# The Ethical Standing of Potential

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#### **ABSTRACT**

The concept of potential and its standing in ethical thinking have been almost totally neglected in general and theoretical accounts of ethics, yet a coherent analysis of the standing of potential is a prerequisite for appealing to it, or denying it, in support of any particular conclusions in applied ethics. It is demonstrated that to deny ethical standing to potential is irrational. It is further shown that in our everyday ethical behavior we give standing to potential. A preliminary calculus of potential that formalizes the notion of standing is provided. The arguments of several anti-potential philosophers are refuted. It is concluded that the ethical standing of potential cannot be denied.

### I. Introduction

When an event or state of affairs is not yet actual but has a physical possibility of becoming actualized (occurring), the event or state of affairs is said to be a *potential* one. Where the possibility can be attributed to an object or process, that object or process is said to possess potential for the event or state of affairs. For example, an acorn prompts one to think of a potential oak tree, and the acorn can be said to possess the potential to become an oak tree, or, less rigorously, to actually be a potential oak tree. As will be seen, potential can be viewed as a graded measure whose magnitude is determined by the probabilities of events required for its actualization. (I henceforth use the shorthand 'event' to stand for 'event or state of affairs'.)

Potential clearly plays an important role in our thinking, and not just in the form of thinking in advance about expected future actual events (that is, those that one expects to occur with certainty). Rather, we weigh potential, as such, in both our non-ethical and ethical thinking, and, as will be shown, it is both natural and rational that we should do so. To say that one gives 'standing' to an event, actual or potential, is simply to say that one includes it as a part of one's deliberations, and gives it due consideration and valuation.

The concept of potential and its standing in ethical thinking have been almost totally neglected in general and theoretical accounts of ethics, although the notion of possibility and possible worlds has played a significant role in ontology and specialized areas such as modal logic. [1] Consideration of potential appears to be confined to certain areas of applied bioethics, for example, arguments over abortion, where it seems to be used as a double-edged sword in the carving out of desired conclusions, rather than being regarded as a topic of genuine and independent interest and importance in ethics.

It is possible to adopt several different stances on the ethical standing of a given potential P:

- P has no standing;
- P has standing identical to that accorded to actualized P;
- P has standing identical to that accorded to actualized P only above a threshold, but has no standing below the threshold;
- P has an intermediate, graded standing; or
- P has standing (full, thresholded, or graded) only if the possessor of P once possessed actualized P.

I argue that the theses that P has no ethical standing, and that P has standing identical to that accorded to actualized P (excepting the special cases where the corresponding probabilities are 0 and 100%, respectively), are not only irrational but fail to adequately account for our ethical behavior. Further, I show that the thesis that, to deserve ethical standing, a potential P must have once been actualized by the possessor is also irrational. Remaining as possibly coherent theses are those that attribute full-but-thresholded standing and intermediate standing, and hybrids thereof.

It is not uncommon to see a single author, even in a single book or paper, at one point embrace potential as ethically relevant (for example, when considering temporarily comatose persons) but at another point reject it (for example, when considering fetuses), with no appeal to any relevant justifying distinction. Whether one should attribute such an unbecoming quirk to mere confusion, or to a total unawareness of the manifest contradiction, or whether one should view it (perhaps cynically) as an attempt to ground desired conclusions in applied ethics, remains an open question. In any case, it is clear that a coherent analysis of the ethical standing of potential is a prerequisite for appealing to it, or denying it, in support of any particular conclusions in applied ethics. I attempt such an analysis in this paper. I (a) show that giving standing to potential is both natural and rational, (b) show that ethics is permeated with considerations of potential and that it cannot be ignored, or co-opted in an *ad hoc*, partisan manner, (c) develop a preliminary model of potential and the ethical standing thereof, and (d) address some attacks on the ethical standing of potential.

# II. Preliminary Considerations

#### II.A. The Nature of Potential

The ontology of possibility and potential has a long history. Aristotle viewed potential as one form of possibility—what we today would call an ability or a capability. For him, potential was to be distinguished from formal possibility, which, unlike potential, is not necessarily embodied in an object or person. For example, it is possible that swans could be purple, but there is no identifiable object or person that embodies an ability or developmental process leading to it, hence, the possibility is not, for Aristotle, an instance of potential. Contemporary usage of the term 'potential', however, appears not to reflect Aristotle's distinction. One can quite meaningfully speak of there being potential purple swans. Accordingly, I here give the term 'potential' this broader meaning and take it as synonymous with the notion of possibility (specifically, physical possibility—see below).

The contemporary understanding of possibility seems to have been first formalized by Kant, who wrote:

A concept is always possible if it is not self-contradictory. This is the logical criterion of possibility, and through it objects are distinguished from the *nihil negativum*. But it may none the less be an empty concept, unless the objective reality of the synthesis through which the concept is generated has been specifically proved; and such proof...rests on principles of possible experience, and not on the principle of analysis (the law of contradiction). This is a warning against arguing directly from the logical possibility of concepts to the real possibility of things. [2]

This expresses a distinction between what I refer to below as absolute potential and physical potential. Based on Kant's analysis, later thinking, and my view of potential as synonymous with possibility, the following exegesis of the taxonomy of potential is entertained, and proves adequate for my purposes:

- **Formal absolute potential:** The proposition in question is not self-contradictory.
- A priori absolute potential: The proposition is not self-contradictory and does not violate other accepted axioms or definitions.
- **Physical potential**: The proposition has absolute potential and does not violate accepted natural laws
- **Technical potential:** The proposition has physical potential and is capable of being actualized with currently available actualizing means (inherent development processes, exercise of volition, and/or the use of technology).
- **Potential as ability**: Ability (or capability) can be viewed as technical potential of a person or other object that is embodied in a physical or mental trait or process.
- **Probabilistic potential**: A graded measure of physical potential based on the probability of events required for actualization.

I am here concerned with physical potential and its standing in ethical thinking. Consideration of potential events that are physically impossible cannot be of any relevance to practical ethical thinking, and, although one might be inclined to suppose that one should also require technical potential to think of attributing standing, this seems inappropriate because technology changes rapidly and varies dramatically in different groups, societies, nations, etc.; it would seem misguided to promulgate an ethical notion that is subject to being rendered rapidly obsolete, or whose validity depends on the technological level of a given culture. In any case, the examples used here all presuppose technical potential, and so the distinction is not important to the argument. (In addressing the science-fiction examples of some opponents of potential, as I do later in this paper, one can at least imagine that the examples are technically possible.)

