Binary act consequentialism

Johan E. Gustafsson[1,2]

Abstract
According to Act Consequentialism, an act is right if and only if its outcome is not worse than the outcome of any alternative to that act. This view, however, leads to deontic paradoxes if the alternatives to an act are all other acts that can be done in the situation. A typical response is to only apply this rightness criterion to maximally specific acts and to take the alternatives to a maximally specific act to be the other maximally specific acts that can be done in the situation. (This view can then be supplanted by a separate account for the rightness of acts that are not maximally specific.) This paper defends a rival view, Binary Act Consequentialism, where, for any voluntary act, that act is right if and only if its outcome is not worse than the outcome of not doing that act. Binary Act Consequentialism, which dates back to Jeremy Bentham, has few supporters. A number of seemingly powerful objections have been considered fatal. In this paper, I rebut these objections and put forward a positive argument for the view.

Keywords Alternatives · Act consequentialism · Actualism · Maximalism · Minimalism · Deontic logic

Think of all the papers you could be reading instead of this one. Given that competition, this paper is (admittedly) unlikely to be the best. So, if all those papers are among the relevant alternatives to reading this one, you probably shouldn't read on. But, before you leave, let's be honest: If you weren't going to read this paper, you would probably read some similar paper. And there's no reason to expect *that* paper to be any better. So, if the relevant alternative to reading this paper is *not to read this paper*, you might as well stick with this one. These two ways of thinking correspond to Maximalism and Minimalism about alternatives—the very topic of this paper. So, for an informed decision, read on.

✉ Johan E. Gustafsson
   johan.eric.gustafsson@gmail.com
   https://johanegustafsson.net

1 Population Wellbeing Initiative, University of Texas at Austin, Austin, TX 78712, USA

2 Department of Philosophy, University of York, York YO10 5DD, UK

 Springer

It's tempting to include as much information as possible in the alternatives we consider. If we don't, we potentially miss some practically relevant detail. Accordingly, many contemporary act consequentialists accept a maximalist version of Act Consequentialism. They claim that a maximally specific act is right if and only if its outcome is not worse than the outcome of any other maximally specific act that can be done in the situation. (They can then supplant this view with a separate account for the rightness of acts that are not maximally specific.) In this paper, I'll defend the opposite approach: a minimalist version of Act Consequentialism, where, for any voluntary act, that act is right if and only if its outcome is not worse than the outcome of the minimally specific alternative, namely, not to do the act. In defending this unpopular view, I am in excellent company—siding with Jeremy Bentham.

The point of contention between Maximalism and Minimalism is the structure of morally relevant alternatives. Both camps may accept a form of consequentialism which maximizes over *alternative-sets*, sets of voluntary acts that are jointly exhaustive (the agent cannot avoid doing at least one of them) and mutually exclusive (the agent can do at most one of them). The motivation for the joint-exhaustiveness requirement should be obvious: if the agent is able to act so that they do none of the acts in an alternative-set, then it seems that the outcome of doing so is relevant for the consequentialist assessment of the acts in the set.[1] But the motivation for the mutual-exclusivity requirement may be less obvious. That requirement is motivated by the idea that Act Consequentialism is supposed to guide choices between alternative acts. If two alternative acts can be performed jointly, the agent does not face a choice between them—unless, of course, the two alternatives are conceived as *doing the first act and not the second* and *doing the second act and not the first*. But, if the alternatives are conceived in that way, they are mutually exclusive.[2]

With the notion of alternative-sets, we can state Act Consequentialism as follows:

Act Consequentialism
An act x that is in a relevant alternative-set ought to be done if and only if the outcome of x is better than the outcome of every other act in the set.
An act x that is in a relevant alternative-set is right if and only if the outcome of x is not worse than the outcome of any other act in the set.
An act x that is in a relevant alternative-set is wrong if and only if the outcome of x is worse than the outcome of some other act in the set.[3]

If all alternative-sets in a situation are relevant, then Act Consequentialism is riddled by deontic paradoxes. The underlying problem, the Problem of Act Versions, is

---

[1] Bergström 1966, pp. 36–7.

[2] This is a variation of an argument in Bergström 1966, p. 35. Bergström (1966, pp. 34–5) also puts forward another argument for the mutual-exclusivity requirement, but that argument is based on the Principle of Entailment—which we'll reject later on. Since the argument proposed here does not rely on the Principle of Entailment, it also avoids the objections in Carlson 1995, pp. 97–9.

[3] Bergström 1966, p. 11. Timmons (2013, p. 117) states Act and Consequentialism with an added 'and because' clause after 'if and only if'. I choose to leave it out, however, since we may accept the biconditional and still maintain that the normative statuses of acts are justified in some other way. (See, for example, Gustafsson 2021, pp. 264–5.) The justificatory thesis won't matter for our discussion.

that many acts have more specific versions and these specific versions need not have the same outcome as the less specific act.[4] This allows the possibility that an act belongs to multiple alternative-sets such that the act ought to be done if one of these alternative-sets is relevant but the same act in the same situation is wrong (it ought not to be done) if some other of these alternative-sets is relevant.[5] Hence, to avoid such deontic paradoxes given Act Consequentialism, we need a criterion for what alternative-sets are relevant in a situation.

For instance, suppose that {to walk, not to walk} is an alternative-set. And suppose that one can walk in more than one way, for example, talking or not talking. Accordingly, two versions of *to walk* are *to walk and talk* and *to walk and not talk*. So *not to walk* is also in another alternative-set, namely, {to walk and talk, to walk and not talk, not to walk}. Suppose also that *to walk and talk* has a better outcome than *not to walk* and that *not to walk* has a better outcome than *to walk and not talk*. Finally, suppose that, if one were to walk, one wouldn't talk. Then *not to walk* has a better outcome than *to walk*. And, if so, one ought *not to walk* relative to {to walk, not to walk} even though it's wrong *not to walk* relative to {to walk and talk, to walk and not talk, not to walk}.[6]

The maximalist solution to the Problem of Act Versions is that the only relevant alternative-sets are those where the alternatives are maximally specific. (And then normative statuses of acts that are not maximally specific are assessed in some other way. We will consider how this can be done in section 3.1) An act *x* is *maximally specific* if and only if there is no additional voluntary act (that is, no voluntary act that is not entailed by *x*) that the agent can perform jointly with *x* in the situation. According to

> *Maximalism* The relevant alternative-sets in a situation are all alternative-sets in the situation which only contain maximally specific acts.[7]

Let *Maximalist Act Consequentialism* be the combination of Act Consequentialism and Maximalism.

