Philosophy, critical thinking and 'after-birth abortion: why should the baby live?'

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Confronted with an article defending conclusions that many people judge problematic, philosophers are interested, first of all, in clarifying exactly what arguments are being offered for the views in question, and then, second, in carefully and dispassionately examining those arguments, to determine whether or not they are sound. As a philosopher, then, that is how I would naturally approach the article 'After-birth abortion: why should the baby live?', by Alberto Giubilini and Francesca Minerva. Very few philosophical publications, however, have evoked either more widespread attention, or emotionally more heated reactions, than this article has. Because of that, I am going to proceed, initially, in a different fashion, and rather than focusing upon the specific arguments that Giubilini and Minerva offer for their conclusions, I am going to suggest that there are crucial background issues that need to be placed on the table, that any thoughtful reader needs to consider. I shall then go on to discuss how philosophers approach the topic of abortion, and attempt to arrive at sound conclusions concerning its moral status. Finally, I shall offer my assessment of the article by Giubilini and Minerva.

WHAT IS PHILOSOPHY? PHILOSOPHY AND THE SOCRATIC CHALLENGE

Many philosophy journals, because of their focus on intellectual questions that are quite remote from central human concerns, and also likely to involve, sooner or later, some difficult technical issues, have a readership that consists almost entirely of professional philosophers. This is not so, however, in the case of journals concerned with ethical questions, and especially issues of an applied sort, such as are addressed in 'After-birth abortion', where interested readers will include, for instance, professional philosophers, and individuals who work in the healthcare and legal professions, and whose philosophical training may well have been very limited. I want to begin,

therefore, with some discussion of the nature of philosophy. The importance of doing this will emerge very quickly.

The origin of philosophy

Philosophy originated in Greek society, during a time when science began, and when there were very great discoveries and advances indeed in mathematics, achieved by people such as Pythagoras, Zeno, Eudoxus, Euclid and Archimedes. It was also there, at that time, that democracy originated.

In the case of philosophy, although some earlier thinkers had certainly raised important philosophical questions, it was really with Socrates (469–399 BCE), that philosophy began in a serious way. Socrates was then followed by the other two great Greek philosophers, namely, Plato (426–347 BCE) and Aristotle (384–322 BCE).

Unlike Plato and Aristotle, Socrates did not himself write anything. What, then, did he do? The answer is that he went about questioning people, raising philosophical issues—especially of an ethical sort—concerning, for instance, the nature of justice, of piety and of the good life.

Socrates attempted to show that the answers that people offered did not really stand up under critical scrutiny, for he believed that people who thought that they knew the answers to such questions were generally labouring under an illusion. His goal, accordingly, was to convince people that this was the case, with the hope that people would then be motivated to search for more satisfactory answers.

Many people, however, did not react favourably to Socrates' attempt to convince people that they did not know things they thought they knew, and they felt that Socrates' activities were undermining society's values. As a result, Socrates was charged with not respecting the gods, and with corrupting the young, and he was sentenced to death. He died by drinking hemlock.

The Socratic challenge

Socrates thought that it was very important not to take the truth of one's most important beliefs for granted. So in Plato's dialogue *Apology*, where Plato is describing Socrates' last days before the carrying out of the death sentence, we find the following passage:

Perhaps someone might say, 'Socrates, can you not go away from us and live quietly, without talking?' Now this is the hardest thing to make some of you believe. For if I say that such conduct would be disobedience to the god and that therefore I cannot keep quiet, you will think I am jesting and will not believe me; and if again I say that to talk every day about virtue and the other things about which you hear me talking and examining myself and others is the greatest good to man, and that the unexamined life is not worth living, you will believe me still less. This is as I say, gentlemen, but it is not easy to convince you. (Apology, 373-38a)

It might well be argued that Socrates' very famous remark here—'The unexamined life is not worth living'—puts things too strongly, on the grounds that there are many things that contribute to the value of a life, and that a life full of most of those things would not become a life that was not even worth living if the person in question did not subject his or her important beliefs to critical scrutiny. But even if that is so, it is surely a virtue, and a very important one, to subject one's most important beliefs to close, critical scrutiny, and to ask whether one in fact has good grounds for thinking that those beliefs really are true.

Many people, however, would disagree with the claim that this is so. In some cases, the thought may be merely that most important beliefs that people have are generally true and, thus, that there is no reason to waste time examining those beliefs closely. More often, however, the idea is that there are certain beliefs that it is crucial to have, and that subjecting those beliefs to critical scrutiny is dangerous, since one may be led astray by unsound arguments against those beliefs, thereby abandoning beliefs that are essential to one's well-being.

