It has been 38 years since Judith Jarvis Thomson published her looping trolley counterexample to the moral doctrine known as the Doctrine of Double Effect (DDE). This is a variant of the Trolley Problem where Thomson argues it would be permissible to divert a trolley away from five people and onto one, but DDE seems to imply that it would be impermissible (Thomson 1985, pp. 1402-3).

Although Thomson’s counterexample has been influential, DDE remains a commonly accepted doctrine among moral philosophers. Proponents of the doctrine have sought to solve their “Looping Trolley Problem,” as I shall call it, in two ways. The first way is embodied by Frances Kamm’s argument that you could permissibly divert the trolley in the looping trolley scenario (Loop) consistently with her Doctrine of Triple Effect (DTE), which may, as I shall argue, be understood as a version of DDE (Kamm 2007). The second way has been to argue that Thomson’s argument in favor of diverting in Loop relies on problematic intuitions (see, e.g., McMahan 2009, p. 359; Otsuka 2009, p. 108; Liao et al. 2012).

In this essay I argue that both of these attempted solutions fail. I argue that the action-theoretic underpinnings of Kamm’s application of DTE to Loop are unsound, and that if they were sound, their soundness would intensify the “closeness” problem for DDE in previously unappreciated ways. And I give an argument for the permissibility of diverting in Loop that does not rely on the intuitions that proponents of the second solution criticize. In the process I present a novel variant of Loop where I argue that DDE generates a moral dilemma, implying both that you must and that you must not divert.

The upshot of these arguments is meant to be that DDE succumbs to its Looping Trolley Problem. Thomson’s alleged counterexample is a genuine one, as is the novel counterexample that I present en route to showing that it is so.

1 DDE and its Looping Trolley Problem

1.1 DDE

There are many formulations of DDE. In an important respect, classical formulations are stronger than many contemporary formulations. Classical formulations categorically forbid intentionally causing certain harms like the death of an innocent person while maintaining that it can be permissible to perform actions
or omissions which are merely expected to result in the same harms (Aquinas, ST, II-II, Q. 64, Art 7; Connell 1976, pp. 1020-2). By contrast, many contemporary formulations merely maintain that intentionally causing harm is harder to justify than performing actions or omissions with merely expected harmful consequences (e.g., Nagel 1980, pp. 129-30; Delaney 2007, p. 103; Delaney 2008, pp. 335-6; Quinn 1989, p. 335). Both types of the doctrine derive their name (“Double Effect”) from the distinction they draw between intended and merely expected effects of actions, where “merely expected” means expected but not intended.

In this essay, when I refer to DDE, I will be referring to the weaker formulations mentioned above. I will define DDE as follows:

**DDE:** Intentionally causing harm is harder to justify than performing actions or omissions that one merely expects to cause harm.

Nonetheless, my discussion will follow much of the recent literature by focusing on examples where classical and contemporary formulations of DDE issue the same judgments, at least according to the bulk of their proponents. Thus, if I can show that these judgments are incorrect, I will have raised problems for both classical and contemporary formulations. That will be my ambition.

The current popularity of DDE may reflect its ability to corroborate widely held intuitions about variants of the Trolley Problem. Consider first the *Standard Trolley* variant of that problem:

**Standard Trolley:** a runaway trolley is headed toward five workmen who are stuck on the tracks. It will kill them unless you divert it onto a sidetrack where it will kill one workman who is stuck there. Plausibly, if you divert, you do not thereby express an intention to harm the workman on the sidetrack. Diverting would be a sufficient means of saving the five even if he was not on the sidetrack. As a result, proponents of DDE standardly maintain that you act permissibly in diverting. For you do not intend harm and the expected benefits outweigh the expected harms. By contrast, consider *Bridge*.

**Bridge:** unless you push a large man off a bridge and into the path of a runaway trolley it will hit five workmen who are stuck further down the track.

Proponents of DDE standardly maintain that it would be wrong to push the large man because, they argue, this would involve intending to cause him to be hit as a means of saving the five. Thus, DDE suggests that the same harm—causing someone to be hit by a trolley—is justified if it is merely expected and unjustified if it is intended even though the same amount of good—the survival of five other people—is at stake in either case.

While DDE maintains that merely expected harms are easier to justify than intended ones, it does not absurdly maintain that merely expected harms are always justified. Rather, some version of the following, sensible constraint is typically affirmed by DDE’s proponents:

**Proportionality (PROP):** one is permitted to cause harm only when there is proportionately grave reason.
At first, PROP may appear to maintain that we are obligated to avoid causing more harm than good when we can. But that interpretation would be too strong. For example, DDE says you must refrain from pushing the large man in front of the trolley in *Bridge*. But by so refraining you cause more harm than good—i.e., you cause five people to be killed at the expense of one—assuming that there is omissive causality.\footnote{For defenses of causation by omission, see Bernstein 2013 and Haldane 2011.} So, the interpretation of PROP must be qualified in something like the following way: We are obligated to avoid causing more harm than good when (i) we can avoid doing so (ii) without acting otherwise wrongly. This formulation of PROP might be too weak to encompass all that DDE’s proponents mean to convey by the principle, but it seems to be at least part of what they standardly mean to convey by it (for discussion, see McIntyre 2023, §3).

