from one uterus to another. Recently we read about the first documented case of a baby

conceived in a test tube and then implanted in the uterus of a woman who had been unable to conceive a child. Uterine transfer would be similar to this, only the DH would be conceived in one woman's body and then transferred to another woman's uterus. There are thousands of childless couples today (estimates say about 1 in 10 couples are naturally childless) who want children, and who would be eager for such an operation. It would amount to a form of early adoption, and would have the advantage that the adopting mother would have the extra closeness of having had the baby grow and develop within her.

Let's say that in twenty years uterine transfer has been perfected, for both embryos and smaller fetuses. If this happens, I suggest, our moral intuitions will be similar to those in the hypothetical pouch switching case. A woman who discovers that she is pregnant, but who does not want the DH, would be able to get rid of it by having it transferred to the uterus of a woman who does want it. This operation would even have the advantage over the hypothetical pouch switching that there would be no need to wait at all after the discovery of the pregnancy for the transfer of the unwanted DH. If the mother owed the DH any moral consideration at all under these circumstances—and I have been insisting that she would—she would at least be obliged to have it transferred rather than kill it, if she wanted to get rid of it. This would be minimal consideration.

But perhaps we can say more than this. In the pouch switching case the issue was whether to abort an embryonic DH. Because of what it would be and what it would be developing into, I argued, we would owe it at least a minimal amount of consideration. But if uterine transfer were possible with fetuses and not just embryos, and if because of its greater development we owe a fetus more consideration than an embryo, then in the decision whether to abort or to transfer a fetus, the life of the fetus would counterbalance more than just minor inconveniences on the mother's side of the scale. If the issue were whether to abort or to transfer a four month old fetus, let's say, the mother would be obliged to put up with at least a moderate amount of inconvenience or pain in a transfer, which preserves the life of the DH, rather than take the DH's life in an abortion.

Here, too, we should stress that what has to be weighed against the life of the DH is not the inconvenience and pain of the transfer, but the difference between the inconvenience and pain of the transfer and the inconvenience and pain of an abortion. Aborting a fetus even at three months involves some inconvenience and pain. And after three months a fetus is usually aborted by a technique known

as "salting out": a needle is inserted through the woman's abdomen into her uterus, about half a pint of fluid is removed, and then a strong saline solution is injected. This kills the fetus, but it is hours and occasionally days before the dead fetus is brought forth in a process similar to labor. If the uterine transfer operation were perfected, as we hypothesized, it is hard to see how it could involve a great deal more inconvenience and pain than this. And so in practically every case, I contend, our moral intuitions would say that a pregnant woman who wanted to get rid of the DH should do so by transferring it rather than killing it.

If what I have said so far is sound, then we have some insights which can be applied to abortion decisions today. Perhaps the most important thing we have seen is that there is no logically necessary connection between getting rid of and unwanted DH and killing it. In the marsupial and the uterine transfer cases the woman could get rid of the DH without killing it, in the first case by waiting a few weeks until it was born, and in the second by having it transferred from her uterus before it was born. Now as things are today, neither of these is an alternative in an abortion decision. Nonetheless, a woman now can get rid of the DH—though only after several months wait—by carrying the DH to full term and then giving it to adoptive parents. The big difference between this and the hypothetical cases we have been considering is the time involved. While in the case of uterine transfer, she could achieve her goal of getting rid of the DH immediately, and in the marsupial case within a few weeks, the woman today who decides to have the baby and put it up for adoption must wait several months after her decision before she can get rid of it. She must go through the inconvenience, discomfort and pain of pregnancy and childbirth. She can get rid of the DH without killing it, then, but not as quickly or as easily as she would like.

Now I do not want to ignore any of the difficulties connected with the adoption alternative here. Nor would I suggest that the difference between the inconvenience and pain of an abortion and that of carrying the DH to full term is never or even seldom enough to counterbalance the value of the DH's life. Women who know that their pregnancies are difficult, or whose mental problems would be seriously aggravated by a continuation of the pregnancy, might well have good grounds for aborting the DH rather than carrying it to full term and putting it up for adoption, especially if the DH is still in its early stages. But I am disturbed by the increasingly casual attitude of many people today toward aborting fetuses even in their fourth or fifth month without giving sufficient thought to the life that is being taken and their reasons for taking it. Increasingly in

this country, and even more in places like Japan, the life of the DH is being treated as if it counted for nothing, and abortion is treated as if it were simply a means of birth control.

Against this growing attitude I want to insist that the decision to abort is always at least in part a moral decision, and that the life of the DH, at whatever stage, deserves some moral consideration. And the older the DH is, the more consideration it deserves. In a large number of elective abortions today there is simply not enough on the woman's side of the scale to counterbalance the life of the DH. If a woman has already had several easy pregnancies and births, for instance, and if the DH is already in its fourth or fifth month, I cannot see that the difference between the inconvenience and pain of aborting it (by the salting out technique or by triggering live birth) and the inconvenience and pain of carrying it to full term, amounts to a big enough difference to outweigh the value of the fetus' life.

In many cases today where abortion is chosen over the adoption alternative, I think, it is not even the desire to avoid extra pain and inconvenience that is the crucial motive. Indeed, I would suggest that if uterine transfer were feasible but involved the same amount of pain and inconvenience as abortion, many women would choose uterine transfer over abortion, because it would preserve the life of the DH. What motivates many women today to choose abortion over adoption is not their fear of pain but their unwillingness to face the embarrassment of going through nine months of pregnancy and then giving the baby to someone else to raise. If the DH is aborted by the fourth or fifth month, the woman is probably not noticeably pregnant; the people who know that she is pregnant are those she chooses to tell. She can discreetly have the DH aborted, try to forget all about the pregnancy, and go on with her life. For a short period an occasional question may be asked, but soon the whole matter is forgotten. If she has the baby and gives it up for adoption, on the other hand, everything is much more public. Many more people will know that she is pregnant, it will be obvious when she is no longer pregnant, and-especially if she is married-people will be asking about the baby after she has given it up. The baby will grow and probably outlive her, and its very existence may serve as a constant reminder that she got rid of it.

While I admit that more embarrassment may attend the adoption alternative than abortion, I cannot see that we should attach any moral weight to this fact in an abortion decision. If we do, then we are sanctioning the view that if someone's or something's life causes

you embarrassment, then that very fact gives you some moral grounds for taking that life. And this strikes me as an abhorrent principle, whether in our relations with persons, with DHs, or even with animals. Whatever rights a pregnant woman has to her own life and happiness, at most in an abortion decision she may be entitled to end the dependence of the DH upon her. She is not morally entitled to have as her primary objective the extinction of the DH. It is one thing to want to no longer be pregnant; it is quite another to want to kill the DH so that you won't be reminded as often that you were pregnant. The first may be a legitimate desire, and may constitute part of a justification for choosing abortion; the second is never a legitimate desire, and contributes nothing to justifying abortion.

If a woman owes a DH in her uterus any moral consideration, to conclude, she does not owe it any less consideration because its continuing its life may cause people to ask embarrassing questions. After all, whether she aborts it or bears it and puts it up for adoption, she has chosen to get rid of it. The fact that if she chooses abortion the DH will no longer be alive to remind her that she has gotten rid of it, provides no moral grounds for getting rid of it in this way rather than in a way that does not involve taking its life.

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