The minimalist solution is, more or less, the opposite of Maximalism. According to

> *Minimalism* The relevant alternative-sets in a situation are all alternative-sets in the situation which only contain an act *x* and the act of not doing *x*.[8]

---

[4] Bergström 1966, pp. 27–8 and Castaneda 1968, p. 142. The name comes from Gustafsson 2014, p. 586.

[5] Bergström 1966, pp. 40–1.

[6] See Carlson 1995, ch. 6 for an overview of the early literature on the Problem of Act Versions. For a discussion of more recent literature on this problem, see Gustafsson 2014 and Smith 2020.

[7] Bergström 1966, p. 44, Goldman 1978, p. 190, Brown 2018, p. 754, and Portmore 2019, p. 126.

[8] Bergström 1966, p. 42.

Given that x is an act, let not-x be the negative act of not doing x.[9] Then we can state Minimalism, more compactly, as the view that the relevant alternative-sets in a situation are the sets $\{x, \text{not-}x\}$ such that x is a voluntary act in the situation.

Let a *maximal alternative-set* be an alternative-set that only includes maximally specific acts.[10] And let a *minimal alternative-set* be an alternative-set that only includes an act and the negative act of not doing that act.[11] Accordingly, Maximalism and Minimalism differ in that, on Maximalism, only the maximal alternative-sets are relevant and, on Minimalism, only the minimal alternative-sets are relevant.

Binary Act Consequentialism is the combination of Act Consequentialism and Minimalism:

> *Binary Act Consequentialism*
> A voluntary act x ought to be done if and only if the outcome of x is better than the outcome of not-x.
> A voluntary act x is right if and only if the outcome of x is not worse than the outcome of not-x.
> A voluntary act x is wrong if and only if the outcome of x is worse than the outcome of not-x.

Binary Act Consequentialism has, for the most part, been neglected. Yet it seems to have been the preferred form of consequentialism for Bentham (and possibly John Stuart Mill).[12] In this paper, I will argue that the standard objections to Binary Act Consequentialism don't work. Moreover, I will put forward a positive argument that Binary Act Consequentialism is the most plausible form of Act Consequentialism.

1 Actualism and possibilism

Binary Act Consequentialism is sometimes discussed under the label 'Actualism', but Actualism and Binary Act Consequentialism are distinct. Frank Jackson and Robert Pargetter define Actualism and Possibilism as follows:

> By *Actualism* we will mean the view that the values that should figure in determining which option is the best and so ought to be done out of a set of options are the values of what *would* be the case were the agent to adopt or carry out the option, where what would be the case includes of course what the agent would simultaneously or subsequently in fact do: the (relevant) value of an

---

[9] Bentham 1970, p. 75, von Wright 1951, p. 2, and Bergström 1966, pp. 24–5. The distinction between positive and negative acts is arbitrary. As Bentham (1970, p. 76; 2010, p. 253) notes, whether an act is positive or negative depends on how it is described. His example is 'get drunk'/'not stay sober' versus 'not get drunk'/'stay sober'.

[10] Bergström 1966, p. 44.

[11] Bergström 1966, p. 42.

[12] The binary interpretation of Bentham is defended in Gustafsson 2018. Note that Mill's (1969, p. 210) Proportionality Criterion doesn't refer to any alternatives to acts, which suggests that an act's consequences should be compared to the consequences of not performing the act.

option is the value of what would in fact be the case were the agent to perform it. We will call the alternative view that it is only necessary to attend to what is possible for the agent, *Possibilism*.[13]

If Actualism is combined with Binary Act Consequentialism, the relevant outcomes for deontically assessing a voluntary act *x* are what would happen if *x* were performed and what would happen if not-*x* were performed. And, if Actualism is combined with Maximalist Act Consequentialism, the relevant outcome for evaluating a maximally specific act *x* is what would happen if *x* were performed and, for each of the other maximally specific acts, what would happen if that act were performed. Accordingly, Actualism doesn't require Binary Act Consequentialism. Nor does Binary Act Consequentialism require Actualism; Binary Act Consequentialism is compatible with Possibilism.

But, given Possibilism, the differences between alternative-sets in a situation play no significant role—in the sense that, if an act *x* is right with respect to one alternative-set in a situation, then *x* is right with respect to any other alternative-set of which it is a member. At least, this is so if Possibilism is understood in the standard way (which is slightly stronger than the above characterization), as the view that acts are evaluated by the value of their *optimal outcomes* (the outcomes of the optimal ways the agent can do the act).[14]

To see this, note that, given Possibilism, the relevant value of the outcome of an act is the same as that of the best of the optimal outcomes of the act's maximally specific versions. So an act *x* belonging to a relevant alternative-set is right, given Possibilism, if and only if there is no act *y* in the alternative-set such that some maximally specific version of *y* has an optimal outcome that is better than all the optimal outcomes of the maximally specific versions of *x*. Consequently, an act *x* belonging to a relevant alternative-set is right, given Possibilism, if and only if some optimal outcome of the maximally specific versions of *x* is no worse than any of the optimal outcomes of any of the maximally specific versions of not-*x*. This will be so regardless of which relevant alternative-sets include *x*.

Accordingly, given Possibilism, both Maximalist and Binary Act Consequentialism agree about the normative status of all maximally specific acts. And both views only prescribe acts that are done in the best possible life still open to the agent. Hence, given Possibilism, the difference between Maximalism and Minimalism doesn't matter. So we will focus on Maximalist and Binary Act Consequentialism combined with Actualism.

---

[13] Jackson and Pargetter 1986, p. 233. Feldman 1975, p. 260 states a form of possibilism and Sobel 1976, p. 196 states actualism, but they not use those labels.

