

Foetal Personhood, Vagueness and Abortion

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1. Introduction

In a recent paper, Lee Kerckhove and Sara Waller (hereafter K & W) argue that the concept of personhood is irrelevant for the abortion debate.¹ Surprisingly, this irrelevance is due merely to the fact that the predicate 'being a person' — hereafter 'personhood' — is inherently vague. This vagueness, they argue, reduces 'personhood' to incoherency and disqualifies the notion from being a useful moral concept. In other words, if 'personhood' isn't a precise notion with well-defined boundaries, then it cannot be of any use in the debate over the permissibility of abortion.

This argument is mistaken. While it *may* be true that 'personhood' is irrelevant for the debate over abortion (a substantive issue not dealt with in this paper), it is not true that 'personhood' should be disqualified merely because it is vague. Section 2 of the paper is a quick survey in which I briefly review the importance of 'personhood' in some of the more recent literature concerning the moral status of abortion. Section 3 is a reconstruction of K & W's argument against the relevancy of 'personhood' and a criticism showing why their argument fails. Section 4 approaches the use of a vague predicate in moral debate and explores the application of 'personhood' given three contemporary solutions to vagueness: degree theory, epistemicism and supervaluationism.

2. Personhood and Abortion

The debate over the permissibility of abortion often focuses on the personhood of the foetus. The claim is usually something like the following: if the foetus is a person, then it has all of the rights of any other person, and these rights must be taken into account when an abortion is considered. The standard conclusion is that because it is *prima facie* wrong to kill an innocent person, then if the foetus is a person, abortion is *prima facie* morally wrong. In fact, many pro-lifers and pro-choicers would agree with the forgoing analysis. The disagreement arises over whether or not the forgoing analysis applies to a foetus. Is the foetus a person? In this section I will briefly recount some of the contemporary positions regarding the relevance of personhood for the abortion debate. This will help to clarify why the dismissal of 'personhood' by K & W is so important to the debate. If the reader is well apprised of the contemporary dialectic concerning the personhood of the foetus, he is advised to move directly to section 3 of the paper.

First, a clarification. In an influential essay from the 1970's, Mary Anne Warren suggests that we draw a distinction between being a human and being a person.² The former is a biological concept. Having 46 chromosomes of the right type is a sufficient condition for being a human. A person, however, is a moral concept that serves to define

our moral community. 'Personhood', then, is a moral predicate that supervenes on some given set of non-moral facts, and the set of all persons need not be coextensive with the set of all humans. This means that 'some human beings are not people, and there may well be people who are not human beings.'³ Much of the current literature on abortion is an attempt to discover these relevant non-moral facts in hopes of providing a way of distinguishing persons from non-persons.

But what relevant non-moral features can demarcate persons from non-persons? As K & W point out, answers to this question have been many and varied. Among the possible candidates are 'conception, quickening, viability, consciousness, birth, self-consciousness,' etc.⁴ On one hand the issue of personhood seems central to solving the abortion issue, but the notion appears inscrutable, denying any attempts to elucidate the concept.

Many philosophers argue that a foetus, at least in some stage of development, is indeed a person.⁵ In fact, Warren's own criteria for personhood invite the claim that (at the very least) a late-term foetus is a person. Warren suggests that a person will have some unspecified combination of the following five characteristics: consciousness, capacity to solve problems via reasoning, self-motivated activity, capacity to use a language, and self-awareness.⁶ If an infant qualifies as a person on these criteria, it is difficult to see how a 9-month foetus could not. *Contra* Warren, Stephen Schwarz argues that these criterions only demarcate *functioning* persons, and we should have further criteria for 'personhood' *per se*.⁷ Many persons, he suggests, will not exemplify any of the properties of a functioning person even though they remain persons. Examples include normal adults in deep sleep, comatose humans, infants, and, of course, foetuses. Robert Larmer argues that the sufficient condition for personhood is the potential for human-like consciousness.⁸ Note that the foetus is not a *potential* person on this view, but from conception onwards it is a fully-fledged person and member of the moral community in virtue of its potential to achieve a human-like consciousness.

Others have argued that the foetus, no matter what the stage of development, is not a person.⁹ Aside from Warren, Michael Tooley defines a person as a living entity that has at least one permanent, non-potential property that makes it intrinsically wrong to kill that being.¹⁰ Tooley's careful analysis demonstrates that a foetus and, indeed, a newborn child both lack the requisite properties and are thus not persons. Because foetuses and newborns lack personhood (and thus a right to life), both abortion and infanticide are *prima facie* morally permissible.