Consider, for instance, how many of the world's religions have said, 'Here are the things that we believe, and that we think it is important to believe. But you should not accept these beliefs casually. On the contrary, you should consider alternative views, and examine carefully what can be said for and against those alternatives. You should not accept any belief, including those that are part of this religion, unless, after such a critical examination, it is reasonable to conclude that the belief in question is likely to be true'. The answer, surely, is that very few of the world's religions have said anything like this, and in the case of the two dominant

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Western religions-Christianity and Islam -what believers are told is that there are certain truths that have been revealed to humans by the creator of the universe. and that either have been set out in some book that is claimed to be sacred-the Bible or the Koran-or that have been infallibly taught by people who occupy a certain place in the religion in questionsuch as the pope in the case of Catholic Christianity. These supposedly revealed propositions, moreover, are thought to be ones that it is very important to believe, since it is taught that acceptance of those propositions contributes significantly to one's chances of salvation, and of winding up in heaven rather than hell. Hence the view, within Christianity, of the seriousness of heresy, and the corresponding emphasis upon such things as creeds of belief, such as the Apostles' Creed, or the pronouncements of the Council of Trent, and, similarly, the view, within Islam, that apostasy is a capital offence.

As regards the question of how to determine what one should believe, there is, in short, an enormous gulf between Socrates on the one hand, and most well known historical religious figures, such as Jesus, Mohammed and Moses on the other. This difference was formulated very vividly by the German philosopher and dramatist, Gotthold Ephraim Lessing (1729-1781), in a passage in his book Anti-Goeze (1778)-a book that arose out of an ongoing debate that took place over a number of years with Johann Melchior Goeze, a Lutheran pastor and theologian in Hamburg who wrote several pieces criticising various proponents of the Enlightenment. In that famous and oft-quoted passage, Lessing said, 'Not the truth in whose possession any man is, or thinks he is, but the honest effort that one has made to find out the truth, is what constitutes the worth of a man'.

In approaching any issue, then, and especially ones where people strongly disagree, it is crucial to ask oneself whether one does so convinced that one is in possession of the truth on the matter in question, so that one does not need to consider seriously the arguments that have been offered for views incompatible with one's own, or whether, on the contrary, one takes the Socratic challenge seriously, and views it as a real possibility that one's view may be mistaken, so that one needs to examine closely and dispassionately the relevant arguments that others have advanced.

'Package deals' as an obstacle to critical reflection

How easy or difficult it is to accept the Socratic challenge, and to think critically about one's beliefs in a given area often depends upon how those beliefs are connected to other beliefs that are very important to one. When a belief, even a very important one, is isolated from other important beliefs, it is easier to think seriously about the belief in question, to consider objections to it, and to decide, in the end, that the belief should be abandoned. But if the belief is part of what one might call a 'package deal', in that it is connected with other important beliefs with which it appears to stand or fall, then it may often be much more difficult to subject it to dispassionate critical scrutiny, and to follow the arguments where they lead, for if the conclusion is that the belief in question is probably false, and so should be abandoned, then other important beliefs that are connected to it may have to be abandoned as well.

Consider, for example, the question of the age of the Earth, or the question of the age of the universe. For many people, these questions pose no problem. They are, after all, questions to which there are scientific answers that are well supported. Thus, in the case of the Earth, the combination of radiometric dating of meteorites, and helioseismic studies of the sun, point to an age of the Earth of around 4.5-4.6 billion years, while in the case of the universe-or at least the universe that we inhabit-considerations involving background microwave radiation, and the rate of expansion of the universesupport an age estimate of around 13.75 billion years.

Yet in America, a Gallup poll conducted in 2010 found that 40% of Americans believe that humans were created by a deity sometime in the past 10 000 years, and so presumably believe that that is also about how old the Earth is. This view is related to estimates of the time of creation based on the Bible that a number of scholars arrived at, including John Lightfoot (1602–1675), who in a book written between 1642 and 1644, estimated the time of creation as 3929 BCE, and, more famously, Bishop James Ussher (1581–1656), who in a book published a bit later in 1650, set out calculations supporting the conclusion that the universe was created in 4004 BCE. These estimates entail that the universe is only about 6000 years old, but it is sometimes suggested that each 'day' of creation in Genesis corresponds to 1000 years, which then gives one a slightly higher estimate.

That four out of 10 Americans should reject scientific conclusions concerning the ages of the Earth and the universe in favour of radically different views is quite extraordinary. But the explanation, of course, is that the beliefs in question are not isolated ones, since if conclusions concerning the ages of the Earth and the universe that are firmly based upon the Bible are wrong, then the Bible, interpreted as saying what it appears to be saying, is not inerrant. The question then immediately arises as to when the Bible can be trusted, and when it cannot, which means that one can no longer support any given belief simply by appealing to the Bible. So while the beliefs of four out of 10 Americans are extraordinary, they are not surprising, for the beliefs in question are related to a package of beliefs that constitutes a whole worldview, so that if those beliefs are false, the whole package of Biblically based beliefs is without any firm foundation, and thus open to question.