[14] For this standard kind of Possibilism, see Feldman 1975, p. 260, Bergström 1976, p. 136, Sobel 1976, p. 196, Goldman 1978, p. 202, and Jackson and Pargetter 1986, p. 236.

2 The case against minimalism

2.1 The objection from obligation dilemmas

In his seminal discussion of alternative-sets, Lars Bergström levels a number of objections against Binary Act Consequentialism.[15] To illustrate the view, he turns to its most famous partisan, Hamlet—who has three feasible courses of action: the best is to continue to live and marry Ophelia; the second best is not to continue to live (and hence not marry Ophelia); and the worst is to continue to live and not marry Ophelia.[16] Let *b* be to continue to live, and let *o* be to marry Ophelia. We can diagram his situation as follows:[17]


Case One
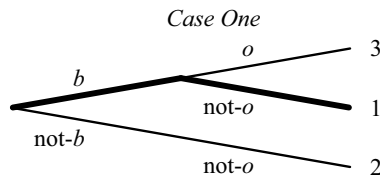
The thick lines denote the course of action that Hamlet will actually end up taking. Hence, if Hamlet were to do *b*, he would also do not-*o*. So the outcome of *b* (value: 1) is worse than the outcome of not-*b* (value: 2). Applying Binary Act Consequentialism to Case One, we find that Hamlet ought to do not-*b*. And, since the

---

[15] Bergström 1966, pp. 42–4; 1971, p. 244.

[16] Shakespeare *Hamlet*; 2006.

[17] Case One and Two are synchronic variations of Jackson and Pargetter's (1986, p. 235) sequential case Professor Procrastinate. (A similar sequential case was put forward in Bergström 1968, pp. 165–6.) A professor gets an invitation to write a review. The professor has a choice at node 1 whether to accept the invitation (act *a*). If the professor accepts, he will later face a choice at node 2 whether to write the review (act *w*). It would be best if the professor did both *a* and *w*, second best if he did neither, and worst if he only did *a*. Representing choice nodes with boxes, we can diagram this sequential decision problem as follows:

Professor Procrastinate
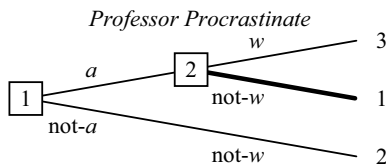
On the one hand, if the professor at node 1 has volitional control over whether he would write at node 2 (that is, *a*, not-*a*, *a*-and-*w*, and *a*-and-not-*w* are all voluntary acts at node 1), then the verdicts of Binary Act Consequentialism at node 1 will be equivalent to those in Case One and Two. That is, that not-*a* and *a*-and-*w* ought to be done and that *a* and *a*-and-not-*w* are wrong. In that case, we get most of the same issues as in Case One which we will discuss in the main text. On the other hand, if the professor at node 1 only has volitional control over whether he will accept the invitation (that is, *a* and not-*a* are the only voluntary acts at node 1), then Binary Act Consequentialism merely implies that not-*a* ought to be done and that *a* is wrong at node 1. In this case, Minimalism and Maximalism are equivalent, so this variation is irrelevant for our present concerns. In both cases, Binary Act Consequentialism implies that *w* ought to be done and that not-*w* is wrong at node 2.

outcome of *o* (value: 3) is better than the outcome of not-*o* (value: 1), he ought to do *o*. And, since he can't do both not-*b* and *o*, Hamlet faces an *obligation dilemma*: each of two mutually exclusive acts ought to be done. Bergström complains that this violates the doctrine that 'ought' implies 'can'.[18]

Yet note that, for each of the things Hamlet ought to do, it's the case that he can do it. So we have no violation of the doctrine that 'ought' implies 'can'. We do, however, have a violation of

> *The Principle of Compatibility of Situation-Identical Prescriptions*   If two acts are mutually exclusive in a situation, then it is not the case that each of these acts ought to be done in that situation.[19]

Erik Carlson, who argues against Binary Act Consequentialism along similar lines as Bergström, defends the principle as follows:

> I believe that a reasonable theory should [...] be 'action-guiding' for an agent with *complete knowledge* of all morally relevant facts in the situation in question. That is, if T is a moral principle, *P* should be able to use T as a decision-making procedure in *S*, provided that she knows everything that is relevant, according to T, to what she ought to do in *S*. If a theory violates [the Principle of Compatibility of Situation-Identical Prescriptions] it does not satisfy this criterion, since it yields inconsistent prescriptions. Being told both to do *a* and to do [not-*a*], in the same situation, does not help one in deciding what to do.[20]

But fulfilling an obligation is not the only way to avoid violating an obligation; another way is to stop it from being an obligation. If Hamlet knows the morally relevant facts in Case One, he can figure out how to get out of the obligation to do not-*b*.[21] He could figure out that, if he were to take his best course of action and do *b*-and-*o*, he would do everything he ought to do. This is because it would then be the case that, if he were to do *b*, he would do *o*. And then the outcome of *b* would be better than the outcome of not-*b*, and the outcome of *o* would be better than the outcome of not-*o*.[22] So it wouldn't be the case that not-*b* ought to be done. In this way, Binary Act Consequentialism can guide Hamlet so that he avoids failing to do

---

[18] Bergström 1966, p. 43.

[19] Carlson 1995, p. 95.

[20] Carlson 1995, p. 101; see also Carlson 1995, p. 128.

[21] It may be objected that, if it's a morally relevant fact that not-*o* would be done if *b* were done, then Hamlet must know that he won't do *b*-and-*o* if he knows all morally relevant facts. But, if Hamlet knows that he won't do *b*-and-*o*, it's hard to see how any action guidance recommending him to do *b*-and-*o* could be successfully incorporated in his practical deliberation while he possesses that knowledge. Even so, Hamlet can still figure out that the only way he could act so that he wouldn't do anything wrong in this situation is to do *b*-and-*o*. The recommendation that he ought to do *b*-and-*o* seems sound in this case. So the trouble is not that Hamlet doesn't get any action guidance; the trouble is that he knows that he won't follow this guidance. But that is a fault of the advisee—not the advise.