Lastly there is a growing contingent of philosophers who agree that personhood is irrelevant for the abortion debate, though they do so for different reasons than those given by K & W.¹¹ Judith Jarvis Thomson is a well-known advocate of this sort.¹² Thomson argues that the issue of personhood is a difficult one, but one that very little depends upon so far as abortion is concerned:

I am inclined to agree, however, that the prospects for 'drawing a line' in the development of the foetus look dim. I am inclined to think also that we shall probably

*have to agree that the foetus has already become a human person well before birth ... I propose, then, that we grant that the foetus is a person from the moment of conception.*¹³

Thomson argues that granting the personhood of the foetus will not secure the impermissibility of abortion. She proceeds to offer her famous violinist example that is crafted to demonstrate that even though a being is a person with a right to life, it does not follow from this that any action that would bring about the death of that person is morally wrong.

Jane English argues that while it is true that the notion of personhood is not precise, it is irrelevant for the abortion debate.¹⁴ In short, even if a foetus is a person, there are many occasions (e.g. self defence) that justify the killing of the foetus and, likewise, if the foetus is not a person, it would not follow that it can be killed indiscriminately.

Don Marquis has offered a pro-life argument that avoids the issue of personhood altogether.¹⁵ To get at the heart of the issue, Marquis begins on ground on which both sides can agree:

It is wrong to kill us. Why is it wrong? ... What primarily makes killing wrong is neither its effect on the murderer nor its effect on the victim's friends and relatives, but its effect on the victim ... it would seem that what makes killing any adult human being prima facie seriously wrong is the loss of his or her future.

So killing an adult human is *prima facie* morally wrong because it deprives that being of a certain type of future, namely a future-like-ours. But abortion kills a being that has precisely this same type of future, for *ceteris paribus* it will become an adult human and experience this unique type of future. So if the deprivation of a future-like-ours is the morally relevant feature of killing, then abortion is *prima facie* morally wrong.

This final contingent of philosophers seems to have recognized the seemingly intractable problems raised by such a vague concept as personhood. Some have made attempts to reach a conclusion regarding the permissibility of abortion without employing the concept at all (e.g. Thomson, English, etc.). Others have attempted to embrace the vague nature of personhood by adopting a view of a foetus as potential person or a developing person.¹⁶ For example, David Levin proposes a solution using the concept of potential persons (which seems to me no less vague than the former); as for personhood *simpliciter*, he writes the following:

*If personhood is such an irreducibly vague concept, then foetuses must be understood neither as persons nor as non-persons. This would imply that we cannot hope to solve the personhood question, if by such a solution we mean the discovery of a sharp dividing line between persons and non-persons.*¹⁷

MacKenzie's feminist approach to abortion comes to a similar conclusion:

On the question of foetal status and potentiality my claim is that fetuses are morally significant beings by virtue of the fact that they are potential persons ... Thus the more physically complex and developed the being is, the more value we attribute to its potential for personhood.¹⁸

The problems with the potentiality argument, however, are well known. We don't grant the rights of the president to a potential president nor the rights of a senior citizen to a potential senior citizen. Why should the fetus be any different than sperm and eggs on this view? What we need is a way to incorporate the notion of personhood without having to talk about potential persons and without falling prey to the vagueness inherent in personhood *simpliciter*.

This is why K & W's thesis is so important. If they can establish that 'personhood' is irrelevant for the abortion debate by demonstrating it to be a useless concept, then their argument is poised to redefine the traditional ethical debate. I think that their argument falls far short of this lofty goal, and it is to that criticism that I now turn.

3. K & W against the Relevancy of 'Personhood'

K & W argue that the concept of 'personhood' is irrelevant for the debate over abortion. Below I quote the thesis of their paper in full:

We will argue that being a person is not merely a vague predicate. It is a predicate that is susceptible to a particularly pernicious form of vagueness. The form of vagueness that we have in mind is that which produces sorites paradoxes ... In order to retain a useful concept of personhood it would be necessary to either eliminate the vagueness of the concept or to resolve sorites paradoxes in general. We argue that both of these alternatives are unpromising. We conclude that a rational resolution of the moral debate over abortion requires that we move away from fetus-centred arguments...

First, K & W state that 'personhood' is a vague predicate. Moreover, it is a specific species of vague predicate that is susceptible to sorites-type paradoxes. In the recent literature, these two sets are normally conflated. That is to say that a predicate is vague just in case it is susceptible to sorites-type paradoxes. Whether this conflation is justified or not, from here on I will use the term 'vague' to refer to the specific property exemplified by those predicates that are susceptible to the sorites paradox. Second, K & W state that 'personhood' is useless unless it is precise or there is a solution to the sorites paradox. This claim is false. A great many of our words (perhaps most of them) are vague and at the same time very useful. Consider the paradigm case of 'bald'. It is unarguable that 'bald' is vague. It is equally unarguable that 'bald' is a pragmatically useful predicate. Everyday language incorporates an enormous list of vague predicates (fast, slow, tall, short, red, green, etc.) that are useful. So K & W must have something more specific in mind. What I think they mean is that unless a predicate is precise or there is a solution to the sorites paradox, then the predicate is *morally* useless. In other words, predicates of this sort are useless for settling matters of morality. With these clarifications in mind, their main argument looks something like this:

K₁: If 'personhood' is a [morally] useless predicate, then it is irrelevant in the abortion debate.