Abortion and 'package deals'

What does this have to do with the controversy generated by Giubilini and Minerva's 'After-birth abortion' article? The answer is that in the case of many people, their views on the moral status of abortion are part of a 'package deal', part of some very general point of view to which they are deeply committed. Thus, many feminists, for instance, believe that one cannot be a feminist without accepting abortion, while many Catholics, and Protestant Fundamentalists, believe that one cannot be a Christian unless one rejects abortion. In such cases, the person may find it very difficult to consider, dispassionately, arguments dealing with abortion, since he or she may view such arguments as threatening his or her general worldview.

The connection is, I suggest, especially strong if one is a Catholic, and this for two reasons. First of all, the Catholic Church has repeatedly affirmed, via authoritative papal encyclicals, that abortion, involving as it does the direct killing of innocent human beings, is intrinsically evil, and thus, never permissible. It is, thus, very difficult to see—though there are prochoice Catholics who disagree—how one can think of oneself as a Catholic, while rejecting the Catholic Church's teaching on the moral status of abortion.

The situation is somewhat different if one is a Protestant, for then what matters is what it is reasonable to believe given what the Bible says, and while some Christians have argued that a Biblical basis can be offered for holding that abortion is morally wrong, I think it is fair to say that the arguments in question are not especially impressive. A Protestant, therefore, has greater freedom on the matter of abortion, and it is not surprising that many Protestants hold that abortion is, in at least certain types of cases, morally permissible. The second factor is this. Suppose, for the moment, that humans are composed of a physical body and an immaterial, rational mind. Then, one might well think that what makes it seriously wrong to kill an innocent human being is that it is wrong to kill any innocent being with an immaterial, rational mind. Accordingly, if an immaterial mind is present from conception, then abortion is the killing of something with an immaterial, rational mind and, therefore, is at least *prima facie* seriously wrong.

Now the Catholic Church does not quite hold that there is an immaterial, rational mind that is present from conception. But it does hold that all mature human beings have immaterial souls, where an immaterial soul is ultimately the basis of the human capacity for thought and other cognitive functions. Moreover, even though the Catholic Church appears to have refrained from committing itself on the question of whether an immaterial soul is present from conception, one can argue that, given that mature humans have immaterial souls, there is a danger that in performing an abortion one is running the risk of destroying something with an immaterial soul, so that if it is having an immaterial soul that gives something a right to life, to perform an abortion is seriously wrong because it involves the risk that one is killing something with a right to life.

A prochoice Catholic has some room to manoeuvre here, since he or she can hold, for instance, that having an immaterial *soul* at a certain time does not entail that any sort of *mind* is present at that time, and that it is the latter, rather than the former, that is the basis of a right to life. But if one is not prepared to go that route, then it would seem that a liberal view on abortion is going to be on a collision course with the Catholic Church's teaching concerning the existence of an immaterial soul in human beings.

Many Protestants, on the other hand, maintain that there is no Biblical basis for a belief in immaterial souls, holding instead, that human survival of death, rather than requiring that humans involve some immaterial entity that survives the destruction of the body, has an adequate basis in God's resurrecting (and possible transforming) one's body. This view then allows greater freedom concerning what it is about humans that gives mature humans a right to life, thereby leaving the door open for various views on the moral status of abortion.

A brief summing up

In this first section, I have attempted to do the following things. First of all, for readers who have not had much exposure to philosophy, I have tried to convey what lies at the heart of philosophy by going back to Socrates' view that even one's most basic beliefs may be mistaken, so that one needs to subject even those beliefs to careful critical scrutiny, asking what the alternatives are, and what can be said for and against those alternatives. In the end, one may conclude that the beliefs that one started with were indeed correct. But it may also turn out otherwise, with one deciding that one's initial beliefs were mistaken, and quite possibly in a radical way. For philosophy, what are crucial are the arguments, and to think philosophically is to be prepared to follow the arguments where they lead.

It is crucial to ask oneself, then, what one thinks about the Socratic challenge, both in general, and in the present context. If the views advanced by Giubilini and Minerva in their article seem to you mistaken, do you think that you could be wrong about that? If so, you need to examine carefully the arguments that they offer. Or do you think, instead, that your present views on those matters are clearly correct, and thus, that there is no need to examine the relevant arguments?

Second, by introducing the idea that some beliefs, rather than being relatively isolated, may be connected to other beliefs that one deems important, I have attempted to draw attention to the general fact that such a web of interconnected beliefs can make it difficult to reflect in a critical and dispassionate way about any one of those particular beliefs. I then went on to mention some ways that this may be the case when the beliefs in question concern the moral status of abortion. In doing so, my hope is that readers who find the conclusions for which Giubilini and Minerva argue problematic will ask themselves whether their own views may not be connected, for example, to deeply held religious beliefs that make it very difficult to take seriously the Socratic challenge in this case.