Although proponents of DDE standardly argue that you cannot push the large man in *Bridge*, they need not do so. They could say that although it is generally harder to justify intentionally causing someone to be hit by a trolley than it is to justify foreseeably causing the same result, the former is nonetheless justified here. For example, they might maintain that it would be wrong to intentionally cause someone to be hit by a trolley as a means of saving two, or three, or four other people. But once the number of people that would be saved reaches five, they could argue, a threshold is triggered, and the action becomes acceptable.

Nonetheless, in this essay, I will make the simplifying assumption that if DDE is true, the bulk of its proponents are right that you are not permitted to intentionally cause a trolley to hit someone in order to save five other people. If anyone finds this assumption objectionable, she may interpret the remainder of the present paper as a critical discussion of attempts to use DDE to distinguish diverting in *Standard Trolley* from pushing in *Bridge*, bearing in mind that the initial feasibility of such attempts is probably one of the main sources of DDE’s current popularity.

1.2 DDE’s Looping Trolley Problem

Thomson provided her famous *Loop* variant of the trolley problem as a counterexample to DDE. The variant runs as follows:

*Loop*: five workmen are stuck on a stretch of track onto which a runaway trolley is headed. The trolley will hit and kill all of them unless you divert it onto a looping sidetrack where it will grind to a halt upon hitting and killing a large man tied to the tracks there before it can loop back around and kill the five workmen on the main track. (See Figure 1.)

Thomson argues that it is clearly acceptable to divert the trolley in this scenario. For the only difference between *Standard Trolley*—where diverting is clearly permissible—and *Loop* is that in the latter case there is an extra stretch of track reconnecting the sidetrack to the main track. And that difference, she argues,
cannot be morally relevant. Therefore, she concludes, DDE is false because in diverting you intentionally cause the large man to be hit as a means of saving the five workmen on the main track, but you nonetheless act permissibly (Thomson 1985, pp. 1402-3). DDE’s “Looping Trolley Problem,” as I use that label here, consists in the fact that DDE appears to yield the wrong result in this scenario and in related scenarios like one that we shall see later on.

2 Kamm’s “Doctrine of Triple Effect” Solution

Kamm, who affirms DDE as I have formulated it, responds to this objection by arguing that although you take it as a reason for diverting that the large man will be hit as a result, you do not intend to cause him to be hit by diverting. To attempt to show how you can take a prospective consequence of an action as a reason for performing it without intending to cause that consequence, she gives the following example:

\[ \text{Party: You throw a party in order to have fun. But you only throw the party because you believe you will thereby cause your friends to feel sufficiently indebted to you that they will clean up the resulting mess afterwards, thereby making your house exactly as clean as it would have been had you not thrown the party. That is, you would not have thrown the party otherwise.} \]

Kamm maintains that, although you throw the party because you believe that you will thereby cause your friends to clean up afterwards, it is implausible to suppose that you throw the party in order to cause them to clean up, since, by cleaning, they will only make your house exactly as clean as it would have been had you not thrown the party (Kamm 2007, pp. 95-6, 99-100). Unless

\[ ^2 \text{Thomson maintained in a later essay that you are not permitted to divert even in the Standard Trolley case (Thomson 2008, 2008), thereby removing a pillar from her argument in support of diverting in Loop. But I will not engage with this later argument here.} \]

\[ ^3 \text{As we shall see shortly, this is true in spite of the fact that she rejects what she considers to be standard formulations of DDE.} \]
there would be some special value in your friends’ being the ones to make your
house clean, she suggests, this would be unreasonable (p. 100). Thus, the fact
that you will cause your friends to clean up after themselves is a reason for your
action even though it is not a goal of it (pp. 95-6). In Kamm’s terminology, it is
a defeater of a defeater (i.e., a defeater-defeater) since it entails that a would-be
defeater of your action fails to gain traction. Your reasoning can be represented
schematically as follows:

Primary Intention: Throw a party to have fun.
Defeater: But your friends will leave a mess.
Defeater of the defeater: No, they won’t. They will clean up
after themselves.

Similarly, Kamm maintains that, in Loop, you do not regard the hitting of
the large man on the looping sidetrack as a goal to be accomplished through
d diverting, but rather as a defeater of a defeater of your intention in diverting.
For Kamm, the diverter’s primary intention is just to prevent the trolley from
hitting the five from the front. But there is a defeater of this intention, namely
that diverting will just cause the five to be hit from the back. That the trolley
will hit the large man arises as a defeater of this defeater. For it implies that the
five will not be hit from the back after all. The reasonableness of the diverter’s
primary intention is thus rescued from the threat posed by the defeater. Your
reasoning can be represented as follows:

Primary Intention: Divert the trolley, thereby preventing the five
workmen from being hit from the front.
Defeater: But that will just cause them to be hit from the back.
Defeater of the defeater: No, it won’t. For the large man on the
looping sidetrack will grind the trolley to a halt, thereby preventing
it from looping back around to hit the five workmen.