K₂: 'Personhood' is a [morally] useless predicate.

K₃: Therefore 'personhood' is irrelevant for the abortion debate.

So here is the rough-and-ready defence of K₂ 'Personhood' is vague. This means it is susceptible to a sorites paradox. The original sorites paradox, recall, concerns grains of sand forming a heap of sand. The argument has two basic forms, the first relying on a series of conditionals and the second using a universal statement as a premise for mathematical induction. The conditional version of the argument runs as follows:

1. 1 grain of sand is not a heap.
2. If 1 grain of sand is not a heap, then 2 grains of sand are not a heap.
3. So 2 grains of sand are not a heap.
4. If 2 grains of sand are not a heap, then 3 grains of sand are not a heap.
- n*. ...So 10,000 grains of sand are not a heap.

The mathematical inductive form looks like this:

1. 1 grain of sand is not a heap.
2. For every number of grains *n*, if *n* does not constitute a heap, then *n* + 1 does not constitute a heap.
- n*. ...So 10,000 grains of sand are not a heap.

This latter inductive form is formally equivalent to the conditional form; I will refer to the two interchangeably. 'Personhood' is vague in the same way that 'heap' is vague. This means that we can set up arguments just like the sorites using the predicate of 'personhood' and applying it to the development of a human being. Any minute amount of time in growth or development should make no difference to the applicability of 'personhood'. Assume that it is obvious that a fertilized ovum is not a person while a 16 year-old is. Using the form of the sorites, we can start with either of these premises and work to a perplexing conclusion:

1. Suppose a human *H* is a person at time *t* (at which *H* is 16 years old).
2. If *H* is a person at *t*, then *H* is a person at time *t* - 1.
- n*. ...So *H* is a person at conception.

Unnervingly, we can construct an equally valid (and seemingly sound) argument in the other direction:

1. Suppose a human being *H* is not person at time *t* (at which *H* is conceived).
2. If *H* is not a person at *t*, then *H* is not a person at time *t* + 1.
- n*. ...So *H* is not a person at 16 years of age.

Granting some intuitive claims about persons and human development, it appears that we can prove that a human, in any stage of development, is both a person and not a person — a troubling result. So the rough-and-ready defence appeals to the contradicting results of sorites arguments and concludes that 'personhood' is a morally useless predicate.

K & W later spell out their defence of K_2 in a more formalized manner. The argument is as follows:

- K_4 : If a predicate is [morally] useful, then either the predicate is precise or there is a solution to the sorites.
- K_5 : But 'personhood' is not precise (i.e. it is vague).
- K_6 : And there is no solution to the sorites.
- K_2 : Therefore, 'personhood' is a [morally] useless predicate.

K_5 is obvious. 'Personhood' is vague. Moreover, K & W convincingly argue that 'personhood' is not the sort of predicate that can be precisified in a satisfactory way. Stipulations don't help here. After showing that 'personhood' is vague, K & W conclude that:

*...being a person is a vague predicate that threatens us with a sorites paradox. If the sorites paradox cannot be solved, then the vagueness of the predicate "is a person" cannot be removed. As a result, any moral decisions that rest on the concept of personhood will be incoherent.*¹⁹

But why think that K_4 and K_6 are true? By 'solution to the sorites', I think that K & W have in mind a philosophical position that demonstrates one of the following claims: 1) the sorites isn't valid or 2) the sorites always includes a false premise. In either case we expect a good explanation. After all, the argument appears to be valid (relying only on *modus ponens* or universal instantiation) and all premises appear to be true. K & W think that we lack such a solution, and they defend K_6 by briefly surveying the recent attempts to explain vagueness and the sorites paradox and concluding that none of the attempts is successful. I think that we do in fact have several useful solutions to the vagueness problem, and I will have more to say on the available solutions in the next section. Though I think that the rough and tumble survey is not enough to establish the truth of K_6 , suppose we grant that there is no generally accepted solution to the sorites. Does this mean that vague predicates are morally useless?

K & W think it does. They defend K_4 with an argument that appears to be a *reductio ad absurdum*. Assume that there are morally useful predicates that are vague. If a predicate is vague, then it is susceptible to the sorites paradox, and if a predicate is susceptible to a sorites paradox, then if there is no solution to the sorites, the predicate is incoherent. But there are no solutions to the sorites. So if a predicate is susceptible to the sorites paradox, then the predicate is incoherent. But morally useful predicates aren't incoherent. Therefore, the original assumption is false, and we can conclude that if a predicate is morally useful, then either the predicate is precise or there is a solution to the sorites.