THINKING ABOUT THE MORAL STATUS OF ABORTION: INITIAL REMARKS Abortion raises intellectually difficult issues

In teaching introductory courses on contemporary moral issues, my experience is that most non-philosophers, regardless of what position they hold on the moral status of abortion, do not believe that the question of the moral status of abortion is an *intellectually* difficult one. On the contrary, the feeling seems almost always to be that the truth here is easily arrived at, and thus, readily evident to anyone willing to approach things in an open-minded way.

I am convinced that this is not so, and that, unlike other contentious areas—such as sexual morality, or euthanasia, where it seems to me that the truth is not especially deep—I think that the question of the moral status of abortion turns upon issues that are intellectually *very* difficult, and where *very* serious work needs to be done if one is to determine what the right view is.

Nor am I alone in this opinion. Most philosophers who have reflected in a serious way about abortion would, I think, share the view that abortion involves intellectually very challenging issues. If this is right, then there is a huge gulf here between ordinary people and philosophers.

The emotionally charged atmosphere of discussions about abortion

Among non-philosophers, discussions of abortion are often highly emotional. Given what is at stake, that is perhaps not surprising. On the one hand, if abortion is morally wrong, but society thinks that it is not, the result will be the unjustified killing of many innocent individuals. But on the other hand, if abortion is not morally wrong, but society thinks that it is, and therefore makes it illegal, the result will be considerable suffering, and the deaths of many women. So either way, the cost of erroneous beliefs is extremely high.

Because of what is at stake, and because people are confident that there is nothing intellectually difficult about the question of the moral status of abortion, people typically approach the abortion issue with a very negative view of people on the other side: either people who disagree with one are intellectually challenged, so that they cannot see the obvious truth about the moral status of abortion, or else they can see it perfectly well, but refuse to acknowledge it, for selfish reasons, in which case they are deeply evil.

This, too, is a respect in which popular discussions and philosophically informed ones differ greatly. Discussions involving philosophically untrained people-and this includes virtually all discussions in newspapers, magazines, on radio or television, and on internet web sites-are almost inevitably highly emotional ones where opinions are advanced in a very confident, aggressive and strident manner. Philosophical discussions, by contrast, are generally calm and dispassionate, even where the distance between the views of the participants is enormous, the reason being that philosophers are committed to offering arguments, and to basing their

beliefs upon the outcome of a critical examination of those arguments.

THINKING PHILOSOPHICALLY ABOUT ABORTION: SOME INITIAL ARGUMENTS

Let us now turn to the question of the moral status of abortion. One way of proceeding philosophically is by considering the extreme antiabortion view according to which abortion is always, at the very least, *prima facie* seriously wrong, and asking what arguments can be offered for this view. So let us follow that approach.

Membership in the biologically defined species *Homo sapiens*

One initial answer that many advocates of an extreme antiabortion view would offer is that abortion is morally wrong because it involves the killing of an innocent individual with a right to life, since all humans have a right to life.

This response then gives rise to the following question. If one assumes, for the moment, that all humans have a right to life, *why* is this so? One answer that might then be given is that it is just a moral truth that all humans have a right to life, and one that does not rest upon any more basic moral truth. It is, in short, a *basic* moral truth that all humans—or at least all innocent humans—have a right to life.

At this point, philosophers will want to ask how the term 'human' is being used, since different writers use the term 'human' in very different ways, and those differences are often crucial. Suppose the reply is that the term 'human' is being used in a biological sense, namely, to mean 'an animal belonging to the biologically defined species *Homo sapiens*'. Then what is being claimed is that the following is a *basic* moral truth: '(HS)': Any (innocent) member of the biologically defined species *Homo sapiens* has a right to life.

Already, we have reached a great divide between much ordinary thinking about abortion and philosophical thinking, for while I believe that many people who are not philosophically trained would view the claim that HS is a basic moral truth as quite satisfactory, it is in fact a contention that *very few* philosophers indeed would accept.

Why so? The answer is that there are multiple reasons why philosophers reject the claim that HS is a basic moral truth, three of which I have set out in my contribution to *Abortion: Three Perspectives.*¹ Here, because of space, I shall set out only the second of those three reasons.

That objection involves what I refer to as the technique of searching for principles of greater generality. The basic idea here is that given two moral principles, M and N that, intuitively, seem closely related in content, one should try to find some more general principle G from which both M and N can be derived.