A preliminary sketch of a calculus for potential is presented in Section III.C, which analyzes the factors that intervene between a state of potential and its actualization; these factors determine whether the potential will be actualized. It suffices here to briefly describe them. First, one or more events and/or states of affairs (excluding acts of volition) may be required at various times. For example, an acorn's potential to become an oak tree requires that rain falls on the developing plant at appropriate intervals. These events may be external, as in the case of rain, or they may be intrinsic, as would be found in the unfolding events of a development process, where, for example, an earlier process may create a chemical or structure that is required for later processes. Whether external or intrinsic, some of the events may also be characterized by a random component, as would be seen, for example, in the actualization of the potential fortune associated with a lottery ticket (there is no reason to get sidetracked onto the concept of randomness; the common-sense interpretation suffices). In principle, the probabilities of the required events can be individually determined and an overall probability value calculated and then used to quantify potential in terms of the probability of actualization. Second, special events consisting of the exercise or withholding of volitional acts by people figure importantly, and severely complicate the quantification proposed above.

The lack of a proper referent when a proposition speaks of potential existence should not be viewed as a serious implication of incoherency ('how can one properly refer to a potential thing that does not yet exist?'). Bergson points out that it seems meaningful to make statements like 'The object A does not exist.' [3] Similarly, one seems to have no difficulty in referring to a nonexistent object of intention: 'Rahul intends to assassinate the next Prime Minister of India.' There are no special problems raised by potential in this regard.

The view of potential as a graded measure based on probabilistic measures seems intuitively satisfying and lays the foundation of a possible calculus of potential that supports attribution of ethical standing. I have

more to say about this in Section III.C, but it is interesting to note that such a view is reflected in Supreme Court deliberations:

[The State has an] important and legitimate interest in protecting the potentiality of human life. [This interest] grows in substantiality as the woman approaches term... [4]

Here, of course, I view the growing interest as deriving from the growth in the probability that the fetus will result in a viable birth as term progresses.

In summary, potential is here viewed as a graded measure of physical possibility based on the probabilities of events required for actualization and qualified by the intervention of volitional acts.

### II.B. On Determinism and Probability

The concept of potential developed here is subject to a possible charge of incoherency based on one or both of two enduring metaphysical dilemmas: the problem of determinism versus free will (agency) and the problem of the interpretation of probability. These problems have proven themselves to be difficult; nevertheless, I believe the charge of incoherency can be parried.

The Megarians believed that possible events are those that either are or will be actualized, while the Stoics, who were strict determinists, believed that possible events are those that are not prevented from being actualized, whether or not they are actualized. Given their strict determinism, one is almost forced to conclude that the Stoics' assertion of possibilities that may not become actualized must derive from ignorance (of the interfering causes, or simple lack of effecting causes, that determine that an event will not become actualized). Nevertheless, the point brought out is clear in the modern context. If determinism is true, then referring to multiple possibilities (and thus potentials) is misguided, and can only be based on ignorance of the determined actualities that are to eventuate. While one might conceive of a concept of potential and a calculus thereof based on ignorance, it seems to me that such a radical step is not required.

Two well-known escapes from the grip of determinism might be embraced: randomness (pure chance events) and agency (the uncaused, creative free will). Empirically, it is not known whether either of these postulated anti-causative phenomena actually exist, although randomness is receiving strong support from modern physics, and agency is a widely claimed subjective experience. Philosophically, both are subject to deep, chronic problems. I think, however, that it is not unreasonable to suppose that randomness is a real property of the world, arising perhaps from quantum-level behavior, and that it interacts with causes, is magnified in some circumstances (through chaotic and nonlinear systems, for example), and thus introduces a measure of indeterminism without fully evicting causation. This, of course, is enough to give real meaning to the notion of potential, because there are then multiple possibilities at any given instant, depending upon the degrees of freedom of the involved random processes. It would be possible to stop here, and to deny hard agency, arguing that what one thinks is agency can be derived from an analysis in terms of, for example, closed evolutionary systems adapting to a partially random environment (which I attempt elsewhere). This reduction of agency would certainly lubricate my argument, as the complicating (and irritating!) intervention of volition could be treated as an amalgam of caused and random events and would thus present no particular problems for a calculus of potential based on event probabilities.

Naturally, such a denial of agency would be considered a serious omission by many, and would certainly constitute a loss of generality for my argument. Therefore, rather than adopt that approach, I assume that the concept of agency can be given some appropriate coherent meaning and proceed as if volitional acts do enter into the picture. Those that deny agency are welcome to reformulate the argument without it.

The problem of the interpretation of probability might be viewed as having less potential to stop us in our tracks. Although none of the formal interpretations (*a priori*, frequency, subjective, common-sense, etc.) is totally adequate to all of our uses of the concept of probability, this has not prevented the concept from

proving its utility in diverse fields, and one or other of the interpretations, or a hybrid thereof, usually suffices for any given application area. The common-sense interpretation appears to be adequate for my purposes. [5]

## III. In Favor of Potential

### III.A. On the Notion of Standing

As described earlier, to say that one gives standing to an event, actual or potential, is simply to say that one includes it as a part of one's deliberations, and gives it due consideration. For example, in deciding whether to engage in some industry, one might take into account the effect of discharge of wastes upon the local populace; one would say that the interests of the populace have standing. The issue at hand now is whether standing should be given to events or states of affairs that are only potential—ones that may or may not become actualized in the future.

It might be asserted that one obviously gives standing to potential because the mere act of thinking about an action or event in advance necessarily involves considering it in potential form only. For example, Bergson writes:

Now a choice involves the anticipatory idea of several possible actions. Possibilities of action must therefore be marked out for the living being before the action itself. [6]

While true, this is a merely formal and trivial fact and is not what I have in mind in talking about giving standing to potential, because it is still the anticipated actuals that are being weighed (in advance). What I am interested in are cases where it is the potential itself that is weighed. A sketch will make this clearer and the reader is directed to Figure 1. It is supposed that a person is involved in a situation that leads to a choice, at which point she can choose to do Q or to not do Q, denoted by 'Q' and 'not-Q', respectively. If Q is done, a situation will be created in which a potential state of affairs A arises with a probability measure of 10% (that is, it is possible with a chance of 10% that A will come about). If Q is not done, the potential does not arise and not-A is inevitable. Now consider the factors that enter into the choice. Obviously, the desirability of A and the costs of doing Q (not depicted) will weigh heavily, so let us suppose that A is desirable and some cost is associated with doing Q. To make this more concrete, one may consider Q to be the purchase of a lottery ticket, for example, and A to be the winning of the prize.