However, K_4 is false. Note that the conditional is really a universal generalization. For every predicate, if it is morally useful, then either the predicate is precise or there is a solution to the sorites. In order to show that this universal claim is false, we just need one example of a morally useful predicate that is not precise while granting that there is no solution to the sorites. Fortunately, this is easily done. What follows are several examples of predicates all of which are vague. If these predicates are morally useful ones, then K_4 is false.

Consider 'abuse'. 'Abuse' is a vague term, and despite wide disagreement about a solution to the sorites, it is also a morally useful one. Abusing someone is morally wrong. The predicate does a reasonable job of picking out certain forms of behaviour that are morally unacceptable. This does not mean, of course, that there are no borderline cases. Like all vague terms 'abuse' is subject to sorites-type arguments. If saying n negative things to my child does not constitute verbal abuse, then saying $n + 1$ to her does not constitute verbal abuse. Therefore, no matter how many negative things I say to her, my behaviour never constitutes verbal abuse. Or consider physical abuse. If spanking a child with n amount of force (or n amount of strokes!) does not constitute physical abuse, then spanking a child with $n + 1$ amount of force (or $n + 1$ amount of strokes!) does not constitute physical abuse. Of course the examples can be set up in the reverse as well. So should we drop 'abuse' from our moral language? No. When evaluating a specific action of questionable behaviour, the application of the predicate 'abuse' (despite its vagueness) is morally useful.

Another example is the predicate 'promiscuous'. Promiscuity is generally thought to be morally wrong. 'Promiscuous' is vague. If having sex with n number of partners is not promiscuous, then having sex with $n + 1$ number of partners is not promiscuous. But now it looks like it is impossible to be promiscuous! According to K & W, we should drop the term from our moral language altogether. What about 'race' when evaluating issues of diversity and affirmative action? Isn't 'race' vague? What is the requisite percentage of genetic material one must have in order to qualify? If a person with n percent of race R blood is considered an R, then a person with $n - 1$ percent R blood is considered an R. According to K & W, it looks like 'race' is a morally useless predicate. So much for our campus initiatives for diversity.

The list of useful but vague predicates is enormous. What about 'reckless driving'? If n is a safe speed, then $n + 1$ will be a safe speed. So it follows that it is impossible for anyone to drive recklessly. Should we discontinue talk about reckless driving? Or how about 'competency'? It is inarguable that competency plays an important moral role in all sorts of decision-making. Children, for example, are normally thought to be incompetent to make certain decisions or engage in certain behaviours, and we have a responsibility not to ask the incompetent to do certain things. So what does it mean to be competent? It seems like if a person with a level of development n is competent, then a level just slightly less, say $n - 1$, will also be competent. Now it follows that everyone is competent. 'Self-defence' is another example.

So it looks as if a predicate can be vague, we can lack an agreed-upon solution for the sorites, and yet the predicate can still be a morally useful one. So, K_4 is false. If K & W want to dismiss 'personhood' from the debate over abortion, they need to provide a better reason than the mere fact that 'personhood' is susceptible to the sorites paradox.

In K & W's defence, it does seem that we should strive for moral predicates that are as precise as possible. And when employing vague predicates in moral debate, sorites-type arguments do leave us with conflicting conclusions. In the final section of the paper I will present some various treatments of vague predicates and suggest some ways in which the troublesome borderline cases can be dealt with.

4. Solutions for Vagueness: 'Personhood' under Degree Theories, Epistemicism and Supervaluationism

Precise predicates are preferred to vague ones, especially when we are making important moral decisions. We want to know that we have made the right decision, and we want to treat like cases alike. We don't want to be morally arbitrary. Vagueness seems to force an arbitrary decision when we examine borderline cases. Of course, precisification of vague predicates will have the same effect. 66 miles per hour warrants a \$120 speeding ticket in the States, while 65 does not. Worse, vague predicates (unlike their arbitrary but exact precisifications) allow us to reach contradictory conclusions by using what appears to be valid reasoning via the sorites paradox. Something can be both a person and not a person. So in many cases it looks like precise predicates will fail to satisfy our desire to treat like cases alike, but the corresponding vague predicates give us trouble with the sorites. What to do?

K & W accept the validity of the sorites and reject the coherence of vague predicates. They adopt a position known within the literature on vagueness as *nihilism*:

Having accepted the validity of the sorites paradox, and having unsuccessfully questioned the truth of the inductive premise, we are left with a choice. We can accept the conclusion, or we can reject the first premise. If we accept the conclusion, we end up in a contradiction because the same thing will be both a heap and not a heap, or a person and not a person. The last avenue is, therefore, to reject the major premise of the sorites paradox by rejecting the legitimacy of certain predicates and their usage.²⁰

K & W make this position sound appealing. 'Look,' they say, "personhood" gets us in trouble with the sorites. The argument looks valid (how could *modus ponens* not be valid?) and no one agrees on what to do with the inductive premise. So we have only one choice: "personhood" just isn't a coherent predicate.' What they don't show is the high philosophical price that must be paid by giving up vague predicates. What K & W affirm, in effect, is that *there are no persons*. Worse, while K & W attempt to resist this conclusion, it seems that on their view nothing is ever red, green, fast, slow, bald, short, tall, etc.²¹ So now it is easy to see why they think that 'personhood' is irrelevant to the abortion debate — there are no persons.