[22] This is assuming that there would be no further changes to the available courses of action if agents were to act otherwise than they actually do. Admittedly, this standard assumption may be challenged. Yet giving it up would also have strange implications for action-guidance if we include more specific alternatives in the alternative-set. See note 27.

what he ought to do, even when the things he ought to do are mutually exclusive. Hence the action-guidance argument for the Principle of Compatibility of Situation-Identical Prescriptions is unconvincing.

2.2 The objection from normative variance

This response to the Objection from Obligation Dilemmas shows, however, that Binary Act Consequentialism violates

> *The Principle of Normative Invariance*   If an act is voluntary in a situation, then the normative status of this act does not depend on what acts are done in the situation.[23,24]

Carlson argues that his action-guidance criterion also supports the Principle of Normative Invariance:

> Theories that violate [the Principle of Normative Invariance] do not satisfy this criterion either, since they include facts about what *P will* do in *S* among the morally relevant facts. Full knowledge of the relevant facts hence presupposes at least partial knowledge of what *P* will do in *S*. *P*'s having such knowledge, however, is incompatible with her *making decisions* or *deliberating* about what to do in *S*. It is conceptually impossible to deliberate about what to do in a certain situation, if you already know what you will do in this situation.[25]

But, in order to use Binary Act Consequentialism as a practical guide in Case One, all Hamlet needs to know is the outcome of the various feasible courses of action—that is, the outcomes of the various feasible combinations of acts. He doesn't need to know what he will do in the situation, because he could know that, if he were to perform a combination of acts which would be optimal in the situation, he wouldn't do anything wrong in that situation on Binary Act Consequentialism.[26] So it seems

---

[23] See Prichard, 1932, p. 26 and Carlson 1995, p. 101. Yet most of the proposed solutions to the Problem of Act Versions also violate this principle—in fact, even Carlson's 1995, pp. 102–3; 1999, p. 258) own proposal does so; see Bykvist 2002, pp. 61–4; 2007. A possible exception is the combinative consequentialism proposed in Gustafsson 2014, pp. 593–5.

[24] On a subjective version of consequentialism, the normative status of an act doesn't depend on what would happen if the act were done, only on the agent's predictions about what would happen if the act were done. So a subjective version instead violates a subjective variant of the Principle of Normative Invariance, such as

> *The Principle of Subjective Normative Invariance*   If an act is voluntary in a situation, then the normative status of this act does not depend on the agent's predictions about what acts will be done in the situation.

[25] Carlson 1995, p. 101.

[26] To see this, assume, for proof by contradiction, that he still did some act *x* that was wrong. Then, if he were to do not-*x*, he would have performed a combination of acts with a better outcome than the combination he actually performed, which contradicts that the combination of acts he actually performed was optimal. This result makes Binary Act Consequentialism and the combinative consequentialism defended

that normative variance does not rule out action guidance.[27] The practical guidance from Binary Act Consequentialism is provided by all of its deontic verdicts, rather than each individual verdict.

2.3 The objection from normative inconsistency

In a second example, Hamlet has, yet again, three feasible courses of action: the best is to marry Ophelia; the second best is not to marry (and hence not to marry Ophelia); and the worst is to marry but not marry Ophelia, that is, to marry someone else. Again, let o be to marry Ophelia, and let m be to marry. Hamlet faces the following decision:

Case Two
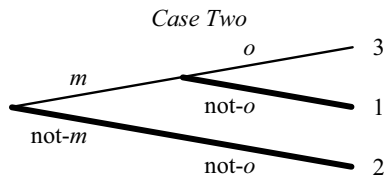
The lower thick line denotes that Hamlet will actually do not-m and not-o. The upper thick line denotes that, if Hamlet were to do m, he would do not-o. Since the outcome of m (value: 1) is worse than the outcome of not-m (value: 2), we find that Hamlet ought to do not-m. And, since the outcome of o (value: 3) is better than the outcome of not-o (value: 2), he ought to do o. Bergström claims that 'the conclusions that Hamlet ought to marry Ophelia and that he ought not to marry are surely inconsistent.'[28] Here, Bergström seems to rely on

> *The Principle of Entailment* If x and y are voluntary acts in the same situation and doing x entails doing y, then y ought to done if x ought to be done.[29]

Hamlet's marrying Ophelia entails Hamlet's marrying; so, if Hamlet ought to marry Ophelia, Hamlet ought to marry. But the Principle of Entailment is implausible given Actualism and Act Consequentialism. In Case Two, it seems that m-and-o ought to be done on any plausible version of Act Consequentialism. And, if m-and-o ought to be done, the Principle of Entailment entails that m ought to be done. But, given Actualism and Act Consequentialism, it's not clear that m ought to be done,

---

Footnote 26 (Continued)

in Gustafsson 2014, pp. 593–5 practically equivalent in the sense that one will do something wrong on one of these theories if and only if one does something wrong on the other.

[27] There is no guarantee, however, that there will be an act such that, if it were done, its outcome wouldn't be worse than the outcome of some alternative act. For some examples of cases where this doesn't hold, see Gustafsson 2019, pp. 195–7. Such cases are equally problematic for Maximalist Act Consequentialism as for Binary Act Consequentialism. So they aren't decisive for our current discussion.

[28] Bergström 1966, p. 43.

[29] Anderson 1966, p. 183, Bergström 1976, p. 139, and Jackson 1985, p. 178.

as *m* has the worst outcome in the situation.[30] And, without the Principle of Entailment, Binary Act Consequentialism need not yield any obligation dilemmas of the form that both *x* ought to be done and not-*x* ought to be done.

2.4 The objection from plurality

Bergström argues in addition that

> the criterion does not help us to decide which alternative-set is relevant for a given person in a given situation, and this is especially serious if the relevant alternative-sets of different actions (which are performable by the person in the situation) are sometimes [normatively inconsistent]. For example, what *are* the alternatives open to Hamlet in the situation in question? Some further criterion is surely needed to answer this question.[31]

The problem for Binary Act Consequentialism, in other words, is that it seems to require a separate criterion for determining which minimal alternative-set is the relevant one in a situation. This objection assumes, however, that there has to be a single relevant alternative-set for an agent in a situation (or, if there are many, that they would all be practically equivalent). But there seems to be no reason to accept this assumption. There is, of course, a unique set of all acts available to the agent in a situation. But, due to the Problem of Act Versions, that set is not an alternative-set. To get guidance on how to behave given that set of available acts, we do not need to single out one alternative-set as the relevant one. We can instead apply Binary Act Consequentialism to all minimum alternative-sets. And then there's no need for a criterion that singles out one of them.