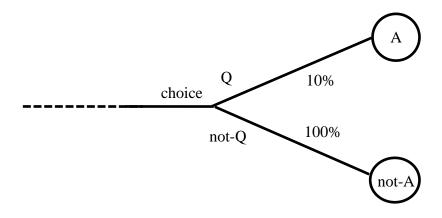


Figure 1. Weighing of Potential at a Choice Point

Clearly now, at the choice point, it would be irrational to act as if the potential for A has the same standing as actual A, that is, as if A will occur with a probability of 100%. This would totally disconnect the weighing of probable returns with prudent investments, and could rapidly lead to ruin if the cost of Q is high enough (more than a tenth the value of A) and the policy is repeated over multiple instances. Equally, it would be irrational to act as if the potential for A has no standing, that is, as if A will never occur. That would foreclose some nice returns if the cost is low enough and, again, the policy is repeated. The rational approach, of course, is to consider the 'mathematical gain' on a per-choice basis, which is here calculated by multiplying 0.10 times the value of A. This latter, rational policy amounts to giving direct standing to the potential for A, and furthermore, to doing so in a manner that (a) is not simply the weighing of anticipated actuals (events which one expects to certainly occur) in advance, and (b) takes into account the graded nature of the potential.

A strange approach taken by some bioethicians is to assert that no standing can be given to the potential for A of an object or process, unless A has at least once already been actualized. In one-time situations like that of Figure 1, of course, this clearly reduces to the irrational dismissal of potential described above. What the bioethicians have in mind are situations where, once actualized for the first time, there is a subsequent return to mere potentiality, or an oscillation between potentiality and actuality, and they want to say that the potential leading up to the first actualization has no standing, while the potential phases occurring after the first actualization do have standing. This appears to be little more than an unjustified ad hoc device which, moreover, can be shown to be as irrational as the theses discarded above. I have already pointed out the manifest irrationality in one-time cases (and who can know at the time that potential is weighed whether the situation will end up as a one-time case), but even the extended scenarios can be seen to entail irrationality. Consider a farmer who holds a bunch of apple-tree seeds. He is thinking of planting these seeds and reaping the harvest of apples which will periodically occur each spring thereafter. We have here a situation where there is an initial phase of potential for apples prior to the first actualization of apples, and then repeating periods alternating between potential for apples and actualized apples. If the farmer is to accept the thesis under consideration, he must ignore and dismiss the potential for apples that leads up to their first actualization. He must throw away, as useless, the bunch of seeds before planting them. This is clearly irrational, and I show later in this paper the ad hoc nature of the thesis in specific examples from the antipotential bioethics literature.

A little thought exposes a multiplicity of cases where we give standing to potential in non-ethical situations, and it will serve little purpose to detail them here (I detail ethical cases in the next section). There does not seem to be any reason to suppose that the rationality of the process described above for Figure 1, and the irrationality of supposing potential to have full or no standing there, is at all undermined by being transplanted to a situation where ethical choices are involved (although I show that some thresholding of the graded potential may be appropriate). In support of that conclusion I now show that in our everyday ethical behavior we indubitably give standing to potential. If the reader accepts the foregoing arguments and the evidence to follow, the conclusion becomes inescapable that to give ethical standing to potential is both rational and natural, and that to deny it is irrational and flies in the face of our everyday behavior. Indeed, given the importance of considerations of potential in the non-ethical domain, should it surprise us that it would also be important in the ethical domain?

# III.B. Potential in Everyday Ethics

Bernard Williams argues that the notion 'ethical' is a vague one and, furthermore, that there is no harm in its being vague. The notion 'moral,' he argues, has now largely come to be taken to refer to a system of duties and obligations which, as such, makes up only one component of ethics. [7] We might reasonably take this as reinforcing the idea that the manifest standing that we attribute to potential in non-ethical situations is not lost upon transplantation to ethical situations, in view of the lack of a clear distinction between the ethical and non-ethical, to which such a loss might be attached. Nevertheless, this is not decisive and therefore I

propose an approximate characterization for 'ethical' that will allow the argument to proceed. I take ethical considerations to be those that transcend 'those that relate merely to the comfort, excitement, self-esteem, power, or other advantage of the agent.' [8] In short, when one begins to consider the interests of other agents, one has entered the domain of the ethical.

Impatient readers (or those to whom the foregoing material is obvious) no doubt are happy that we have reached this point, at which evidence of the attribution of ethical standing to potential can now be presented, and I will detain them no longer. The following list is extracted from a much longer list maintained by the author and is presented with minimal analysis, as this paper is already becoming longer than desired. I anticipate that the reader will be able to provide additional examples and will conclude, as I have argued, that attribution of ethical standing to potential is both rational and natural.

Unconscious persons. Most people now believe that it is morally acceptable to withdraw life support from a brain-dead person, that is, one incapable of ever again being a conscious, feeling person. However, and significantly, if there is any real potential that the person might recover, it is believed that life support should be continued. A degenerate case, perhaps, is that of sleeping persons, where we do not withdraw any rights or consideration to people while they are asleep, because they have a high potential to awaken and thus return to consciousness.

**Euthanasia.** Similarly, many believe that it is acceptable (in at least some cases) to actively or passively bring about the death of persons for whom there is thought to be no realistic potential for a future life characterized by a 'meaningful' life, for example, one in which conscious awareness can be experienced without extreme suffering. This includes some deformed infants such an anencephalics, some seriously ill or terminally ill patients, and brain-dead or vegetative patients. While not all people accept euthanasia, the substance of the debate appears to be connected to such issues as the sacredness of life and practical issues (such as how to avoid abuses), suggesting that even for the objectors, the ethical standing of potential is not at issue.

**Special Valuation of Children.** It is very common to find people exhibiting a special distress about crimes or tragedies involving children. When questioned about this, one encounters such answers as, 'It is so sad because the child had his whole life ahead of him.' The extra potential of the child, whose life is not fully actualized, is specially valued. Conversely, when an aged person meets a sad fate, we are more stoic, reasoning that 'he had a full life.' That this special distress for children defeats the seemingly more rational view that adults should be valued more, because a much larger societal investment has already been made in them, and they are likely to be much more productive currently, underlines the strong role that the potential of the child plays in our thinking.