I want to suggest some ways that we can maintain our vague notion of personhood while still incorporating the importance of 'personhood' in the debate over abortion. Instead of rejecting the predicate as incoherent, each of the following suggestions will diagnose the sorites in a way that will prevent contradicting conclusions. I should note at the outset that there is widespread disagreement on the acceptability of the following solutions. I don't think that this disagreement rules out the usefulness of vague predicates. My intention is to show how some of the abstract solutions to vagueness as applied to the practical ethical dilemma of abortion can produce useful results even with the vague predicate 'personhood'. In order, I will examine degree theory, epistemicism and supervaluationism.

Degree theory is an ambiguous reference to any number of theories that treat vagueness by employing a many-valued logic. This approach abandons bivalence: there are many propositions that are neither perfectly true nor perfectly false. One version, recently defended by Michael Tye, posits a 3-valued logic where propositions are true, false or indeterminate.²² More common are solutions that utilize a continuum-valued logic with an infinite number of gradations.²³ Propositions can be fully true (1), fully false (0) or anywhere in between (e.g. .437843). The sorites is taken care of in the following way. Consider the following argument:

1. 1 grain of sand is not a heap.
2. If 1 grain of sand is not a heap, then 2 grains of sand are not a heap.
3. So 2 grains of sand are not a heap.
4. If 2 grains of sand are not a heap, then 3 grains of sand are not a heap.
- n. ... So 10,000 grains of sand are not a heap.

A continuum-valued degree theory would note that the first premise is fully true (1) while the final conclusion is perfectly false (0). Each of the conditionals would be slightly less than perfectly true. Thus, since each conditional premise is almost fully true, the small gaps lead us from perfect truth to perfect falsity.

Admittedly, degree theoretic solutions to vagueness have problems. Traditional validity must be given up as well as some standard logical equivalences such as contraposition. We also get some unnerving results: $P \& \sim P$ can be .5 true and $P \leftrightarrow \sim P$ will be perfectly true if P is .5 true. There are also problems with higher order vagueness. Won't it be vague just when a statement moves from perfectly true to .99999999 true? Finally there are complaints about 'penumbral' connections. Degree theory seems unable to account for the way that certain predicates interact with one another. For example, the statement 'I am a person and I am not a person' can be .5 true, though the relation between the predicates (e.g. being exhaustive) suggests that the statement should be perfectly false.

Still, many are convinced that the degree approach is an effective way to deal with the sorites. So how might the degree theory apply to the abortion debate and 'personhood'? Simply find clear examples of a person and a non-person and posit a continuum in between the two. For my purposes in this essay, it doesn't matter where we

locate our examples of definite persons and definite non-persons. Let's just assume that a fertilized ovum is a clear case of a non-person and a newborn is a clear case of a person (if you don't like these extremes, substitute your own). It will be perfectly false that a fertilized ovum is a person and perfectly true that a newborn is a person. Every stage of development in between is some shade of grey. An ovum is less of a person than a zygote, a zygote is less than an embryo, an embryo is less than an early-term foetus and an early-term foetus is less than a late-term foetus. 'Personhood' comes in gradations.

So what are the implications for the abortion debate? Well, a developing child will deserve more moral consideration the truer it is that the child is a person. K & W don't think that this will work, and they complain that 'the problem in accepting the degrees-of-truth approach for being a person is that we have to make a moral decision all over again. Do we assign rights to an individual who has a .5 degree of personhood, or .01, or .001?' This complaint is unfair. There is no reason why these rights must be an all-or-nothing affair. Full personhood is indeed sufficient for a being to deserve moral consideration, but full personhood need not be a necessary condition. In line with the degree theory, the foetus should be given more moral consideration, that is to say, the foetus increasingly has rights, as it develops within the womb. Norman Gillespie, in his important 1977 essay 'Abortion and Human Rights,' argues precisely this point:

Precision is possible without drawing any lines; and in determining the rights of a being we can proceed in exactly the same fashion. Thus, when an adult requests an abortion, if it is seen as a conflict of rights case, the comparative strength of the rights of the being to be abortion is determined by its stage of development. A conceptus would have a minimal right to live (supposing that an unfertilised ovum has none), whereas an almost full term foetus would have considerably more of a right, but still less than its mother ... one does not have to be a full-fledged person in order to have rights, or to be treated immorally.²⁴

Under degree theory, 'personhood', though vague, allows for a nice treatment of foetal development and rights. Under my earlier suppositions about clear cases of personhood, the degree approach suggests that early-term abortions are much less morally problematic than later-term abortions. The solution matches our intuition of treating like cases alike and avoids the counterintuitive drawing of arbitrary distinctions. Finally, we retain a pragmatic and morally useful notion of a person. Persons still exist!