When it is claimed that some moral principle is *basic*, it is legitimate, in arguing against it, to appeal to logically possible cases. Suppose, then, that the lovable extraterrestrial (ET), rather than being merely an illusion produced by skilful animators, were an actual living thing, that he and a number of other members of his species had moved down to Earth, and that some had entered this country. Imagine now that an enterprising businessperson decides to open up a new fast food chain—the Kentucky Fried ET chain, perhaps. What would one say about that?

Wouldn't most people, including most extreme antiabortionists, think that such a business enterprise would be unacceptable? Moreover, if asked why, wouldn't someone who advanced the claim that HS is a basic moral truth have to respond, in order to be consistent, by claiming that the following, perfectly parallel principle, is also a basic moral truth?

(ET) Any member of the biologically defined ET species has a right to life.

But now we have two distinct principles —namely HS and ET—advancing claims about entities that have a serious right to life. The technique of searching for principles of greater generality then involves attempting to find some more general principle that explains why these two very similar and parallel principles are true, while some other very similar and parallel moral principles are not—such as

(C) All innocent carrots have a serious right to life

Moreover, given that one can introduce as many imaginary cases of living things as one wants, some of which would intuitively have a right to life, and others not, must there not be some underlying principle of differentiation that one is implicitly employing?

But what could the more general principle be that underlies both the principle concerning the right to life of members of our own biological species *H sapiens*, and the principle concerning the right to life of members of the ET biological species? Presumably, it will have to focus on something that would be common to members of the two species, but that is not shared, for instance, by carrots, and that is also a morally relevant property. What could such a property be? The answer, surely, must involve some sort of reference to the *type of* *mental life* that both *H sapiens*, and members of the ET species, are capable of.

What will the content of that underlying principle be? This, I think, is not clear at this point, but here are three important alternatives:

- 1. Any innocent individual that has the capacity for a certain sort of mental life has a serious right to life.
- 2. Any innocent individual that has either the capacity or the potentiality for a certain sort of mental life has a serious right to life.
- 3. Any innocent persisting subject of consciousness has a serious right to life.

In the present context, however, it does not matter which of these three alternatives-or other possibilities-is most plausible. The crucial point is simply that consideration of other possible species strongly suggests that the claim that innocent members of our own biological species H sapiens have a right to life, rather than expressing a basic moral principle, must be derived from some principle that does not refer to any particular species, and which thus explains why it is seriously wrong to kill normal adult human beings, and also why it would also be seriously wrong to kill non-human beings comparable to ET.

It is important to be clear that this conclusion is one that is accepted by all philosophers working in the area of abortion, regardless of the position that they defend. Thus, for example, the Catholic philosopher Peter Kreeft, in a debate with David Boonin at the University of Colorado at Boulder in 2008, in setting out an argument for an extreme antiabortion view, initially formulated his argument in terms of the claim that all humans have a right to life. David Boonin, in his response to Kreeft's argument, advanced what is known as the counterexample objection to the claim that all humans have a right to life, which consists in focusing on humans who have suffered, for example, upper brain death, and who thus-for reasons we shall consider shortly-no longer have any psychological capacities. The contention is then that death for a human organism in that state does not harm the organism in any morally relevant way, and thus, that a human organism in such a state no longer has a right to life.

How did Kreeft respond to this counterexample objection? The answer is that he did so by claiming that philosophy can prove that all humans have immaterial, rational souls. He was therefore advancing, at that point, the following sort of argument:

1. Anything that has an immaterial, rational soul has a right to life.

 All members of the biologically defined species *H sapiens* have immaterial, rational souls.

(HS) All members of the biologically defined species *Homo sapiens* have a right to life.

But now HS is no longer a *basic* moral principle, since it is based on (1) and (2), and (1) is also a moral principle.

Possession of an immaterial, rational mind or soul

A second type of argument that many advocates of an extreme antiabortion view offer claims that abortion is morally wrong because it involves the killing of an innocent individual that has an immaterial, rational soul. This is the view of Peter Kreeft,² and of many other Catholic philosophers, including Francis Beckwith,³ John Haldane,⁴ ⁵ Stephen D Schwartz,⁶ and also of some non-Catholic philosophers, most notably J P Moreland, and Scott B Rae.⁷

This argument appeals to what is called a Thomistic conception of a soul. What does that conception involve? Here is a description from the article 'Soul' in the online *Catholic Encyclopaedia* on the *New Advent* website:

The soul may be defined as the ultimate internal principle by which we think, feel, and will, and by which our bodies are animated. The term 'mind' usually denotes this principle as the subject of our conscious states, while 'soul' denotes the source of our vegetative activities as well. That our vital activities proceed from a principle capable of subsisting in itself, is the thesis of the substantiality of the soul: that this principle is not itself composite, extended, corporeal, or essentially and intrinsically dependent on the body, is the doctrine of spirituality.⁸

How satisfactory is this defence of an extreme antiabortion position? The answer is that it is very weak. In the first place, given the above definition of the soul, according to which the soul is immaterial, the human mind must also be immaterial. But then, second, as I shall now argue, there are excellent reasons for holding that not even normal adult human beings, let alone human embryos and fetuses, have immaterial rational minds. It then follows that humans do not have immaterial, rational, Thomistic souls.