2.5 The objection from arbitrariness

Bergström levels one final charge against Binary Act Consequentialism, writing:

> it seems entirely arbitrary to postulate that only minimum alternative-sets are relevant. Suppose, for example, that {to commit suicide, to kill the king and marry Ophelia, to kill the king and not marry Ophelia, to marry Ophelia and not kill the king, to do none of these actions} is an alternative-set for Hamlet in the situation in question. As far as I can see this alternative-set would then be at least as relevant as any minimum alternative-set in Hamlet's case. Besides, if Hamlet ought not to commit suicide relative to this set, then it seems that {to commit suicide, not to commit suicide} is *not* a relevant alternative-set if he ought to commit suicide relative to this latter set; in other words, there is not merely one alternative to committing suicide in Hamlet's case.[32]

---

[30] Bergström (1976, p. 140) offers much the same objection.

[31] Bergström 1966, p. 43.

[32] Bergström 1966, p. 43.

There are two objections here. The first is that it seems arbitrary that only minimal alternative-sets would be relevant.

Regarding this first objection, it seems that Bergström is right that a maximal alternative-set would be less arbitrary as *the* relevant alternative-set in this situation than any individual minimal alternative-set. As we have noted, however, Minimalism states that all minimal alternative-sets in a situation are relevant, not just one of them. And an approach that just takes the relevant alternative-sets to be all minimal alternative-sets would be no more arbitrary than an approach that takes the relevant alternative-set to be all maximal alternative-sets.

Perhaps a less arbitrary approach would be to regard both of these kinds of alternative-sets as relevant. Jackson and Pargetter defend an ecumenical approach in this vein. They adopt Maximalism for questions about what one ought to do at a certain time, and Minimalism for questions about whether or not to do a certain act.[33] Yet this leads to strictly incompatible prescriptions in Case One. In that case, it seems that the set {*b*-and-*o*, *b*-and-not-*o*, not-*b*} is a maximally specific alternative-set. Maximizing over this set, we find that not-*b* is wrong, because the outcome of not-*b* (value: 2) is worse than the outcome of *b*-and-*o* (value: 3). But, according to Minimalism, not-*b* is not wrong—because the outcome of not-*b* (value: 2) is better than the outcome of *b* (value: 1). Hence we find that not-*b* is both wrong and not wrong, which is clearly inconsistent.[34] Given that the ecumenical approach doesn't work, we have to make a choice; and neither Minimalism or Maximalism seems any more arbitrary than the other.

Bergström's second objection here is that, if {*b*-and-*o*, *b*-and-not-*o*, not-*b*} is an alternative-set in Case One and not-*b* ought not to be done relative to that set while not-*b* ought to be done relative to the alternative-set {*b*, not-*b*}, then the latter set can't be relevant. Presumably, this is because the more specific alternative-set takes more information into account and thus that its recommendations have stronger support. But, like the first objection, this objection only seems to work against the view that {*b*, not-*b*} would be the only relevant alternative-set in Case One. While to *b* or to not-*b* is a relevant question, that is not *the* relevant question. The idea behind Binary Act Consequentialism is, as mentioned, that *all* minimal alternative-sets with voluntary acts are relevant in a choice situation. Hence the additional detail in the more specific set which is missing in {*b*, not-*b*} will be present in some other relevant minimal alternative-set in the situation. Moreover, we can explain why Hamlet does something wrong if he were to do not-*b*, namely, not-both-*b*-and-*o*, which is wrong according to Binary Act Consequentialism.

[33] Jackson and Pargetter 1986, p. 251.

[34] It may be objected that we could avoid inconsistency if we treated the oughts related to these questions as two logically distinct oughts—that is, ought-to-do-now and ought-to-do. But then it seems that we get two instances of the arbitrariness worry. Why adopt Minimalism, rather than Maximalism, for ought-to-do? And why adopt Maximalism, rather than Minimalism, for ought-to-do-now?

2.6 The objection from obligatory suboptimal acts

Jacob Ross puts forward the following, alleged, counter-example to Binary Act Consequentialism:

> Absentminded Ace is looking after his three-year-old granddaughter Emily, who asks him for a glass of water. As a matter of fact, Ace is about to accidentally give Emily a glass containing an arsenic solution. When he does so, she will drink the contents of the glass and die. Ace has many options besides giving Emily the arsenic. He could instead give her a glass of water as she requested. Or he could give her a glass of Drano, or a glass of bleach, or a glass of ammonia. If he were to give her glass of water, she would drink it and be happy. If, on the other hand, he were to give her a glass of Drano, bleach, or ammonia, then while she would not drink enough of the liquid for it to be fatal, she would drink enough to suffer severe and irreversible damage to her mouth and esophagus.[35]

Let a, w, d, b, and m be to give Emily arsenic, water, Drano, bleach, and ammonia respectively. We can then diagram the example as follows:

Case Three
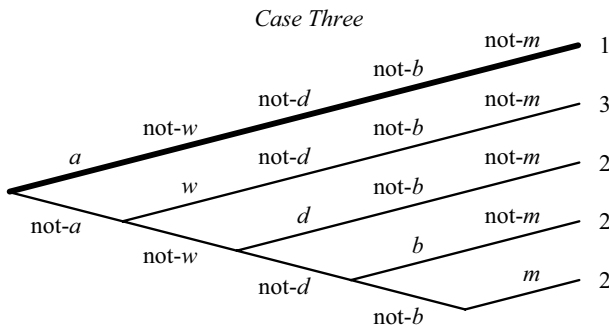
Here, Binary Act Consequentialism yields, among other things, that d ought to be done, that b ought to be done, and that m ought to be done. Ross has two problems with this result, which follows from the combination of Binary Act Consequentialism and Actualism. The first is the implication that awful acts ought to be done:

> First, there are many cases where it implies that agents ought to do really awful things: for any action ϕ, no matter how bad ϕ is, actualism entails that one ought to ϕ so long as ϕ-ing isn't quite as bad as what one actually does.[36]

---

[35] Ross 2012, p. 75. See Norcross 2005, pp. 165–7 for a similar objection to the counterfactual view of harm.