Valuation of the Virtues. We value virtues in people at least partially because they are likely to behave in desirable ways, that is, they have strong potentials to act admirably. We value friends not only for what they have done in the past, but because we believe they have a high potential to act in a supportive, stimulating, etc., manner in the future. Conversely, why do we devalue known dishonest people, even though we may not have dealt with them before? Surely, one of the reasons is that we believe they have a high potential to harm us. We devalue lazy people because they do not actualize their potential. If one doubts the role of potential in valuation, one should ask oneself why one values one's car. Is it exclusively due to the past successful journeys that the car has given one? Or is it in large measure due to the potential future trips we believe will be forthcoming?

**Education and Advertising.** The process of educating our children and others would be meaningless if we did not believe that we were creating valuable capabilities, etc., in those individuals. Capabilities are merely physically embodied potentials to act in a certain way. If we did not value the potential actions of the educated, why would we bother? A similar point can be made for advertising. A proposed advertising campaign against smoking is viewed as valuable because it has the potential to prevent some cases of lung cancer and consequent premature death.

**Reward and Punishment.** Do we not utilize reward and punishment at least partially to affect the probabilities of future behavior, that is, to modify the potentials for certain behaviors?

**Future Generations.** We have regard for future generations, that is, for potential future people. For example, many would consider it wrong to destroy the environment for future generations, or to deplete or squander natural resources in a non-sustainable manner.

Assisting Persons in Distress. In deciding to assist another person in a dangerous situation, we will often assess the potential risk to ourselves and allow this assessment to play a role in the decision. Indeed, a failure to assist would be seen as excusable by others when the potential for harm to ourselves is sufficiently high.

**Societal Risk-Taking.** We take risks as a society where we know there is a significant potential for human death (for example, aviation). We assess these potential risks and factor them into our decisions.

**Liberty.** We value liberty, which consists in large measure of the broadening of potential action.

**Squandering.** We devalue a person squandering a fortune when it could potentially have been deployed more usefully. If the potential uses of the fortune have no standing, how could we complain?

**Interference.** We would consider it wrong to foreclose desirable possibilities for someone for no good reason. We devalue actions that would increase the potential for harmful results.

**Potential in Law.** Supreme Court Justice Blackmun, Roe vs. Wade, 1973: '...the State may properly assert important interests in...protecting potential life. At some point in pregnancy, these respective interests become sufficiently compelling to sustain regulation....' And: 'Similarly, unborn children have been recognized as acquiring rights or interests by way of inheritance or other devolution of property...' We compensate people for their lost potential income when a wrong has caused the loss. We deny bail to those judged to have a high potential to abscond. We deny parole to those judged to have a high potential to reoffend. More recently, some states in the United States have enacted laws that require the maintenance of registers of known pedophiles and notification to residents of a neighborhood when a pedophile moves into the neighborhood. This constitutes a trumping of an individual's right to privacy by the right of the residents to take precautions against the manifest potential for future crimes (pedophiles have a high incidence of reoffending).

**Intention.** Our ethical evaluation of a proposed act is crucially affected by the imputed intention of the agent. Arthur Schopenhauer writes:

...whenever an action of some moral importance is discussed, everyone inquires into the *intention*, and by this alone is the action judged; as also, on the other hand, everyone clears his character in the *intention* alone when he sees his action misinterpreted, or excuses himself if it has turned out unfavorably. [9]

We morally decry, for example, participants in an aborted conspiracy to murder, so it is not required for the intended act to become actualized for it to attract censure. While some theoreticians might doubt the ethical standing of intention, it remains a prominent feature of common-sense morality. The connection to potential, however, is not obvious. Bruce Aune analyzes intention as a combination of a disposition and appropriate conceptualization. An intention implies a disposition to act, to do A when C. The disposition to do A when C involves proper conceptualization of what is intended (A), as well as proper recognition of the requisite conditions (C). Aune writes:

...having an intention is then largely a matter of envisaging—of conceiving in a particular way—an action or state of affairs while in a state of readiness to do things that will, one believes, directly or indirectly bring about its realization. [10]

Since merely *conceiving* a state of affairs is not objectionable, it must be the addition of the disposition—a form of potential—that attracts moral attention. So, if one agrees that intention properly attracts moral attention, then so too must dispositional potential. On this view, it is the standing of dispositional potential that gives rise to the standing of intention. (To avoid the reader thinking that this analysis of intention is perhaps too simple, it should be pointed out that dispositions may involve subdispositions to act in favor of intermediate states/episodes that may be required for, or make more probable, the final act A. This might also involve dispositions for certain verbal utterances regarding one's intentions. Each subdisposition may involve beliefs and conceptualizations of its own.)

**Moral Luck**. Bernard Williams argues that consideration of 'moral luck' should lead us to value trying over the results thereof:

The ideal of morality is a value, moral value, that transcends luck. It must therefore lie beyond any empirical determination. It must lie not only in trying rather than succeeding, since success depends partly on luck, but in a kind of trying that lies beyond the level at which the capacity to try can itself be a matter of luck. [11]

Trying consists of volitional acts that are separated from actualization by a partially probabilistic process; the significance of trying, then, necessarily lies in the realm of potential.

Similarly, although the law might punish a negligent driver whose actions result in a serious accident while not punishing (or not punishing as severely) a negligent driver who was fortunate in not causing an accident, our intuition tells us that both are blameworthy. Michael Slote writes:

...it may seem as if we should be able to insert some kind of probability estimate into the example, so that...the degree, if any, of [the driver's] culpability would depend solely on whether he was sufficiently aware of the liklihood of an accident... [12]

This passage suggests that our intuitive reaction here can be attributed to the ethical standing of the potential for an accident to occur. Furthermore, it suggests that a graded measure based on probability might be useful in properly assessing that potential. It is to the development of such a calculus that I now turn.

#### III.C. A Calculus of Potential

If one now accepts the thesis that the attribution of ethical standing to potential is both rational and natural, there arises the problem of describing how potential is to be assessed, how it is to be traded off against actuals and other potentials, how discontinuous attribution of rights can be derived from a graded notion of potential, etc.—in short, there arises the problem of developing a calculus of potential. The calculus of actuality, however, is not well developed! It would be expecting too much, then, to expect a rigorous, convincing calculus of potential to be readily had when potential is a derivative of, or subservient to, actuality. Nevertheless, I attempt a preliminary sketch of such a calculus in furtherance of three goals: (a) to show that no new, insuperable difficulties emerge from the formalization of potential, (b) to show some of the considerations that rightly belong to an acceptable formalization, and (c) to expose some points that will be of use in the following section, where I address some of the anti-potential arguments. Emphatically, however, I make no claims that the treatment is either complete or devoid of problems; indeed, at points I suggest possible alternative approaches without favoring any of them. It is intended to be merely suggestive, to provoke further, more detailed thought. I hope the reader will grant standing to its potential in that regard.