Epistemicism is another contemporary explanation of the sorites. Under the epistemic view, vague words have precise extensions. The difference between vague words and precise words is that we are able to finger the exact extension of the latter while we are ignorant of the borders of the former. Epistemicism has been endorsed most recently by Timothy Williamson who mounts a sustained defence of the theory in his book entitled *Vagueness*.²⁵ The theory is motivated by the acceptance of bivalence and defence of classical logic. For every given predicate, it is either true that something has the given predicate or it is not true that that thing has the given predicate. This means that the extension of every term is precise. However, with a vague word, we can never know where the precise boundary lies. The problem is one of ignorance. We can know the range in which the predicate moves from being correctly applied to being incorrectly

applied, but we cannot know the exact cut-off. This ignorance leads us once again to the problem of borderline cases.

The epistemic solution to the sorites will eventually deny one of the conditionals. In other words, there is some point at which n has the given property but $n + 1$ does not. This diagnosis gives us exactly what we want out of the sorites. The major premise is true as well as the first sequence of conditionals, but the eventual conclusion remains false. Unfortunately (like all vagueness solutions), epistemicism comes with a bullet to bite: one hair makes the difference between being bald and not bald, one word makes the difference between verbal abuse and not, one second of intellectual development makes the difference between competency and incompetency.

K & W briefly mention the epistemic solution to the sorites, but they dismiss it as irrelevant to the debate at hand. "No solution to the problem of what a person is arises from our acceptance of the fact that we cannot know exactly when a foetus ought to receive the status of person."²⁶ Once again, this is mistaken. Whether or not one accepts the epistemic theory is irrelevant. All we need show is that another of the major solutions to the sorites allows 'personhood' to play an integral role in the abortion debate despite its vagueness.

Epistemicism does just that. For any given vague predicate, there will be a range of cases in which it is clear that the predicate is instantiated and a range of cases in which it is clear that the predicate is not instantiated. In between is a range in which it isn't clear whether or not the predicate is instantiated. So here is how 'personhood' might be relevant on an epistemic view. There will be a range of cases in which it is clear that the being under consideration is a person and a range of cases in which it is clear that the being under consideration is not a person. Again, where these ranges are located on the continuum is irrelevant for the usefulness of 'personhood', but for my example, let's just suppose that it is clear that the conceptus is not a person in the first trimester and clearly a person in the third trimester. So now we already have some important answers for the abortion debate: the conceptus lacks the rights associated with personhood in the first trimester and has those rights in the final trimester. But what about the second trimester — the range in which it is unknown whether or not the conceptus is a person?

K & W jettison epistemicism at this point. But this is too hasty. Consider the following analogy. You are a successful businessman, and you own a dilapidated building in a busy downtown area. You have plans to implode the building and have secured the proper permits to that end. It is winter, and you know that the building is empty. No one plays or sleeps in the building during the winter months. But you also know that the building is filled with people throughout the summer months — homeless sleeping in the shade, little children playing, etc. You're not sure about spring. You know that they aren't there in the winter, are there all summer and arrive on some given day in the spring. What are you to do? Regardless of property rights, it looks like the right thing to do is to destroy the building in the winter. To destroy the building in the summer would be to kill innocent people, and to destroy it in the spring would be to take an unnecessary moral risk.

Epistemicism proposes the same sort of solution to the abortion debate. There will be a range of cases in which it is clear that the being in question is not a person (in which case the foetus is not on equal moral standing with the mother), a range in which the being in question is a person (in which case the foetus is on equal moral standing with the mother), and a range of cases in which moral prudence urges caution due to the known possibility of destroying a person. This is not an *argumentum ad ignorantiam*. It is not the case that moral caution is urged simply because of what we do not know; rather, we know something that is vitally important, *viz.* that at some particular moment in the range under consideration a person will begin to exist. Here again it seems that 'personhood' can continue to play an important role in the abortion debate despite its vagueness.

Supervaluationism is the last of the important solutions that I will discuss here. In brief, supervaluationism is the view that vagueness is due to semantic indeterminacy — vague words don't specify an exact extension, leaving us with truth gaps. The classic supervaluationist position was advanced by Kit Fine in 1975.²⁷ Take the vague predicate 'bald' for example. There is a range of cases in which the predicate definitely applies, a range of cases in which the predicate definitely does not apply, and a range in which it is genuinely indeterminate whether or not the predicate applies. This indeterminacy is semantic; there are many ways that we could have made 'bald' precise, but we haven't actually done so. Each of the ways of making a vague term precise is called a sharpening or a precisification. There will be numerous precisifications for every vague predicate. Truth will be defined in relation to this set of admissible precisifications. Consider the statement 'John is bald'. If John's condition will qualify as bald under every admissible precisification of 'bald', then 'John is bald' is true. If John's condition will qualify as not bald under every admissible precisification of 'bald', then 'John is not bald' is true. If John's condition qualifies as bald under some precisifications but not others, then 'John is bald' is indeterminate in truth value. Truth is defined as super-truth, falsity as super-falsity, and all cases that are neither super true nor super false are indeterminate.