[36] Ross 2012, pp. 75–6.

This worry would be a problem if agents only considered acts in isolation. But a conscientious agent takes, I think, everything they ought to do into account and seeks to act so that they wouldn't fail to do anything they ought to do. The only way to avoid failing to do what one ought to do in Case Three is to do *w*—that is, to give Emily water, the act with the best outcome in the situation. Hence, if one does any of the awful acts that worry Ross, then one will do something wrong according to Binary Act Consequentialism—because one will thereby do not-*w*, which is guaranteed to have a worse outcome than *w*. Hence, as not-*w* is guaranteed to be wrong, one must do *w* to avoid wrongdoing on Binary Act Consequentialism.

Nevertheless, it may seem implausible that the agent does anything they ought to do if they do something suboptimal, like *d*, even granting that the agent fails to do everything they ought to do in the situation. Note, however, that this is mostly due to fact that the agent will do something wrong and that we have combined Binary Act Consequentialism with Actualism. Maximalism combined with Actualism will have much the same implications in sequential cases. To see this, consider the following sequential variant of Case Three (dropping the superfluous bleach and ammonia), where the agent first has a choice whether to do *d* or to do not-*d* and, if the agent does not-*d*, they will face a second choice whether to do *a* or to do *w*:[37]

Case Four
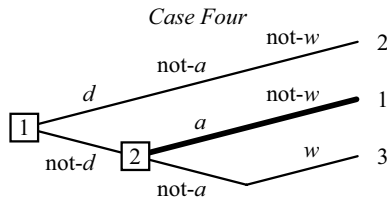
The boxes represent the two choice nodes, where node 2 is only reached if the agent goes down at node 1. At node 1, the agent has no control of what they would do at node 2. But the thick line denotes that, if the agent were to reach node 2, they would go up—that is, they would wrongly do *a*-and-not-*w* at that node. Let us assume that {*d*-and-neither-*a*-nor-*w*, (not-*d*)-and-either-*a*-or-*w*} is a maximally specific alternative-set at node 1 and that {*a*-and-not-*w*, *w*-and-not-*a*} is a maximally specific alternative-set at node 2. Then, given Maximalism and Actualism, Act Consequentialism entails that *d*-and-neither-*a*-nor-*w* ought to be done at node 1. This recommendation of *d*-and-neither-*a*-nor-*w* in Case Four is analogous to the recommendation of *d* in Case Three. In both cases, *d* (or, the practically equivalent, *d*-and-neither-*a*-nor-*w*) ought to be done because of the combination of Actualism and the fact that *a* would be done if the agent does not-*d*. If Maximalism and Minimalism were each combined with Possibilism, then these views would no longer entail that any suboptimal

---

[37] This case is structurally the same as Professor Procrastinate; see note 17.

acts ought to be done. So this objection is better thought of as an objection to Actualism than as an objection to Binary Act Consequentialism.

Ross's second worry is the implication that agents ought to do too many things in Case Three:

> In addition to implying that agents ought to do really awful things, there are simply too many things that actualism entails one ought to do. If there are a million options that are less bad than what one actually does, then actualism will entail, for each of these options, that one ought to do it.[38]

This second worry seems to be a version of Bergström's worry about obligation dilemmas, which we discussed in section 2.1. Accordingly, much the same reply applies. Regarding this worry (that Binary Act Consequentialism entails that two or more mutually exclusive acts ought to be done), this would be a problem if the only way to avoid violating a certain obligation was to do what the obligation prescribes. But there is, as mentioned earlier, another way to avoid violating an obligation, namely, to act so that it wouldn't be an obligation. If one were to do *w* in Case Three, it would no longer be the case that the awful acts that worry Ross ought to be done.

3 The case for minimalism

3.1 The argument from deontic logic

The standard objections to Binary Act Consequentialism are, I have argued, unconvincing. Still, we haven't heard any argument *for* the view. There is, however, at least one positive argument in favour of Binary Act Consequentialism over Maximalist Act Consequentialism. The argument is based on some basic principles of deontic logic.

The following seem analytic:

(1) An act *x* ought to be done if and only if not doing *x* is wrong.
(2) An act *x* ought not to be done if and only if *x* is wrong.

These principles, which link the normative status of an act and that of the corresponding negative act, were noted by Bentham.[39] They seem analytic given the

---

[38] Ross 2012, p. 76.

[39] Bentham 2010, pp. 252–3. Yet these principles were already known in the fourteenth century. See Knuuttila, 1981 p. 236.

meaning of our ordinary notions of oughtness (moral obligation) and wrongness.[40] In the terminology of negative acts, (1) and (2) translate to the following:[41]

(3) An act x ought to be done if and only if not-x is wrong.
(4) An act not-x ought to be done if and only if x is wrong.

Act Consequentialism aims to provide an account of oughtness and wrongness in their ordinary senses. And, for these ordinary senses of oughtness and wrongness, (1)–(4) seem to hold.

(Note that I'm not claiming that Act Consequentialism aims to provide an account of our ordinary, common-sense ideas about oughtness and wrongness. In common-sense thinking and morality, oughtness and wrongness have implications for blameworthiness and other notions that are alien to consequentialist ethics. Binary Act Consequentialism will do no better than Maximalist Act Consequentialism in accounting for such ideas. What I do appeal to is the logical structure that seems analytic for our ordinary notions of oughtness and wrongness.)

Now, suppose that Act Consequentialism is applied to a single non-minimal alternative-set. And let x be an act in that alternative-set. Of two complementary acts (x and not-x), only one can be an alternative in that set, because the alternatives in a single alternative-set need to be mutually exclusive. So not-x is not in the alternative-set.