#### III.C.1. Non-Volitional Events and Processes

It has been previously shown that events of two kinds can be required for a potential to become actualized: non-volitional events and volitional events. The latter events derive their special character from

agency, which I deal with in a later section. The former events, which I call normal events, can be characterized as random or caused, but these are not necessarily exclusive qualities. For example, a physical process might give rise to an event that is random within a range of values that is determined causally (a microscopic pure random event might be partially magnified but not enough to totally swamp causality at a macroscopic level). Fortunately, it is not necessary here to make a rigorous distinction between caused and random events because I treat them the same way, by attributing a probability of occurrence to them. For a process of actualization, then, that does not involve volitional events, one can consider the required normal events and perform standard combination of probabilities to produce a composite probability measure for actualization of the potential. When more than one sequence of events might suffice to actualize the potential, one can either embrace the probability of the most-probable sequence (adjusting it as time unfolds actual events), or one can adopt a composite approach that is similar to that employed in some quantum-mechanical calculations. In any case, the calculated probability of actualization *is* the measure of the potential.

With a measure of potential in hand, one can use it to derate the value attributed to the actualization of the potential. The value of the actualized potential is taken as the baseline—a given—and the calculus of potential makes no assumptions about its derivation (it may be derived from one of many possible ethical theories). For example, if the value of an actual human being is taken as 5000 points, and the potential measure for a fetus at a given point of time is (calculated with best knowledge to be) 80%, then the value of the fetus is 4000 points. Of course, I do not mean to suggest that it is necessarily an easy matter to arrive at valuations for actuals. The point here is that potential derates these values, whether they are determined through intuition, fiat, negotiation, tradition, or otherwise. It will be seen that for the resolution of conflicts, absolute values are not required in any case, and that relative ordering of values can suffice.

#### III.C.2. Thresholds

One might arbitrarily designate a dispersed set of molecules that would be sufficient to constitute a human and then assert that the set is a potential human (with a very low potential measure!). One would then be forced to acknowledge ethical regard for those molecules. This suggests that it might be reasonable to specify a threshold below which the probability (and hence the potential measure) is regarded as effectively zero. This accords with the intuitive idea that the probability of a physically possible event never reaches zero but only approaches it; thus, to allow ourselves the luxury of *believing* some things will not occur, which is a prerequisite for practical living, we must choose some point at which unlikelihood becomes impossibility. Interestingly, a similar approach is taken in statistics and hypothesis testing, where, for example, thresholds of probability determined from observed frequencies determine whether a hypothesis is considered confirmed, or thresholds of correlation determine whether a relationship is 'significant.' It may also be a part of our ethical behavior. When considering whether to withdraw life support from a comatose person, is there not a point at which we decide that the potential for recovery is too low to justify continued efforts (even when the derated value of the life still exceeds the cost of the support procedures)?

One can also contemplate asserting a threshold above which certainty is assumed, that is, above which potential is taken as equivalent to actualization.

### **III.C.3.** Resolving Conflicts

The calculus thus far adduced arms us to resolve conflicts between potential for A and actualized A (actualized A always wins out over potential A), and between differing potentials for A (the higher potential measure wins). Moreover, given values for two different actualizations A and B, the calculus allows us to resolve conflicts between potential for A and actualized B. This seems more rational than to argue that actualization *always* wins out. More interesting is the question of whether an aggregation of multiple potentials for A can win out over a single actualized A. For example, Mary Anne Warren writes:

[An actual person] is not morally obligated to [sacrifice himself] for the sake of permitting any number of potential people to come into actuality, so great is the margin by which one person's right to liberty outweighs whatever right to life even a hundred thousand potential people have. [13]

But things do not seem to be so clear-cut to me. The crucial determinant of our stand here would seem to have less to do with the calculus of potential (for surely, a not outrageously unreasonable case can be made for believing that it is correct to give the nod to a hundred-thousand normal fetuses near birth in preference to one aged, senile adult) than with our stand on utilitarian versus rights-based approaches to the resolution of ethical conflicts.

#### III.C.4. Volitional Acts

Now things become *very* interesting, and not just because it is difficult to characterize agency and volition (which I do not attempt here); rather, complex issues that arise in the resolution of conflicts between actuals now poke their fingers into the domain of potential. Fortunately, that allows us to argue that the problems derive from the actual domain and do not arise as a consequence of embracing a calculus of potential. For example, Judith Jarvis Thomson writes:

If I am sick unto death, and the only thing that will save my life is the touch of Henry Fonda's cool hand on my fevered brow, then all the same, I have no right to be given the touch of Henry Fonda's cool hand on my fevered brow. [14]

Here, Thomson assumes that the touch will certainly save her life, so we are dealing with the domain of actuality. If we change her example slightly by assuming that the touch will only increase the probability of her survival, we move into the domain of potential, and we can see that Thomson's dilemma exists prior to entering that domain.

A naive, and incorrect, approach to the treatment of volitional acts in the potential domain would be to suppose that they can be assessed independently, as if only actuals were involved. In Thomson's example, one might say that if it is considered acceptable for Fonda to withhold his touch when it would certainly save the life, then it must be acceptable for him to withhold it when there is only potential for saving the life. But this won't work if one believes that Fonda *is* obliged to give the touch in the actual domain, because one is left unable to decide what diminution of potential finally removes the obligation (can one appeal to a threshold?).

But worse is the fact that this approach begs the question. Rather than being independent of the potentials involved, one wants the ethical judgment of Fonda's withholding the touch to be determined, at least partially, by the standing of the life-saving potential. A more correct approach seems to be to treat the case as a conflict and resolve it as described earlier. The conflict is between Thomson's potential for life that might be obtained by granting the touch and Fonda's actual right to act as he wishes. Now, Fonda's not-acting satisfies right A but thwarts potential P, while his acting violates A but respects P. If one assesses right A as overriding actualized P (which is what Thomson asserts by saying in her quotation above that 'I have no right to be given the touch'), then, since potential P always loses to actualized P, one concludes that right A defeats the potential P, and Fonda need not respect Thomson's potential. If one rejects Fonda's right to act as he wishes in the actual case, that is, one assesses actualized P as overriding right A, then one derates the value of actualized P by the potential measure and compares it to the value of right A to determine whether Fonda is obliged to grant the touch. This is just the procedure for resolving conflicts described earlier. As before, one may also think of asserting a threshold of potential below which one relieves Fonda of his obligation (even if the derated value of actualized P exceeds the value of A).