The crucial point that emerges from this analysis is that if it is sound, then
Loop is not a genuine counterexample to what I have called the DDE. For if it is
sound, then you do not intend to cause the large man to be hit, and thus, you do
not violate DDE’s injunction against intentionally causing harm. Kamm rejects
what she calls traditional formulations of DDE for reasons too complicated to
explain here, but she embraces the doctrine that I have called DDE as we shall
see momentarily. Thus, she distinguishes between three kinds of effects. The
first two are those distinguished by DDE, namely, intended effects and (merely)
expected effects. The third is the kind of effect that Kamm believes serves as
a defeater-defeater in Party and Loop. We may call these “third effects,” and
they have a complicated profile. Namely third effects may be defined as follows:

Third Effect: a prospective effect E of an action X such that the
agent A performs X because she believes that E will result from X
and that E will play a role in causing a greater good, but nonetheless
A does not intend E.

For example, in Loop, you divert because you believe that you will thereby
cause the large man to be hit and because you believe that his being hit will
play a role in bringing about a greater good (=the rescue of the five workmen) but, according to Kamm, you do not intend to cause him to be hit. Thus, the trolley’s hitting the large man is a third effect in our sense.\footnote{In Party, the third effect is your friends’ cleaning of the mess that results from the party. But it is harder to see what the greater good might be in this case. Your friends cause your house to be clean, but that is presumably not the greater good since your house would have been just as clean had you not thrown the party. Thus, the greater good here seems to be something like the state of affairs wherein it is true that you have had a fun party and that you now have a clean house.}

It is important to distinguish third effects from a neighboring category of prospective effects. These are effects such that the agent acts because she believes she will cause them, but not because she believes that they will play a role in causing a greater good. For example, consider the case that I shall call Rusty Knob.

**Rusty Knob:** you are trying to fill your glass with water, and someone tells you that the knobs for the only working faucet in the house squeak. As a result, you find the faucet with rusty knobs and turn one of them because you believe it will squeak, and you take the fact that it will squeak to indicate that the faucet will produce water.

Here, you take it as a reason for turning the rusty knob that it will squeak but it is not your goal to make it squeak. Nonetheless, the squeaking of the knob would not count as a third effect because you do not believe that it will play a role in causing a greater good. You believe that the squeaking will indicate that you have turned a knob on the correct faucet, but you do not believe that the squeaking will cause the water to flow or any other greater good.

F fittingly, Kamm calls her doctrine which distinguishes intended, expected, and third effects the Doctrine of Triple Effect (DTE). She defines the DTE as follows:

**DTE:** A greater good that we cause and whose expected existence is a condition of our action, but which we do not necessarily intend, may justify a lesser [harm] that we must not intend but may have as a condition of action (p. 118).

In the terminology I have been using, this is to say that it can be permissible to perform an action because we believe it will have some third effect which will cause some greater good even when it would be impermissible to intend to cause the same effect in order to cause the same greater good. For example, Kamm maintains that it is permissible to divert in Loop because you will thereby cause the large man to be hit (=third effect) and thereby rescue the five workmen even though it would be impermissible to divert with an intention of causing the large man to be hit in order to rescue the five. That is her solution to the Looping Trolley Problem.

I stated above that Kamm embraces DDE according to my formulation of it. I stated this because Kamm’s broader argument seems to be that the reason why it is easier to justify actions with “third effect harms” than it is to justify actions with intended harms is precisely that third effect harms are merely expected in my sense, that is, they are expected but not intended (pp. 101-4).
3 The Failure of Kamm’s Solution

3.1 Action-Theoretic Problems

In this subsection I will argue that Kamm’s solution fails since its action-theoretic underpinnings are unsound. Let’s begin with an analysis of what it means to intend an event as a goal of an intentional action slightly adapted from what Thomson considers to be the “standard” analysis. At first, the analysis might appear to beg the question against Kamm, but I will provide arguments for it momentarily. The important thing to see up front is that if it is true, then you intend to get your friends to clean up after themselves in Party, contrary to what Kamm argues. Here is the analysis:

**Standard Analysis (SA):** For a person to X, intending an event E, is for her to X (at least partly) because (i) she thinks her doing so will cause or include E, where (ii) she takes the putative fact that X will cause or include E as a reason for X-ing just because she wants E either for E’s own sake or for the sake of its consequences.\(^5\)

This analysis is *prima facie* plausible, and it implies that you intend to cause your friends to clean up after themselves in Party. Kamm stipulates that you throw the party (partly) because you believe you will thereby cause your friends to clean up after themselves. So, you fulfill condition (i). But why do you take it as a reason in favor of throwing the party that you will thereby cause your friends to clean up after themselves? The answer is that you want something causally downstream of their cleaning, namely, a clean house. That is, you do not just want your friends to clean your house because their doing so would indicate that some causally unrelated good was present. So, you fulfill condition (ii). In sum, you throw the party partly because you believe you will thereby cause your friends to clean up (thus fulfilling (i)), while you desire that they clean up because you desire the consequences of their cleaning (thus fulfilling (ii)). Thus, if the SA is true, you throw the party (partly) from an intention to cause your friends to clean up—that is, partly in order to cause your friends to clean up—so you do not exemplify the kind of motivational structure needed for a DTE justification.

Furthermore, there are plausible arguments to be made in support of the SA. First, the SA nicely captures the sense that the agent must believe at the time of performing an action X that if the goal of X is realized, its realization will play a role in making it the case that performing X was worthwhile. This is very plausibly what distinguishes goals from other “motivating consequences,” where the latter are defined as prospective events such that the relatively high likelihood that they will result from an action gives the agent a reason for

---

\(^5\)Thomson maintains that “It is standard to take it that for a person to X, intending an event E, is for him to X because she thinks her doing so will cause E, and she wants E” (Thomson 1999, 512).