The sorites remains valid but not sound under supervaluationism. Like epistemicism, there will be some conditional premise that will fail to be true. This is because at some point the conditional will move from an antecedent containing a case that is super-true (and thus true) to a consequent containing a case that is not super true (and thus indeterminate). So we can still resist the final conclusion while admitting the truth of the major premise and the more obvious series of conditionals. Of course, like degree theory and epistemicism, supervaluationism is not without its problems. The supervaluationist structure loses some classically valid inferences and modes of proof including *reductio ad absurdum*, conditional proof, argument by cases and contraposition. As well, supervaluationist theorists have yet to give a satisfying account of how admissible precisifications are specified and how the theory can avoid higher-order vagueness. Still, despite these shortcomings, supervaluationism provides another alternative to the sorites paradox.

How does 'personhood' fare on the supervaluationist account? Like other contemporary accounts of vagueness, the supervaluationist strategy is useful from a practical point of view, and the abortion debate is no exception. It looks like there will be a range of cases in which no matter how we precisified 'person' the cases in question would still count as people. Ditto for a range of non-persons. This leaves us with a range of cases in which our notion of person neither definitely applies to the object in question nor definitely does not apply to the object in question. So as with the epistemic solution, there will be sets of cases in which all of the members are definitely persons and sets of cases in which all of the members are definitely not persons. This sorting is useful as it answers at least some questions about morality and persons, but it avoids the tricky borderline cases — exactly the sorts of cases relevant in the abortion debate. So supervaluationism leaves us with a set of indeterminate cases. The relevant question involves the admissible precisifications for 'personhood'. If every stage in foetal development is included in at least one possible precisification and precluded by at least one possible precisification, then the personhood of the foetus will be indeterminate in every stage of development. This indeterminacy is different than that of epistemicism. Because the epistemic view operates on our ignorance of certain facts, moral caution was urged. The supervaluationism case is different. Here the indeterminacy is genuinely semantic — we just haven't made up our minds whether or not 'personhood' applies in many cases. So the real issue is one of admissible precisifications.

Perhaps we can sort the indeterminate cases in a morally relevant way. The proportions of precisifications on which the being in question counts as a person could be morally relevant here.²⁸ In other words, there will be a degree structure generated by the ratio of the number of precisifications that result in personhood to the number of precisifications on which the being in question lacks personhood. If X is a person on only one precisification out of 1,000, then that being will have less moral standing than a being that is a person on 500 of the 1,000 admissible precisifications. This leaves us with a decision matrix that represents an odd cross between the epistemic and degree theories of vagueness. Like epistemicism, there will be clear cases of persons and clear cases of non-persons, due in the former to a universal application of 'personhood' under all admissible precisifications and in the latter to a universal rejection of 'personhood' under all admissible precisifications. For the cases in between, we find a degree-type structure based again on the ratio of the number of precisifications on which the being is a person to the number of precisifications on which it is not. So here again a contemporary solution provides a way of dealing with the issue of 'personhood' and abortion. All of this demonstrates that vague predicates remain morally useful even in the absence of an agreed-upon solution to the sorites and that at least some of the contemporary solutions to the sorites provide a practical way of addressing vague predicates and moral dilemmas.²⁹

Notes

¹ Lee F. Kerckhove and Sara Waller (1998). 'Fetal Personhood and the Sorites Paradox,' *The Journal of Value Inquiry* 32, pp. 175-189.

² Mary Anne Warren (1973). 'On the Moral and Legal Status of Abortion', *The Monist* 57, pp. 43-61.

³ *Ibid.*, p. 56.

⁴ Lee F. Kerckhove and Sara Waller (1998). 'Fetal Personhood and the Sorites Paradox', *The Journal of Value Inquiry* 32, p. 176.

⁵ Aside from Schwarz and Larmer, which I mention here, for arguments that a foetus is a person, see John Noonan, Jr. 'Abortion is Morally Wrong', in Francis J. Beckwith and Louis P. Pojman (eds.), *The Abortion Controversy: 25 Years After Roe v. Wade* (Scarborough: Wadsworth Publishing, 1998), pp. 203-208; Jeff McMahan (1993), 'The Right to Choose and Abortion', *Philosophy and Public Affairs* 22, pp. 331-348; Jane Mary Trau, 'Treating Fetuses: The Patient as Person', *Journal of Medical Humanities*, Winter 1991, pp. 173-181; see also an anthology by Michael Goodman, *What is a Person?* (Clifton: Humana Press, 1988).