At each point in the process of actualization of potential at which a volitional act is required, one can frame the situation as a conflict and resolve it as described in Section III.C.3 (using the potential measure assessed at the intermediate point). If the volitional act is thus determined to be ethically required, one treats it as having a 100% probability for the purpose of calculating the composite probability of the overall required event sequence.

# IV. Against Potential

The case here presented in favor of the ethical standing of potential contained three components: an argument based on appeal to rational reasons, a set of examples demonstrating the truth of the argument in the real world, and a sketch of a formal calculus that shows that no new difficult problems arise. Philosophers arguing the case against potential adopt analogs of the first two components in their attacks (if the standing of potential is denied, there is no need for a calculus). They seek to show through rational arguments that the ethical standing of potential should be denied, and they seek to show through examples that the attribution of ethical standing to potential leads to absurdities. I maintain that these attempts fail, both on their merits and through their failure to address the positive case for standing and the everyday attribution thereof that we see in real-world morality. In support of that contention, I consider the arguments of three philosophers who have prominently objected to granting ethical standing to potential. Interestingly, the objections considered have all been framed in the context of bioethics, and specifically in the controversy over abortion, which arouses deep passions. Of course, the connection to potential arises from the question of whether any standing should be granted to the potential for the fetus to become a normal human being.

It is not my intention in this paper to enter the debate over abortion, but the issue is raised by some of the cited arguments against potential, and so I am forced to touch upon it. An open question, that the reader may be better equipped to judge after reviewing the following material, is whether the strong motivated passions provoked by the abortion controversy serve to bring out the strongest and best arguments, or whether they tend to inhibit reasoned, dispassionate analysis. In any case, it should be realized by both sides that concluding that potential has ethical standing is not decisive for the abortion debate. The real issue resides in the conflict between the rights of the mother (and perhaps others) and the derated rights of the fetus stemming from its potential. If this conflict can be resolved in favor of the mother (as some well-known arguments suggest), then it is not necessary for the supporters of abortion to deny standing to potential to continue supporting abortion.

# IV.A. Tooley

Michael Tooley, in the course of a paper whose primary point is to argue that abortion is acceptable, presents an attack on potential that follows the scheme laid out above. [15] He cites a positive argument the effect of which is to exclude any standing for potential (all quotations are from the cited paper):

My approach will be to set out and defend a basic moral principle specifying a condition an organism must satisfy if it is to have a serious right to life.... 'A has a right to X' is roughly synonymous with 'A is the sort of thing that is subject to experiences and other mental states, A is capable of desiring X, and if A does desire X, then others are under a prima facie obligation to refrain from actions that would deprive him of it.'

It is clear that potential is excluded from standing because the passage refers only to actual states of experiencing and desiring. Of course, deep attacks can be launched against this conception of rights as deriving from desires, but there is a more direct path. I ask how the principle allows us to continue to grant standing to those people who are unconscious, mentally incompetent, etc. Tooley is ready with an answer:

...an individual's right to X can be violated not only when he desires X but also when he *would* now desire X were it not for one of the following: (i) he is in an emotionally unbalanced state; (ii) he is temporarily unconscious; (iii) he has been conditioned to desire the absence of X.

Tooley's implied omniscience about what other people would desire is of course laudable, as is his casual delimitation of the invalid classes of 'conditioned' desires and 'unbalanced' emotional states, but arguably the more serious objection is the *ad hoc* and question-begging nature of this response. If one can accept his arbitrary and purpose-built caveats, there seems no reason not to accept an additional quite plausible one: '(iv) he has as yet not fully developed his normal capacity to exercise desires', the acceptance of which would grant standing to potential. In the absence of any justification from Tooley for the acceptance of his caveats (i) through (iii) and the rejection of my caveat (iv), one must conclude that the positive argument against potential fails.

Tooley *does* try to dismiss caveat (iv), but not through positive argument; rather, he presents a fantastic example that he believes shows that the acceptance of potential is absurd. Before considering it, a strong dose of caution about fantastic examples must be administered. Typically, they work by describing some highly unrealistic scenario that usually involves some science-fiction-like assumptions and then appealing to our common-sense moral judgment about that scenario. The problem is that common-sense morality is not static; it changes as technology and society develop. Judging such fantastic cases against common-sense or intuitive morality is a fundamentally misguided enterprise because the advent of such technologies as those required to actualize the fantasies would undoubtedly provoke profound changes in common-sense morality itself. For example, if we *really did* enter an era in which humans could be cloned, wouldn't it be reasonable to expect that our common-sense morality would adapt to those realities, and that it would be misleading and even a bit dishonest to appeal to moral intuitions from an earlier era? Bearing this in mind, let's turn to Tooley's example:

My argument against the potentiality principle can now be stated. Suppose at some future time a chemical were to be discovered which when injected into the brain of a kitten would cause the kitten to develop into a cat possessing a brain of the sort possessed by humans, and consequently into a cat having all the psychological capabilities characteristic of adult humans. Now it would surely be morally indefensible in such a situation to ascribe a serious right to life to members of the species Homo Sapiens without also ascribing it to cats that have undergone such a process of development: there would be no morally significant differences.

So far, there's not too much to object to (except for irredeemable speciesists). We should, however, note the fantastic character of the example so that we may apply the appropriate degree of caution to any subsequent appeals to common-sense morality.

Tooley continues:

Secondly, it would not be seriously wrong to refrain from injecting a newborn kitten with the special chemical, and to kill it instead. The fact that one could initiate a causal process that would transform a kitten into an entity that would eventually possess...a serious right to life does not mean that the kitten has a serious right to life even before it has been [injected]. The possibility of transforming kittens into persons will not make it any more wrong to kill newborn kittens than it is now.

Even in the current era, when kittens are kittens, many would object to killing them, but I will overlook this and address the contention that 'it would not be seriously wrong to refrain from injecting [them].' The

inclusion of the qualifier 'seriously' is very strange here (and Tooley uses it repeatedly). It seems to leave the door open to conclude that it *is* wrong to refrain from injecting them, just not seriously so. But if that is accepted, then some standing has been granted to potential, and, as the old joke has it, now we just have to discuss the price. But Tooley apparently means us at the appropriate points to take 'not serious' in the sense of 'ridiculous.' One wonders why his argument cannot proceed without such blatant equivocation.