If x is uniquely optimal in the alternative-set to which we apply Act Consequentialism, then, plausibly, x ought to be done in the ordinary sense. And, if x ought to be done in the ordinary sense, then (3) entails that not-x is wrong in the ordinary sense. Yet, since not-x isn't in the alternative-set to which we apply Act Consequentialism, we can't get a non-derivative Act-Consequentialist account of the wrongness of not-x.

Likewise, if x is suboptimal in the alternative-set to which we apply Act Consequentialism, then x is, plausibly, wrong in the ordinary sense. But, if x is wrong in the ordinary sense, then (4) entails that not-x ought to be done in the ordinary sense. Yet, since not-x isn't in the alternative-set to which we apply Act Consequentialism, we can't get a non-derivative Act-Consequentialist account of the oughtness of not-x.

---

[40] These principles, however, rule out that there could be *prohibition dilemmas*—that is, situations where all alternatives are wrong—that are not obligation dilemmas. Given these principles, this would be a distinction without a difference. This conflicts with Vallentyne's (1989) claim that prohibition dilemmas are possible but obligation dilemmas are impossible. Vallentyne's (1989, p. 305) argument assumes, however, that what ought to be done is by definition permissible, which is questionable if prohibition dilemmas are possible.

[41] In deontic logic, either oughtness (obligation) or wrongness (non-permission) is typically defined in this manner in terms of the other. See, for example, Hansson 1969, p. 374. von Wright (1951, p. 4) and Føllesdal and Hilpinen (1971, p. 8) define 'x ought to be done' in terms of 'not-x is not permitted' (rather than 'not-x is wrong'), which is less plausible. It seems to me that (i) *that x ought to be done* is synonymous with (ii) *that not-x is wrong*, rather than (iii) *that not-x is not permitted*; see Gustafsson 2020, p. 121. If moral error theory is true, then (i) and (ii) are both false but (iii) is true; see Olson 2011, pp. 69–70 and Gustafsson 2020, p. 119.

Hence, if Act Consequentialism is applied to a single non-minimal alternative-set, it cannot provide a non-derivative account of the oughtness and wrongness of each of two complementary acts, which is needed to account for (1)–(4) since (as seems plausible) they hold for the ordinary senses of oughtness and wrongness. So then non-minimalist forms of Act Consequentialism would fail to give an account of the oughtness or wrongness (in their ordinary senses) of some acts. This makes these forms of Act Consequentialism either less general (they fail to give an account of the oughtness or wrongness of some acts that are wrong or ought to be done) or less unified (they rely on some other account for the oughtness or wrongness of acts that are not maximally specific) compared to Binary Act Consequentialism.

Given Maximalism, the standard way to account for the normative statuses of acts that aren't in any relevant alternative-set is to introduce a derivative, prerequisite sense of rightness, wrongness, and oughtness—along the lines of the following:[42]

A voluntary act *x ought to be done in the prerequisite sense* if and only if one cannot act so that one does everything one ought to do in the ordinary sense without doing *x*.

A voluntary act *x* is *right in the prerequisite sense* if and only if one can do *x* and still act so that one does everything one ought to do in the ordinary sense.

A voluntary act *x* is *wrong in the prerequisite sense* if and only if *x* is not right in the prerequisite sense.

But the move to prerequisite senses of oughtness and wrongness cannot help account for the implication of (1)–(4) that, if *x* has a normative status in the ordinary, non-prerequisite sense, then not-*x* has one too.

Perhaps one could amend the non-minimal approach by adding the claim that acts that ought to be done (or are wrong) in the prerequisite sense also ought to be done (or are wrong) in the ordinary sense. But this move yields a splintered account of the normative statuses of acts. If, for example, two acts are wrong in the same sense, it would be weird if we had two very different accounts for why they are wrong— if one act was wrong in the standard consequentialist way by being a suboptimal member of a relevant alternative-set and the other act was wrong in the derivative way by being wrong in the prerequisite sense (which, moreover, seems to depart from the consequentialist tenet that an act should be morally assessed based on its consequences).[43]

---

[42] See, for example, Bergström 1976, p. 140; 1977, p. 138, Carlson 1995, p. 142, Goldman 1978, pp. 190–1, and Bykvist 2002, p. 57.

[43] One approach that may get around the splintered-account problem is Combinative Consequentialism, put forward in Gustafsson 2014, pp. 593–5. This approach applies maximizing consequentialism to the set of all exhaustive combinations of acts such that, for each combination, one can jointly perform all and only those acts in the combination. Then one can adopt a prerequisite account for the normative status of individual acts. This approach may get around the splintered-account problem since there's only one kind of account for normative status of individual acts and only one account for the normative status of the exhaustive combinations of acts. Combinative Consequentialism, however, departs from Act Consequentialism.

So, to avoid these problems, it must be that, if an act x is in a relevant alternative-set, then not-x is in a relevant alternative-set too. This still doesn't give us Binary Act Consequentialism. The remaining possibility is that x and not-x are in different relevant alternative-sets. That is, x is in a relevant alternative-set with several versions of not-x,

$A = \{x, a_1\text{-and-not-}x, a_2\text{-and-not-}x, ...\},$

and not-x is in a relevant alternative-set with several versions of x,

$B = \{\text{not-}x, b_1\text{-and-}x, b_2\text{-and-}x, ...\}.$

This, however, would require some implausible restrictions on the value of the outcomes of the acts in these sets. It can't be that some alternative to x in A has a better outcome than some alternative to not-x in B while some alternative to not-x in B has a better outcome than some alternative to x in A. For instance, it can't be the case that $b_2\text{-and-}x$ has a better outcome than $a_1\text{-and-not-}x$ while $a_2\text{-and-not-}x$ has a better outcome than $b_1\text{-and-}x$.

To see this, suppose that, if you were to do x, then you would, more specifically, do $b_1\text{-and-}x$. Then x is wrong, since x would have the same outcome as $b_1\text{-and-}x$ which has a worse outcome than an alternative in A, namely, $a_2\text{-and-not-}x$. Suppose further that, if you were to do not-x, then you would, more specifically, do $a_1\text{-and-not-}x$. Then not-x is wrong, since not-x would have the same outcome as $a_1\text{-and-not-}x$ which has a worse outcome than an alternative in B, namely, $b_2\text{-and-}x$. Given that A and B are both relevant alternative-sets, x is wrong and not obligatory, as x is suboptimal in set A, and not-x would also be wrong and not obligatory, as not-x is suboptimal in set B. So we have a violation of each of (1)–(4).