⁶ Mary Anne Warren (1973), 'On the Moral and Legal Status of Abortion', *The Monist* 57, p. 55.

⁷ Stephen Schwarz (1990). *The Moral Question of Abortion* (Loyola University Press: Chicago), pp. 86-112.

⁸ Robert Larmer (1995). 'Personhood, and the Potential for Consciousness', *Journal of Applied Philosophy* 12, pp. 241-251.

⁹ Aside from Warren and Tooley, who I mention here, see Helga Kuhse and Peter Singer, *Individuals, Humans, Persons: Questions of Life and Death* (Academia, 1994); Michael Goodman, *What is a Person?* (Humana Press, 1988); for an interesting rejection of person-denying arguments, see William Cooney (1991), 'The Fallacy of all Person-denying Arguments for Abortion', *Journal of Applied Philosophy* 8, pp. 161-165.

¹⁰ Michael Tooley (1983). *Abortion and Infanticide* (Clarendon Press: Oxford), p. 87.

¹¹ Aside from Thomson, English and Marquis, which I mention here, for a pro-choice argument that avoids personhood see Paul Roth (1983) 'Personhood, Property Rights and the Permissibility of Abortion', *Law and Philosophy* 2, pp. 163-192; for a pro-life argument that avoids personhood see Harry Gensler (1986) 'A Kantian Argument Against Abortion', *Philosophical Studies* 49, pp. 83-98.

¹² Judith Jarvis Thomson (1971). 'A Defense of Abortion', *Philosophy and Public Affairs* 1, pp. 47-66.

¹³ *Ibid.*, p. 47.

¹⁴ Jane English (1975). 'Abortion and the Concept of a Person', *Canadian Journal of Philosophy* 5, pp. 233-243.

¹⁵ Don Marquis (1989). 'Why Abortion is Immoral', *The Journal of Philosophy* 86, pp. 183-202.

¹⁶ For another example of this sort of defense, see John Bigelow and Robert Pargetter (1988) 'Morality, Potential Persons and Abortion', *American Philosophical Quarterly* 25:2, pp. 173-181.

¹⁷ David Levin (1985). 'Abortion, Personhood, and Vagueness', *Journal of Value Inquiry* 19, p. 201.

¹⁸ Catriona MacKenzie (1992). 'Abortion and Embodiment', *Australasian Journal of Philosophy* 70:2, pp. 136-155.

¹⁹ Lee F. Kerckhove and Sara Waller (1998). 'Fetal Personhood and the Sorites Paradox', *The Journal of Value Inquiry* 32, p. 183.

²⁰ *Ibid.*, p. 186.

²¹ K & W think that they can avoid this conclusion. They state that, 'We do not need to go so far as to say that there are no tables, books, or automobiles. We can keep these classes of middle-sized objects because they can be defined by stipulation without ethical worries' (p. 186). But stipulation, as they pointed out earlier, doesn't solve our problems with vague predicates. If we just stipulate that a book is a publication of such and such a size, this won't help with our common-sense notion of a book. Claiming that only vague predicates that are morally relevant are troublemakers is a bizarre view. If the vagueness presents us with logical problems that are inescapable, as they insist by embracing the sorites, then it looks like we have a good reason to reject all vague predicates not just a restricted subclass of vague predicates. If there are no persons because we have no coherent notion of 'personhood', then there are no books because we have no coherent notion of 'bookhood'. Stipulation could fix both, but in a very *ad hoc* and unsatisfying way. Granted that much more hinges on our decisions regarding persons than our decisions regarding books, but this pragmatic/ moral difference seems unable to resolve the logical problems inherent in the vague predicates themselves.

²² Michael Tye (1994). 'Sorites Paradoxes and the Semantics of Vagueness', in *Philosophical Perspectives: Logic and Language* (Ridgeview: Atascadero, California).

²³ For an example of this approach see L. Zadeh (1975), 'Fuzzy Logic and Approximate Reasoning', *Synthese* 30, pp. 407-428 and Kenton Machina (1976), 'Truth, Belief and Vagueness', *Journal of Philosophical Logic* 5, pp. 47-78.

²⁴ Norman Gillespie (1977). 'Abortion and Human Rights', *Ethics* 87, pp. 239.

²⁵ Timothy Williamson (1994). *Vagueness* (Routledge: London).

²⁶ Lee F. Kerckhove and Sara Waller (1998). 'Fetal Personhood and the Sorites Paradox', *The Journal of Value Inquiry* 32, pp. 184.

²⁷ Kit Fine (1975). 'Vagueness, Truth and Logic', *Synthese* 30, pp. 265-300.

²⁸ I am indebted to Matt McGrath for this insight.

²⁹ Thanks to Mat Konieczka and an anonymous referee for *The Australian Journal of Professional and Applied Ethics* for helpful criticism on an earlier draft of this paper.

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