The fact that the belief that humans have immaterial, rational minds and souls is generally associated with religious views leads many people to think that the belief is not one that is open to scientific investigation. But that is a mistake. One can treat the proposition that humans have immaterial, rational minds as a scientific hypothesis, and then subject that hypothesis to scientific investigation.

Before considering what happens when this is done, it is important to be clear that there are three main alternatives concerning the nature of the mindcommonly referred to as substance dualism, materialism and property dualism. According to the first of these, the mind is an immaterial substance that contains all of one's psychological capacities and all of one's mental states. According to the second, the mind is identical with the brain, and involves nothing more than the fundamental particles and forces discovered by physics. According to the third-and intermediate-view, the categorical bases of psychological capacities lie in the brain, but experiences involve qualitative propertiessuch as redness, or the smell of lilacs-that are not reducible to the stuff of physics.

What happens when one investigates scientifically whether the first of these views is true?⁹ The answer is that it turns out that there are excellent reasons for concluding that humans do not have immaterial minds. Some of the more important considerations are as follows. First of all, if one suffers a serious, but not too serious blow to the head, one may wind up unconscious. If the mind is the brain, the fact that a blow to the head, by affecting the brain, may cause one to lose consciousness, is not surprising. But why should this happen if the mind is an immaterial thing capable of existing without one's body? A blow to the head might disrupt communications between the immaterial mind and parts of the brain, so that the person's external behaviour was that of an unconscious person, but there is no reason why the immaterial mind should cease having thoughts and feelings during that period of time.

Second, different parts of one's brain can be permanently damaged, through strokes, gunshot wounds and so on, and what one finds is not only that such injuries affect mental functioning and personality, but that what psychological capacities or traits are affected depends upon what part of the brain is damaged. Damage to one part may affect one's ability to use language, while damage to another part may affect one's ability to think spatially; damage to yet another part may impair one's mathematical ability, while damage to another part may alter one's personality. All this is precisely what one would expect if the mind is the brain, for then the bases for psychological capacities, for personality traits, for memories and so on, lie in complex neuronal circuits. By contrast, if the mind were an immaterial entity, these results would be utterly unexpected, and would have to be given ad hoc explanations.

Third, there are diseases that can radically affect one's mental functioning, one's memories and so on. One of the most familiar is Alzheimer's disease, whose effects over time can be so extreme that it is quite natural to think that the person who once existed no longer does. How could a disease have such an effect upon an immaterial mind? If memories are states of an immaterial substance, how are they destroyed, or how is it that the immaterial mind is unable to access those states?

Fourth, there is the phenomenon of ageing, where not only one's body, but also one's mind, deteriorates, so that various psychological capacities, such as memory, gradually decline. If the mind is the brain, there is nothing surprising here: one's brain is deteriorating with age, along with the rest of one's body. But as there is no reason why an immaterial mind should deteriorate with age, the decline of the mind as one grows older is not at all what one would expect on the hypothesis that the mind is an immaterial substance.

Fifth, and as has been shown by numerous psychological experiments, the mental capacities of very young members of our species gradually increase as they mature. Again, there is nothing surprising in this if the mind is the brain: neuronal circuits gradually get built up that are the bases of the capacities in questions. But why should there be such changes if the mind is an immaterial substance?

Sixth, psychotropic drugs can alter mood very significantly, can relieve depression and anxiety, can give rise to paranoia, or reduce it and so on. Once again, if the mind is the brain, and emotional states depend upon chemicals in the brain, all this falls into place, whereas, once again, these things are not at all something that one would expect if the mind were an immaterial substance. For why should Valium, or Prozac, affect an immaterial substance?

Finally, the differences that one finds both between humans and other animals, and between different species of nonhuman animals correlate with differences in the structures present in the relevant brains. If psychological capacities have their bases in neuronal structures, this is once again precisely what one would expect and predict. But what is the explanation if the mind is an immaterial substance? Why is it, for example, that humans have a more highly developed brain if the superior psychological capacities that they have belong not to the brain, but to an immaterial mind? In short, there is a wealth of familiar phenomenon that would be surprising and unexpected, and not at all what one would predict if the mind were an immaterial substance, but which fall perfectly into place if the mind is, instead, the brain. There is, accordingly, massive evidence against the view that the mind is an immaterial substance.