\(^6\)Kamm raises two counterexamples to what Thomson calls the standard theory of intending an effect by an action (117). It might seem as though if these counterexamples were genuine, they would also pose problems for the emended version of that theory that I have proposed here. But the alleged counterexamples seem to beg the question against the theory.
performing that action. For example, recall *Rusty Knob*, where you take it as a reason for turning the rusty knob that it will squeak, but it is not your goal to make it squeak. Very plausibly, the reason you do not make it your goal to make the knob squeak is that its squeaking would merely indicate that it was worthwhile for you to turn it, without playing any role in making it the case that it was worthwhile.

Another, closely-related argument in support of the SA stems from Elizabeth Anscombe’s thesis, which I shall the Anscombe Thesis (AT), that intentional actions are actions that answer to a certain sort of “Why?” question. Specifically, the “Why?” question that Anscombe has in mind is the question of what the agent wanted to achieve by performing the action. Thus, for example, if asked, “Why are you speaking so loudly?” a woman might answer, “I was just making sure you could hear me.” By answering in this way the woman would confirm that she was intentionally speaking loudly according to the AT, since she would indicate that the explanation of her loud speaking lied in her desire to ensure that her interlocutor could hear her. Now, the AT is widely-accepted, and it supports the SA. If the explanation of an agent’s intentional action lies in her desire to achieve certain goods by means of it, as the AT maintains, then it is natural to suppose, as the SA alleges, that an agent intends those consequences of her actions that she desires to achieve by performing them, where her desire to achieve those goods explains why she performs the action.

Nor does the AT imply, implausibly, that you intend to cause the knob to squeak in *Rusty Knob*. To see why someone might think that the AT implies this implausible result, let us modify the case slightly. Suppose that you expect that the water will not begin to flow until five seconds after you turn the knob. In that case, if you turned the knob and it did not squeak, you would be dismayed, because you would conclude that you had turned a knob on the wrong faucet. Thus, it might seem as though you do not merely take the fact that the knob will squeak as a reason for turning it, but you also desire to turn it. And in that case, you would intend to cause it to squeak according to AT.

But even if this argument shows that there is a sense in which you desire to cause the knob to squeak, there is also an important sense in which you do not desire to cause it to squeak. This is the sense of “desire” according to which, if you desire some possible effect E of an action X, you would assign E a positive value when calculating the expected utility of performing X. In this sense, an agent’s desire for E corresponds to her sense that it would be a good thing, rather than just a good sign, if E occurred. In this sense, you do not desire to cause the knob to squeak. For you would not assign its squeaking a positive value in a decision theoretic analysis. Rather, you would take the fact that it would squeak as a reason to assign a high probability to the possibility that the faucet will produce water. The fact that the knob will squeak factors into the decision theoretic analysis in a way that favors turning it even though the possibility of its squeaking is not assigned a positive value. Thus, once the sense of “desire” which is at play in the AT is clarified, it becomes clear that *Rusty Knob* is not a counterexample to that thesis.

The most convincing argument that Kamm gives for denying that you throw
the party in order to cause your friends to clean up after themselves is that it "makes no sense" (p. 100) to perform an action just to solve a problem that the action would create. And, Kamm argues, by cleaning up after themselves, your friends would just be solving a problem created by the party, since they would not thereby make your house any cleaner than it would have been had you not thrown the party (pp. 99-100, see also Otsuka 2009, p. 101, N. 16). But that argument just shows that, assuming you act rationally, you don't throw the party just in order to cause your friends to clean up after themselves. You might still throw the party partly in order to cause your friends to clean up after themselves, and partly in order to achieve some other goal. And indeed, this is exactly what seems to happen. The first of your goals in throwing the party seems to be to ensure that your house is clean at some future time and the second is to have fun. You throw the party in order to achieve the conjunction of these goals more effectively than you would by not throwing the party. There is nothing irrational about this plan.⁷

In summary, the problem for Kamm's DTE solution to the Looping Trolley Problem may be stated as follows: According to that solution, it would be morally justified to cause the large man to be hit, since this is the only way of rescuing the five workmen. Nonetheless, according to the DTE, it would be wrong to intend to cause the large man to be hit. But if the SA is true, then, if you divert from a desire to save the five, you intend to cause the large man to be hit, since this is the causal route by which diverting saves the five. Therefore, if the SA and the DTE are both true, then, it follows that it would be morally wrong for you to divert from a desire to cause the very good that Kamm alleges would morally justify diverting—namely the rescue of the five. This is absurd, and Kamm would agree that it is absurd. Hence, she seems to acknowledge that if you divert in Loop, you do so from a desire to save the five, provided that you act rationally.⁸ So, either the SA or Kamm's solution must be rejected. But the SA is prima facie plausible and supported by plausible arguments. On the other hand, Kamm's most convincing argument in support of her fundamental contention that you do not intend to cause the large man to be hit—namely, the argument from Party—fails. Thus, since we must choose between the SA and Kamm's solution, I argue that we should choose the former and reject the latter.