More 'serious,' however, is Tooley's assumption that the common-sense moral dilemma he asserts here derives from the attribution of standing to potential, rather than from issues inherent to the domain of actuality. I have earlier examined, in considering a calculus for potential, Thomson's consideration of whether Henry Fonda owes anyone a healing touch on the forehead, and the situation here seems totally analogous; if the injection would immediately bestow the requisite qualities for a right to life, one could still doubt whether one was required to perform the injection. In short, the dilemma does not arise from the attribution of potential.

Finally, one retains the option to simply assert that in an era when such things are really possible, appropriately revised common-sense morality would lead us to conclude that it *is* seriously wrong to refrain from injecting the kittens. Perhaps Tooley could respond that his aforementioned omniscience about what people *would* desire allows him to predict that one would not hold the postulated view!

Tooley continues:

Thirdly,...if it is not seriously wrong to refrain from initiating such a causal process, neither is it seriously wrong to interfere with such a process. Suppose a kitten is accidentally injected with the chemical. As long as it has not yet developed those properties that in themselves endow something with a right to life, there cannot be anything wrong with [interfering] either by injecting the kitten with some 'neutralizing' chemical or simply by killing it.... The point is merely that if it seriously wrong to kill something, the reason cannot be that the thing will later acquire properties that in themselves provide something with a right to life....the potentiality principle is false.

The main objections have already been detailed but here one must point out that Tooley's reasoning is leading him into absurdities. A similar application of his reasoning would have us conclude that it will not be 'seriously' wrong to euthanize a comatose person who has just had a consciousness-restoring operation as long as the effects of the operation have not yet taken effect! Tooley can only appeal to the previously discredited notion that the comatose patient gets standing because he *once* was conscious. He definitely will not appeal to the common-sense notion that the comatose person has the *potential* to return to consciousness!

#### IV.B. Dworkin

Ronald Dworkin, writing two decades later, again in defense of abortion, adopts the same general strategy that Tooley adopts. [16] He presents the positive argument by concluding from his belief that interests derive from the capacity to experience a mental life that:

It makes no sense to suppose that something has interests *of its own*—as distinct from its being important what happens to it—unless it has, or has had, some form of consciousness, some mental as well as physical life.

Here we have a mere bald assertion masquerading as an argument. I can simply reply that, in fact, it makes perfectly good sense to suppose that possession of potential is sufficient to attribute an interest, that is, to attribute standing. As shown in this paper, it is both rational and natural. As before, I can also modify Dworkin's statement to read 'unless it has, has had, or will have, some form of consciousness,' and he gives us no reason to prefer his formulation over mine.

Dworkin provides the obligatory fantastic example:

Imagine that (as some scientists apparently think conceivable) doctors were able to produce a child from an unfertilized ovum, by parthenogenesis (development of an egg without fertilization). Menstruation would still not be against an ovum's interests; a woman who used contraception would not be violating some creature's fundamental right every month.

As described above for Tooley's example, it is not the potential of the ovum that gives rise to the dilemma; it is the issues surrounding whether volitional acts are owed even in the domain of actuality. Furthermore, there are issues of probability involved here that may cause the potential measure for an arbitrarily designated ovum to fall below a reasonable threshold for attributing standing. In other words, the probability of the women being in a situation where that ovum can be harvested, that all the infrastructure and arrangements are in place there to perform the process, that she is willing to undergo the process, that the process actually succeeds, etc., may be so low for a given ovulation that one can reasonably act as if there is no real potential involved. Finally, if all these arrangements *are* made and a menstruation (unfortunately) precludes completion of the plan, is it so unreasonable to say that the ovum's interest has been harmed by the event? Of course, one cannot berate the mother for an involuntary biological event.

Dworkin follows with a highly fanciful example concerning Dr. Frankenstein's monster, but it would be beating a dead horse to give it in its entirety as the salient points have already been made for the previous examples. One additional point, however, does deserve to be made. There is a motivated appeal to emotion in Dworkin's example: his choice of Frankenstein's monster as the subject. This is presumably calculated to ensure that the reader's common-sense reaction will be negative. But suppose we were to substitute for Frankenstein's monster a potential incarnation of another thinker of the stature of Einstein, or a reincarnation of Jesus. It would not then be unreasonable to suppose that our common-sense reaction would now be positive, and that we would judge his example quite differently.

# IV.C. Singer

Peter Singer, in his book *Practical Ethics* [17], raises many interesting issues regarding potential and it appears that he denies the ethical standing of potential, although, as will be seen, that is not so clear-cut. All the quotes below are from the cited book.

Singer's positive argument proceeds as follows:

It is of course true that the potential rationality, self-consciousness and so on of a fetal Homo sapiens surpasses that of a cow or pig; but it does not follow that the fetus has a stronger claim to life. There is no rule that says that a potential X has the same value as an X, or has all the rights of an X. There are many examples that show just the contrary. To pull out a sprouting acorn is not the same as cutting down a venerable oak. To drop a live chicken into a pot of boiling water would be much worse than doing the same to an egg. Prince Charles is a potential King of England, but he does not now have the rights of a king. In the absence of any general inference from 'A is a potential X' to 'A has the rights of an X', we should not accept that a potential person should have the rights of a person...

Singer clearly denies standing to potential here. Of course, it is reasonable for Singer to display skepticism by denying standing to potential in the absence of a general inference scheme, that is, of a formalized calculus for the valuing of potential. But I have de-fanged this objection above by providing just such a calculus. Singer then tries to make things too easy for himself by erroneously assuming that the supporters of potential want to say that 'a potential X has the *same* value as an X.' We say no such thing; the value of potential is appropriately derated, and so Singer's examples above are blows struck on the chin of his own strawman.

If, indeed, Singer totally disavows potential, I have to ask the telling question: how can he give standing to a sleeping person? Certainly, it is not because the person will become awake again, because that is clearly potential. It seems that it can only be because the person *once was awake*. Singer confirms this:

To have a right to life, one must have, or at least at one time have had, the concept of having a continuing existence.

I have already argued that this is irrational. Some additional points can be made: (1) It contradicts Singer's strong position that it is the *current* possession of traits that gives rights, because an appeal is made to past traits. If one can appeal to past traits, why can't one appeal to future traits? (2) It commits him to accepting that euthanasia cannot be acceptable because the potential victim *once had* the requisite traits; but he argues in favor of euthanasia. (3) One would not continue watering a plant just because it once was alive but is now dead. (4) As with Tooley's argument, Singer's qualifier ('or at least at one time have had') could just as well be augmented with 'or at least will have.' He gives us no reason to suppose that this latter qualifier is any less valid. He offers only the lame '[The desires for the future] will still be there when we awake.' This invites the response: 'The desires of a potential sentient will be there when the potential becomes actualized.'