It is not surprising, then, that when one turns to the science that is concerned with the nature of the mind-namely, psychology-one would have to search long and hard indeed in research universities for psychologists who hold that the mind is an immaterial substance, since the fact is that the belief that humans have immaterial minds is just as much on a collision course with the science of psychology as creationism is with evolutionary biology. Psychology, however, is rarely taught in elementary or secondary schools, and, consequently, no war is presently being waged for schools to give equal consideration to the view that the mind is an immaterial substance. As a result, that unscientific view tends, unfortunately, to fly under the radar. In fact, however, Catholics on this issue are in precisely the same boat as Protestant Fundamentalists are in with regard to evolution.

In addition, however, recall that an immaterial mind is only one aspect of a Thomistic soul, since the latter is also 'the ultimate internal principle ... by which our bodies are animated.' The Thomistic soul, then, is also supposed to explain life processes, which means that the Thomistic view is on a collision not only with contemporary psychology, but also with contemporary biology, according to which all life processes are capable of a molecular explanation.

Potentialities and 'substance' views

I have focused on the two arguments for an extreme antiabortion view that are most likely to occur to people who are not professional philosophers, and we have seen that neither is sound. There are, however, other arguments, virtually all of which appeal, directly or indirectly, to the idea of *potentialities*, and which maintain that what gives something a right to life is that it either possesses certain capacities, or else has what might be called an active potentiality or disposition to acquire those capacities.

All such views are exposed to a number of objections, which I have set out elsewhere.¹⁰ ¹¹ Here, very briefly, is one objection. First of all, as Mary Anne Warren pointed out,¹² any human cell is potentially a person, in view of the possibility of cloning. So if such cells are not to have a right to life, a distinction has to be drawn between active potentialities and passive potentialities, and one has to hold that only the former can ground a right to life. But that claim has unacceptable consequences. For consider a normal adult human being who suffers brain damage that will, unless an operation is performed, result in brain death due to the swelling of the brain. Such a person does not have an active potentiality for recovering consciousness, only a passive one. Yet such a person still has a right to life.

DEVELOPMENTAL VIEWS: NEO-LOCKEAN PERSONS AND THE RIGHT TO LIFE

Extreme antiabortion views all rest on the contention that the property that grounds an entity's right to life is a property that is present from conception. But if neither membership in the species *H sapiens*, nor having an immaterial, rational soul, nor the possession of active potentialities, can serve to show why normal adult human beings have a right to life, then it seems very unlikely that there is any such property. What grounds the right to life must, instead, be a property that normal humans *acquire* at some point in their development.

What is that property? Critics of developmental views of the right to life almost always contend that it must be the possession of certain *capacities*, such as the capacities for thought and self-consciousness, and then they make the obvious point that an adult human who is temporarily unconscious surely has a right to life, even though he or she does not, while unconscious, have a capacity for thought or self-consciousness.

But this is just to criticise a straw man. The serious view here is this:

Only neo-Lockean persons have a right to continued existence.

What is a neo-Lockean person? The answer is that a neo-Lockean person is an entity that has conscious states at different times, and that are psychologically connected by such things as memories, desires and intentions. So understood, a neo-Lockean person exists at times when it is not conscious, and can exist at times when it has lost the capacity for consciousness, and, indeed, all psychological capacities. What matters is that the states that make for personal identity are intact. So if a normal adult human experienced brain damage that destroyed the neuronal circuits upon which his or her capacity for consciousness was based, but that did not destroy the individual's stored memories, or the neuronal states that are the basis of the individual's personality, the neo-Lockean

person would continue to exist, and could once again have conscious experiences if the damage to the brain were repaired.

'AFTER-BIRTH ABORTION; WHY SHOULD THE BABY LIVE?'

Finally, what is one to say about the article by Alberto Giubilini and Francesca Minerva? Essentially, they advance three central claims in support of their conclusions about 'after-birth abortion', and all three claims involve the concept of a person, understood in the following way:

We take 'person' to mean an individual who is capable of attributing to her own existence some (at least) basic value such that being deprived of this existence represents a loss to her.

Given that use of the term 'person', the three central claims in question are as follows:

- 1. It is only persons, thus understood, that have a right to life.
- 2. Being merely a potential person does not give something a right to life.
- 3. Human fetuses and newborns have the same moral status, since both are merely potential persons.