Kamm frequently speaks of a "because/in-order-to distinction" in practical

⁷Kamm also maintains that her conclusions about Loop receive support from a test for intention proposed by Michael Bratman. This is a set of three conditions such that, allegedly, fulfilling them suggests you intend some effect, whereas not fulfilling them suggests that you do not. Kamm argues that it would be possible to divert without fulfilling Bratman's conditions for intending to cause the large man to be hit. Since she believes that the test is reliable, she concludes that you need not intend to cause the large man to be hit if you divert (pp. 96-101). But Liao has subjected Kamm's use of Bratman's test of intention to very serious critique and I have nothing to add to his criticisms here (Liao 2008, pp. 228-9).

⁸For she acknowledges that, if you rationally divert in Loop, you take it as a reason in favor of diverting that you will thereby save the five. But presumably, you would not take it as a reason in favor of diverting that you would thereby save the five if you did not desire to save them to begin with.
reasoning. There clearly is such a distinction. That is, it is possible to perform an action because you believe it will have some consequence and not in order to cause that consequence. This is demonstrated by Rusty Knob, where you turn the knob because it will squeak and not in order to make it squeak. But the upshot of my arguments has been that if an agent performs an action X because she believes it will cause some third effect TE, and she takes the fact that X will cause TE as a reason in favor of performing X because she desires the greater good that TE will cause, then she intends to cause TE. This is to say that there is no because/in-order-to distinction of the particular sort that Kamm attempts to deploy in her solution of the Looping Trolley Problem, or, as I shall put it going forward, that there is no Kamm-style because/in-order-to distinction.

3.2 Loop-DTE’s Indirect Consequentialism

Moreover, if Kamm’s solution to the Looping Trolley Problem was sound, it would generate a different problem for DDE. If DTE could be applied to Loop in the way Kamm envisions, we would be left with a more cumbersome version of consequentialism. Whenever an agent needed to harm someone to cause an offsetting benefit, she could frame the prospective harm as a defeater-defeating reason for her action rather than a goal of it. If she did this, then by Kamm’s reasoning, she would act consistently with DDE.

For example, in Bridge, you could push the large man onto the tracks with the primary intention of preventing the five workmen from being hit by a trolley that he, the large man, has never lain in front of. Your deliberation would proceed as follows:

**Primary Intention:** Push the large man off the bridge and in front of the trolley, thereby preventing the five from being hit by a trolley that the large man has never lain in front of.

**Defeater:** But that will just cause the five to be hit by a trolley that the large man has lain in front of.

**Defeater of the defeater:** No, it won’t. The large man’s body will grind the trolley to a halt before it can reach the five.

On DDE, you would act permissibly by pushing the large man, because you would not intend to make his body grind the trolley to a halt, you would just take it as a defeater-defeating reason that you would make this happen. And your action would fulfill PROP since you would save five lives at the expense of one.

The resulting problem for DDE would be worse than the problem posed by existing “closeness” objections, which maintain that agents can skirt DDE’s prohibition against intending harm by intending something close to harm without intending harm itself. For instance, you might push the large man onto the tracks in Bridge not in order that he be harmed but rather in order that his body might grind the trolley to a halt so that it never reaches the five workmen further down. Since you would have still saved the five workmen even if the large
man was miraculously unharmed by having his body grind the trolley to a halt, you would not intend to harm him, and so your act would be permissible by DDE. Proponents of closeness objections maintain that such results undermine the non-consequentialist credentials of DDE.

The limitations of this objection are displayed by Jonathan Bennett’s *Sophisticated Terror Bomber* example. Here someone bombs enemy civilians in order to make them appear dead and thereby cause the enemy to surrender, saving a net positive number of lives. The bomber, Bennett argues, does not intend to kill the civilians, but only to make them appear dead, so she acts consistently with DDE. Many commentators have pointed out that the reason the civilians appear dead is that you have killed them, and they have concluded that you kill them as a means to this end (Cavanaugh 2006, p. 115; Delaney 2008, pp. 337-8; Fitzpatrick 2006, pp. 589-90; Masek 2010, p. 572; Pruss 2013, 52).

But if Kamm’s application of DTE to *Loop* was sound, you could justify the bombing in a different (DDE-friendly) way than the one Bennett proposes. Namely, you might reason as follows:

**Primary Intention:** Bomb the enemy civilians in order to prevent war from continuing during a stretch of time $t_1 \rightarrow t_n$ such that I have never bombed the enemy’s civilians prior to $t_1 \rightarrow t_n$.

**Defeater:** But then war will continue during a stretch of time $t_1 \rightarrow t_n$ such that I have bombed the enemy’s civilians prior to $t_1 \rightarrow t_n$.

**Defeater of the defeater:** No, it won’t. For by bombing the civilians I will kill them, thereby causing the enemy to surrender.