To avoid this problem, we need both x and not-x to be in the same relevant alternative-set. And, if x and not-x are in the same alternative-set, there can't be any further acts in the set, since the acts in an alternative set need to be mutually exclusive. Hence we need to adopt Binary Act Consequentialism if we adopt Actualism and Act Consequentialism.

Declarations

References

Anderson, A. R. (1966). The formal analysis of normative systems. In N. Rescher (Ed.), *The logic of decision and action* (pp. 147–213). Pittsburgh: University of Pittsburgh Press.

Bentham, J. (1970). *An introduction to the principles of morals and legislation*. Burns, J. H., & Hart, H. L. A. (Eds.), The collected works of Jeremy Bentham. London: Athlone.

Bentham, J. (2010). *Of the limits of the penal branch of jurisprudence*. P. Schofield (Ed.), The collected works of Jeremy Bentham. Oxford: Clarendon Press.

Bergström, L. (1966). *The alternatives and consequences of actions: An essay on certain fundamental notions in teleological ethics*. Stockholm: Almqvist & Wiksell.

Bergström, L. (1968). Alternatives and utilitarianism. *Theoria, 34*, 163–170.

Bergström, L. (1971). Utilitarianism and alternative actions. *Noûs, 5*(3), 237–252.

Bergström, L. (1976). On the formulation and application of utilitarianism. *Noûs, 10*(2), 121–144.

Bergström, L. (1977). Vilken handlingsutilitarism är den riktiga? In A.-M. Henschen-Dahlquist (Ed.), *Filosofiska smulor tillägnade Konrad Marc-Wogau 75 år, 4 April 1977* (pp. 128–142). Uppsala: Uppsala University.

Brown, C. (2018). Maximalism and the structure of acts. *Noûs, 52*(4), 752–771.

Bykvist, K. (2002). Alternative actions and the spirit of consequentialism. *Philosophical Studies, 107*(1), 45–68.

Bykvist, K. (2007). Violations of normative invariance: Some thoughts on shifty oughts. *Theoria, 73*(2), 98–120.

Carlson, E. (1995). *Consequentialism reconsidered*. Dordrecht: Kluwer.

Carlson, E. (1999). Consequentialism, alternatives, and actualism. *Philosophical Studies, 96*(3), 253–268.

Castaneda, H.-N. (1968). A problem for utilitarianism. *Analysis, 28*(4), 141–142.

Feldman, F. (1975). World utilitarianism. In K. Lehrer (Ed.), *Analysis and metaphysics* (pp. 255–271). Reidel.

Føllesdal, D., & Hilpinen, R. (1971). Deontic logic: An introduction. In R. Hilpinen (Ed.), *Deontic logic: Introductory and systematic readings* (pp. 1–35). Dordrecht: Reidel.

Goldman, H. S. (1978). Doing the best one can. In A. I. Goldman & J. Kim (Eds.), *Values and morals* (pp. 185–214). Dordrecht: Reidel.

Gustafsson, J. E. (2014). Combinative consequentialism and the problem of act versions. *Philosophical Studies, 167*(3), 585–596.

Gustafsson, J. E. (2018). Bentham's binary form of maximizing utilitarianism. *British Journal for the History of Philosophy, 26*(1), 87–109.

Gustafsson, J. E. (2019). Is objective act consequentialism satisfiable? *Analysis, 79*(2), 193–202.

Gustafsson, J. E. (2020). Permissibility is the only feasible deontic primitive. *Philosophical Perspectives, 34*(1), 117–133.

Gustafsson, J. E. (2021). Utilitarianism without moral aggregation. *Canadian Journal of Philosophy, 51*(4), 256–269.

Hansson, B. (1969). An analysis of some deontic logics. *Noûs, 3*(5), 373–398.

Jackson, F. (1985). On the semantics and logic of obligation. *Mind, 94*(374), 177–195.

Jackson, F., & Pargetter, R. (1986). Oughts, options, and actualism. *The Philosophical Review, 95*(2), 233–255.

Knuuttila, S. (1981). The emergence of deontic logic in the fourteenth century. In R. Hilpinen (Ed.), *New studies in deontic logic: Norms, actions, and the foundations of ethics* (pp. 225–248). Dordrecht: Reidel.

Mill, J. S. (1969). *Essays on ethics, religion and society*. J. M. Robson (Ed.), Collected works of John Stuart Mill (Vol. 10). Toronto: University of Toronto Press.

Norcross, A. (2005). Harming in context. *Philosophical Studies, 123*(1–2), 149–173.

Olson, J. (2011). In defense of moral error theory. In M. Brady (Ed.), *New waves in metaethics* (pp. 62–83). Basingstoke: Palgrave Macmillan.

Portmore, D. W. (2019). *Opting for the best: Oughts and options*. New York: Oxford University Press.

Prichard, H. A. (1932). *Duty and ignorance of fact*. London: Humphrey Milford.

Ross, J. (2012). Actualism, possibilism, and beyond. In R. Shafer-Landau (Ed.), *Oxford studies in normative ethics* (Vol. 2, pp. 74–96). Oxford: Oxford University Press.

Shakespeare, W. (2006). *Hamlet*. A. Thompson & N. Taylor (Eds.), Arden Shakespeare, Third series. London: Thomson Learning.

Smith, H. M. (2020). Alternatives. In D. W. Portmore (Ed.), *The Oxford handbook of consequentialism* (pp. 113–138). New York: Oxford University Press.

Sobel, J. H. (1976). Utilitarianism and past and future mistakes. *Noûs, 10*(2), 195–219.

Timmons, M. (2013). *Moral theory: An introduction* (2nd ed.). Lanham: Rowman & Littlefield.

Vallentyne, P. (1989). Two types of moral dilemmas. *Erkenntnis, 30*(3), 301–318.

von Wright, G. H. (1951). Deontic logic. *Mind, 60*(237), 1–15.