What is one to say about these three claims, and about the support that Giubilini and Minerva offer? As regards the latter question, their article is a very short one, and given that whole books have been devoted to the question of the moral status of abortion, and given the difficulty of the issues in question, it would be surprising if they had been able to offer substantial support for any of the above three claims. In the case of the second claim, for example, Giubilini and Minerva devote five paragraphs to the question. Their central argument, which focuses on the idea of *harm*, is certainly an interesting one, but it needs to be developed more fully, and in a much more circumspect way. Basically, however, there is much more to be said on the question of whether, for example, an active potentiality for acquiring a capacity for thought gives something moral status. Thus, in my first book on abortion,¹⁰ I devoted 77 pages to a discussion of this issue, while in the more recent debate volume¹¹ that I coauthored with Alison Jaggar, Celia Wolf-Devine and Philip Devine, I devoted 16 pages of my 62-page opening statement to a discussion of the moral status of potential persons.

In fairness to Giubilini and Minerva it should be added, however, in the case of those on the other side, who appeal, either quite explicitly—such as Jim Stone¹³—to the view that certain active potentialities give an organism a right to life, or else less explicitly, either by referring to a 'future like ours'—Don Marquis¹⁴—or by advancing certain versions of so-called 'substance' views—such as in the case of Patrick Lee,^{15–17} Francis Beckwith¹⁸ ¹⁹ and others, that their's are even less satisfactory. Such writers generally simply ignore the many arguments against the view that certain general, active potentialities give something a right to life. They almost invariably assume, moreover, that the view that they need to refute is the weak view that something does not have a right to life unless it has certain capacities, thereby ignoring completely the crucial alternative, namely, that it is *neo-Lockean persons* that have a right to life.

Occasionally, a writer makes some attempt to grapple with relevant arguments. Perhaps the best example is Charles Camosy²⁰ who addresses some relevant arguments. But his discussion is also very weak. Thus, he offers no argument at all for his central claim: 'Existence of a human organism, then, with natural potential for personhood, is the true sine qua non indictor for personhood'.²¹ Nor does he make any effort to grapple with the most important objections to this view. He never discusses, for instance, the crucial 'reprogramming' argument, which I have set out on several occasions,²²⁻²⁴ nor virtually any of the other arguments that I have set out at length.¹⁰ ¹¹ (Camosy refers only to part of one of my 1983 arguments, on pages 191-193.) Nor does he refer, at any point, to the neo-Lockean personhood view of the right to continued existence. Finally, while he formulates his view in terms of what he refers to as 'active potency for personhood', he interprets this in a very strange way, so that humans who have been born with no cerebral cortex, or who have suffered complex destruction of the upper brain, still have an *active* potency for personhood, which generates in turn the extraordinary conclusion that such humans have a full right to life.²⁵

Camosy remarks that this conclusion is 'counterintuitive for some people'. But this is surely an extreme understatement, since, though there may be some, I cannot myself think of any non-Catholic philosopher who has advanced this view. It is difficult not to conclude that Camosy is a person who feels that he must somehow get to the official Catholic view, and who is, therefore, willing to do whatever is necessary to get there.

The conclusion, in short, is that while the discussion by Giubilini and Minerva of whether potential persons have a right to life is very thin, the discussion by philosophers who give an affirmative answer to this question is almost always much more problematic.

Next, what about the claim that it is only persons who have a right to life, when the term 'person' is interpreted in the way that Giubilini and Minerva do? I do not have the space to argue the matter here, but it seems to me that the requirement that one be capable of attributing value to one's own life in order to have a right to continued existence is too demanding. It seems to me that all that is needed is that mental states existing at different times be psychologically connected—something that can be done simply by desires concerning future mental states, or memories of past mental states. So I think that the concept of a person that Giubilini and Minerva employ should be replaced by the broader concept of a neo-Lockean person.

Finally, what about the third and final crucial claim that Giubilini and Minerva advance in support of their conclusions, namely, that human fetuses and newborns have the same moral status, since both are merely potential persons? The crucial issue here, it seems to me, is at what point a developing human acquires the capacity for thought, and many years ago I attempted to survey the relevant scientific literature, including studies of the growth of neurons, studies of electrical activity in the developing brain, and studies of the behaviour exhibited by humans at various points. The results are set out in chapter 11 of my 1983 book, on pages 347-412, and my conclusion at that time was that it was likely that a capacity for thought episodes emerged only some time after birth. But as I also said, 'Much more scientific research and philosophical reflection is needed if a wellfounded answer is to be offered'.²⁶

I have not had the time to familiarise myself with the subsequent scientific work that has been done, so I do not know whether it is now possible to offer a confident opinion on the matter. Certainly, some philosophers express unqualified opinions on this matter, and take it as absolutely clear that developing humans acquire a capacity for thought only postnatally. But, in my experience, the philosophers in question are generally not at all familiar with the relevant scientific literature, so I doubt very much that their views are well founded.

My conclusion, accordingly, is that while I think it will probably turn out that Giubilini and Minerva are right in thinking that human fetuses and neonates have the same moral status, it seems to me likely that the crucial underlying scientific premise namely, that neonates lack the capacity for thought—has not yet been scientifically, firmly established.

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