To be sure, this reasoning smacks of insincerity. If you bombed the civilians and then war continued, it would not somehow be a consolation to you that you had bombed the civilians prior to the war’s continuance. The point is that the triple effect reasoning that Kamm attributes to you in *Loop* seems insincere for the same reason. In *Loop*, it would not come as a consolation to you that you had prevented the five workmen from being hit from the front if that just meant you had caused them to be hit from the back. Thus, if we are treating like cases alike, and we allow that the reasoning that Kamm attributes to you in *Loop* is reasonable, we should say the same of the DTE reasoning used to justify bombing the civilians in *Sophisticated Terror Bomber* outlined above. Thus, if Kamm’s DTE solution to DDE’s Looping Trolley Problem succeeds, we are forced to conclude that DDE justifies harms that previously seemed immune to closeness challenges, where the harm seems paradigmatically consequentialist and is justified by its downstream consequences.
4 Arguments that Diverting Might be Impermissible

As we saw, Thomson argues that it is permissible to divert in Loop by pointing out that the only difference between that scenario and Standard Trolley—where almost everyone agrees that diverting is permissible—is that in the former, but not the latter, there is an extra stretch of track connecting the sidetrack back to the main track. She maintains that the presence of this extra stretch of track could not plausibly make a moral difference. But this argument might appear to beg the question. For the addition of the extra stretch of track in Loop means that if you divert, you will intentionally harm the large man as a means of saving the five, and this is exactly what DDE rules out. Thus, DDE rules that the extra stretch of track is morally relevant, and Thomson has not identified a reason why this ruling is irrational—she has just asserted that it is so.9

Relatedly, McMahan calls Thomson’s contention that you can divert in Loop an “intuition,” and he speculates that it derives from focusing on similarities between Loop and Standard Trolley. But, he adds, “one’s intuition might be different if one were to focus more on the similarities to [Bridge-like variants]” (359). Otsuka makes a similar argument, noting that, “looping cases are vulnerable to assimilation challenges from both directions” (Otsuka 2009, p. 108). But he maintains that broader arguments in support of DDE can be used to disrupt the ensuing stalemate in DDE’s favor (107-10).10

Furthermore, in a series of surveys, Liao et al. found that intuitions regarding the acceptability of diverting in Loop are vulnerable to an “order effect” (Liao et al. 2012, p. 663). Participants were divided into groups and presented with a series of trolley scenarios. Whereas the majority of participants presented with Loop after Standard Trolley approved diverting, the majority of participants presented with Loop after Bridge disapproved diverting (666). Therefore, the authors argue, since the intuition that we should divert in Loop is sensitive to morally irrelevant factors, we should be wary of it (667-8).

5 You Can Divert in Loop

In spite of these arguments, in this section I argue that Thomson had it right, and that, contrary to the implication of DDE, you can permissibly divert in Loop. My argument will work by introducing a series of variants of Loop which are progressively more similar to the original Loop case. In each case I will argue that you are permitted and in fact obligated to divert. If I succeed in showing that you can divert in the last case in this series, it appears to follow that you can divert in Loop since the two cases are so similar. But the last case in the series will constitute a counterexample to DDE in its own right, regardless of

---

9See Kaufman 2015, p. 27 for a similar argument.
10See Kerstein 2013, pp. 123-4 for a similar argument.
its implications about \textit{Loop}. An advantage of my arguments is that they do not rely on the ostensibly problematic intuitions discussed in the previous section.

Let us begin. To see why it is permissible to divert in \textit{Loop}, first consider the following variant of the case:

\textit{Revised Loop with Volunteer (Loop\textsubscript{R} with Volunteer)}: Everything is the same as in \textit{Loop} except for three differences. The first is that the large man is not positioned on the looping sidetrack but rather directly behind the five workmen on the main track. (See Figure 2.) The second is that, if you do not divert, after the trolley runs over the five workmen, it will run over the large man as well. As a result of these two differences, if you divert, you will prolong the large man’s life, since the trolley will take longer to reach him. But like in the original \textit{Loop} scenario, if you divert, the large man will stop the trolley before it can run over the five. The third and final difference is that in light of the first two differences, the large man gives you permission to divert.

![Figure 2: Loop\textsubscript{R} with Volunteer](image)

Since the large man gives you permission to divert, diverting seems permissible and even, I submit, obligatory. I’ll begin with two arguments for permissibility. First, many proponents of DDE allow that you may intentionally harm an agent to deter a threat in so-called “Pareto cases” where the agent is among those threatened with an equal or greater harm. For example, consider Williams’ famous case where a soldier is about to wrongly execute 20 civilians unless Jim, an honored traveler, agrees to execute one of them, in which case the soldier will let the remaining 19 live. Many proponents of DDE allow that Jim may execute the one civilian in order to save the remaining 19 precisely because that civilian would have been executed by the soldier otherwise (e.g., Graham 2017 p. 173; Kamm 2007, pp. 305-44; Korsgaard 2004; and McMahan 2009, p. 351).\footnote{See also Huebner, Hauser, and Pettit 2011, wherein evidence is provided that “folk intuitions” support exceptions to deontological restrictions in Pareto cases like this one.}

Second, since the large man consents to your diverting in \textit{Loop\textsubscript{R} with Volunteer}, the situation is analogous in relevant respects to assisting in noble self-sacrifice.
For example, it is noble for a soldier to jump on a grenade to save her fellow soldiers. If a soldier in this situation was incapable of jumping onto the grenade and requested that you throw her onto it—let’s assume that you can’t jump onto the grenade yourself for whatever reason—it would be acceptable for you to throw her, since you would just be helping her accomplish a noble goal. But I see no relevant difference between throwing the soldier onto the grenade and diverting the trolley onto the willing large man.