Singer appeals to technical issues in an attempt to demonstrate a *reductio ad absurdum*:

[A given in-vitro fertilization's chances of resulting in a child] is 8%. So if the embryo is a potential person, why are not the egg-and-sperm, considered jointly, also a potential person? Yet no member of the pro-life movement wants to rescue eggs and sperm in order to save the lives of the people that they have the potential to become.

Here we have all the problems described for Tooley's and Dworkin's examples. He attributes problems from the domain of actuality to potential; volitional acts intervene in the actualization of a person from an egg and a sperm. The potential measure for the designated egg and sperm may be too low to attribute standing, as we saw for Dworkin's menstruated ovum; without specifying the circumstances we can't make a proper assessment. I return to this again below. Finally, recognizing some potential there does not commit us to act; a threshold can be crossed. This would be analogous to deciding not to aid a marginally poor person but coming to the aid of a serious destitute.

Singer elsewhere asserts:

Potentiality seems not to be such an all-or-nothing concept; the difference between the eggand-sperm and the embryo is one of degree, related to the probability of development into a person.

Exactly. It is statements such as this that make Singer's views seem ambivalent. What now is the probability below which one might cease to grant the right to life? Perhaps one can take it as approximately the same as that for terminating the life of a comatose person based on her possibility of returning to waking.

Singer now delivers what he takes to be the knockout punch:

[Now speaking of fertilization via micropipette...] So if we compare the probability of the embryo becoming a person with the probability of the egg, together with the single sperm that has been picked up by the needle and is about to be microinjected into the egg, becoming a person, we will be unable to find any sharp distinction between the two. Does that mean that it would be wrong to stop the procedure, once the sperm has been picked up?

Here Singer is careful to set the scene in such a way that the probabilities place the potential measure well above any reasonable threshold. It becomes tedious to keep repeating like a mantra my earlier points, but it has to be done. Volitional acts intervene, just as voluntary sexual intercourse intervenes in nature. Furthermore, even assuming that the problems of the actual domain can be sorted out, it is not so clear that we have to answer Singer's query in the negative. Suppose that the technician had the sperm ready to be injected, had signed papers from the donors that they wanted the child, had taken money from them for that purpose, and the potential parents were anxiously awaiting the conception of their child. It would then be certainly wrong for the technician to stop the procedure without good reason. This simply demonstrates that a proper calculus of potential must allow for the intervention of voluntary acts and for conflicts with other rights.

Let us now look more closely at Singer's ambiguity:

If comatose people have no experiences at all, and can never have any again, their lives have no intrinsic value.... I can see no advantage in survival in a comatose state, if death without recovery is certain.

Singer here apparently acknowledges the importance of potential (potential recovery from comas) and, moreover, asserts a very low threshold (certainty!) for the cutoff point of loss of intrinsic value. Wouldn't Singer the utilitarian balance off the probability of recovery against the costs of maintaining the patient in the comatose state? Furthermore, even if we can determine that, *currently*, a condition certainly offers no prospects, don't we have to acknowledge the non-zero potential that a cure might be developed in time to reverse our judgment?

Singer further writes:

While the fetus prior to 18 weeks may, strictly speaking, be unable to be harmed, if the fetus is allowed to develop into a child, the future child could be very seriously harmed by an experiment that caused the child to be born in a disabled state. Therefore research that allows the fetus to survive beyond 18 weeks does not come under the permissive rule suggested...

This describes a caveat that Singer applies to his permissive rule that it is morally acceptable to experiment on fetuses prior to 18 weeks of age. It seems to acknowledge that the acceptability of the prior-to-18-weeks research is affected by potential, because the salient state of affairs (harm to the future child), at the time the decision must be made, is not actualized. Furthermore, since there is the possibility of the child's spontaneous abortion due to other causes, and the intervention of other volitional acts, it is not possible to assume that harm will be caused with certainty by the research, which precludes one from arguing that it is just a weighing of an actual in advance, and thus a degenerate case of potential.

At the risk of appearing to pour salt on a wound, I cite with minimal comment additional instances of Singer's acceptance of potential.

Education is a particularly important area, since it has an important influence on one's prospects.

In other words, it has an important influence on one's potential.

The only real doubt is whether [affirmative action] will work. In the absence of more promising alternatives it seems worth a try.

In other words, it is reasonable to give standing to affirmative action's potential to improve matters.

[While discussing infanticide of disabled infants...] Another factor to take into account is the possibility of adoption.

At the time a decision is being contemplated, we may not know whether adoptive parents will be found; we have to assess the potential for it.

The possibility that...doctors may make a mistake means that the person who opts for euthanasia is deciding on the balance of probabilities... Probability is the guide of life, and of death, too.

Here Singer simply concedes that the ethical decision involves a balancing of potentials. Finally, Singer's utilitarianism itself seems to require that potential be given standing. There are two possible ways in which one can practically implement his philosophy. One can consider in one's calculations only the actual consequences of acts, or one can take into account the *expected* consequences. [18] Using only actual consequences involves serious difficulties. Humans are not omniscient and they cannot predict all future consequences of their acts. This forces us to conclude that the rightness or wrongness of an act may only be determinable in retrospect. Furthermore, as new consequences unfold, the judgment of an act may oscillate between right and wrong. We would have to go to infinity to be sure that all possible consequences have been considered. Such a philosophy can hardly help us in our practical decisions. In light of such problems, many utilitarians adopt what Slote calls an 'expectabilist' formulation, in which it is the *reasonably expected consequences* at the time a decision is made that matter. Singer seems to endorse this:

[Utilitarianism] requires me to weigh up all these interests and adopt the course of action most likely to maximise the interests of those affected.

The catch is that expectabilism clearly requires the agent to assess the potentials for various events and to weigh and balance them in deciding how to act. Utilitarianism, then, appears to require that ethical standing be attributed to potential.

If Singer, contrary to his stated position, does accept that potential has standing, the onus is on him to show that the potential of the fetus cannot ground its right to life, and its right to be free from unconsenting vivisection. He has not done this, instead preferring to claim that potential has no standing, while elsewhere belying his own words. One is hard-pressed to conclude other than that Singer is motivated by his need to justify his conclusions about bioethical issues.

### V. Conclusion

It has been shown through positive arguments that to deny ethical standing to potential is irrational. It has been shown using examples that in our everyday ethical behavior we give standing to potential. A preliminary calculus of potential that formalizes the notion of standing has been provided. The arguments of anti-potential philosophers have been shown to be seriously deficient. I conclude that the ethical standing of potential cannot be denied.

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