I conclude that it is permissible to divert in Loop_R with Volunteer. But why think that diverting is obligatory in that scenario? Because, since diverting is permissible, it follows that by not diverting you would violate PROP even according to the very weak formulation I outlined in section 1.1. Recall, that formulation just states that we are obligated to avoid causing more harm than good when we can permissibly avoid it. But the expected harmful consequences of omitting to divert (five deaths) would outweigh its beneficial consequences. Moreover, (the weak formulation of) PROP is exceedingly plausible. Even if it fails as an interpretation of what some proponents of DDE are referring to when they speak of a “proportionality constraint,” it seems certain that we are obligated to follow what I am calling PROP in this essay. Therefore, I contend, since you are generally obligated to follow PROP, you are obligated to divert in Loop_R with Volunteer.

At this point one might object by arguing that PROP only applies to actions and does not apply to omissions. Thus, it would be argued, you would not violate PROP by refraining from diverting in Loop_R with Volunteer. But this argument seems implausible. To see why, consider a variant of Standard Trolley where everything is the same except that there is nobody on the sidetrack. In this case it seems obvious that you are obligated to divert, and the most obvious explanation is that by omitting to divert you would violate PROP. Therefore, the presently considered objection seems to fail.

Now let’s shift our attention to a case where everything is the same as in Loop_R with Volunteer except that the large man withholds his permission for you to divert. Call this case Loop_R with Non-Volunteer. In this case, I contend, it is depraved for the large man to withhold his permission. Diverting would rescue the five workmen without any cost to the large man himself. Indeed, it would benefit the large man by prolonging his life! In this scenario, he has no good reason for condemning the five workmen to die (and hastening his own death!) by preventing you from diverting.

But it is bizarre to think that whether diverting is obligatory depends on whether the large man gives you his permission or depravedly withholds it, given that you would benefit him by diverting. The large man will be hit either way, and by diverting you would just forestall the hit for a brief period of time while also ensuring that, when the hit occurred, it would save five other people. To successfully maintain that the large man’s refusal to give consent prevents you from being obligated to divert in this scenario, one would need to invoke an implausibly strong principle of respect for autonomy. Therefore, I conclude, you are obligated to divert in Loop_R with Non-Volunteer. This conclusion also appears to follow straightaway from the reasoning that some proponents of
DDE use to justify killing the civilian in Williams’ case.\textsuperscript{12} For the large man in \textit{Loop\textsubscript{R} with Non-Volunteer} is among those who would be comparably harmed if you did not divert. Thus, if “Pareto harms” may be intended on DDE, then PROP requires you to divert.

Boonin argues that \textit{ceteris paribus}, we do not have the right to use another person’s body to achieve a greater good without her consent even if it is morally wrong for her not to consent. It might be thought that if his argument is successful then it poses problems for the argument of the previous paragraph. Boonin’s argument focuses on the court case McFall \textit{vs. Shimp}, where McFall sued Shimp for withholding consent for a marrow transplant after initially consenting in spite of the fact that McFall needed the Marrow to survive. The court judged that Shimp was not legally obligated to donate his marrow. Boonin maintains that this was the correct decision, and that it would have been wrong for the state to coerce Shimp to make the donation even though it may have been immoral for him to refuse to donate it (Boonin 2019). But there are two important difference between this case and \textit{Loop\textsubscript{R} with Non-Volunteer}. First, whereas Shimp would have been harmed, even if only in relatively minor ways, by the transplant, the large man would not be harmed but in fact would be benefited by your diverting. Second, it is plausible that medical professionals should be held to different standards than bystanders at trolley tracks, since medical professionals need to keep the trust of potential patients. These differences seem significant enough to prevent Boonin’s conclusions from applying to \textit{Loop\textsubscript{R} with Non-Volunteer}.

Now consider a final variant of the Revised Loop case.\textit{Simple Revised Loop (Loop\textsubscript{R})}: Everything is the same as in Thomson’s original \textit{Loop} case except that the large man is not positioned on the looping sidetrack but rather directly behind the five workmen on the main track.

The first thing to notice about this case is that DDE implies that you must not divert. To determine whether this is the correct verdict, let’s assume that I have been right that you are obligated to divert in \textit{Loop\textsubscript{R} with Non-Volunteer}. And let’s assume you are sufficiently virtuous that you would obey your duty to divert in that case. It follows that, if you refrain from diverting in \textit{Loop\textsubscript{R}}, you intend to cause the five workmen to be hit as a means of saving the large man. For the only difference between \textit{Loop\textsubscript{R}} and \textit{Loop\textsubscript{R} with Non-Volunteer} is that in the former case, but not the latter, if you do not divert, the trolley will be stopped by the five before it can hit the large man. Thus, if you would divert in \textit{Loop\textsubscript{R} with Non-Volunteer}, then, if you refrain from diverting in \textit{Loop\textsubscript{R}}, you only so refrain because the trolley will be stopped by the five before it can hit the large man. Thus, if I have been right that there is no Kamm-style because/in-order-to distinction, you refrain from diverting (partly) in order to cause the five workmen to be hit, thereby expressing an intention to cause them to be hit. Relatedly, if the SA is true, it follows that if you refrain from diverting, you

\textsuperscript{12}But note that Korsgaard (2004) and Kamm (1999) seem to think that Jim should only kill the civilian if he consents.
thereby express an intention to cause the five workmen to be hit. For you only
so refrain because you believe you will thereby cause the five workmen to be
hit, and you take the fact that they will be hit as a reason for diverting because
you want the consequences of their being hit (=the rescue of the large man).\textsuperscript{13}

Thus, in Loop\textsubscript{R}, you do not deliberate about whether to harm anyone as a
means of saving anyone else. Rather, you deliberate about which group of people
(the five workmen or the large man) to harm as a means of saving the other
group. Two conclusions follow immediately. First, it is obvious that you should
harm one agent as a means of saving five if the next best alternative, morally
speaking, is to harm five agents as a means of saving one. Therefore, DDE’s
implication that you must refrain from diverting in Loop\textsubscript{R} is false. Second,
DDE implies both that you must and that you must not divert, since either way
you would be harming a group of agents as a means of saving an unacceptably
small group of other agents. Therefore, in this case, DDE appears to generate
a moral dilemma. If so, it violates the plausible principle that “Ought Implies
Can,” since it implies that you are doomed to act impermissibly in this scenario.

To make these objections work, I had to assume that you are virtuous enough
that you would do your duty in Loop\textsubscript{R} with Non-Volunteer, where I argued that
your duty was to divert. But rejecting this assumption would not be a plausible
way out of the problems I have posed for DDE. For it is not plausible that DDE
is false when applied to virtuous people but true when applied to the rest of us.
Therefore, this complication may be ignored.

If my arguments have been sound, it appears to follow that you are also
obligated to divert in the original Loop case. For I have argued that you are
obligated to divert in Loop\textsubscript{R}. But the only difference between that case and
the original Loop case is that in the former case, if you divert, the large man
will stop the trolley after looping and in the latter case, if you divert, the large
man will prevent the trolley from looping. And this difference does not seem to
be morally relevant. In either case, if you divert, you will intentionally cause
the large man to be hit as a means of saving the five. Therefore, since you are
permitted to divert in Loop\textsubscript{R}, it appears that DDE’s implication that you must
refrain from diverting in Loop is false.

At this point one might object that all that follows from the conclusions I
have drawn about Loop\textsubscript{R} is that DDE must be revised. The revised version
would make an exception in cases where you cannot avoid harming a smaller
group as a means of benefiting a larger group without harming the latter group
as a means of benefiting the former group. In such cases, it would be allowed, it

\textsuperscript{13}Kleingeld, who affirms a Kantian version of the DDE, maintains that you need not use
the one as a means of saving the five if you divert in the original Loop case, and she concludes
that, for the same reasons, you need not use the five as a means of saving the one if you do not
divert. Her argument for the former conclusion seems to be that since you would be inclined
to divert even if you were unaware that the sidetrack looped back around and rejoined the
main track, you do not give the large man an instrumental role in the accomplishment of
your goals (Kleingeld 2020). But if my argument in section II.a. was successful, it makes a
difference whether or not you realize that the sidetrack loops back around to rejoin the main
track. For once you realize this, if you divert because you want to save the five, the SA implies
that you intend to cause the large man to be hit.
is always acceptable to intentionally harm the smaller group as a means of benefiting the larger group. Call this revised version of DDE “DDE$_R$.” Moreover, if all I have shown in this paper is that DDE needs to be revised to DDE$_R$, it might seem as though I have not shown anything of significant consequence. For that revision would leave DDE nearly completely in-tact for practical purposes, since we rarely encounter situations like Loop$_R$ where you must choose which of two groups to intentionally harm as a means of benefiting the other.

But exchanging the DDE for the DDE$_R$ would seem like an unacceptably ad hoc response to my arguments. For the DDE$_R$ appears unsupported by the standard arguments that are made on DDE’s behalf. For example, many defenses of DDE are Kantian. They maintain that by intentionally harming non-consenting persons as a means of benefiting others, you treat them as mere means, where the latter is forbidden (Cavanaugh 2006, 148-158; Hughes 2019; Quinn 1989, pp. 347-51). But you seem to treat the large man as a mere means if you divert in Loop$_R$ even though by not diverting you would thereby express an intention to cause the five to be hit as a means of saving the large man. Indeed, it seems to be precisely the upshot of my arguments that you must choose which of the two groups—i.e., the five workmen or the large man—to use as a mere means of saving the other group. Therefore, I do not believe that the DDE$_R$ should seem attractive to proponents of the DDE.

6 Conclusion

I conclude that both Loop and Loop$_R$ are genuine counterexamples to DDE. In both cases, DDE implies that you may not divert, and that is the wrong result. Loop$_R$ is an especially interesting counterexample. For in Loop$_R$ you cannot avoid causing the large man to be hit as a means of saving the five without causing the five to be hit as a means of saving the large man. Thus, in this case, DDE does not only falsely imply that you may not divert, but it also generates a moral dilemma. Assuming that there are no moral dilemmas, it follows that Loop$_R$ is a counterexample to DDE twice over. All of this is to say that DDE succumbs to its Looping Trolley Problem and, consequently, should be rejected.

References


 Boonin, David (2019). *Beyond Roe: Why Abortion Should Be Legal - Even if the Fetus is a Person*. Oxford University Press.

---

14Kleingeld (2020) and Kerstein (2013) also both endorse the doctrine I have called DDE on Kantian grounds. Though they do not explicitly affirm DDE it is clearly at work in their discussions of the Trolley Problem.


