Double Effect Troubles
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1. Introduction

The doctrine of the double-effect, DDE, is one of two well-known traditional moral principles forbidding the use of certain means. The other principle is the Kantian one that it is impermissible to treat a person or rational being merely as a means and not simultaneously as an end (in itself). The Kantian principle seems too strong. Suppose that, in tailing you, I use other pedestrians merely as a means of hiding myself from your vision. If I do not interfere with their walking or endanger them in any way, it appears that my using them merely as means in the sense of not doing anything in order to promote their ends cannot make my conduct impermissible. My behaviour cannot be impermissible because it does not in any way harm the pedestrians or interfere with their pursuit of their ends (and it may greatly benefit others). It may be that I am not here properly morally motivated in the sense of being concerned about everyone affected by my actions as an end or for their own sake. But it does not follow that if I am not morally motivated in a situation, my action in it must be wrong, since it may be precisely what a morally motivated person would do after having given due consideration to everyone affected for their own sake.

DDE avoids this objection by condemning doing something harmful to someone as a means. This is not the same as using as a means somebody in a way that is harmful to them, for you can do something harmful to somebody as a means without using as a means this person in way that is

Kant says that you should always act so that you treat ‘humanity, whether in your person or that of any other’ never simply as a means (H. J. Paton’s translation in The Moral Law, London: Hutchinson, 1948, p. 91). The context makes it clear that he has beings with reason in mind rather than members of the species homo sapiens.
harmful to him (and, hence, without using him merely as a means). For instance, if you run over somebody in order to be in time to save five people, you do not use this person as a means of being in time—for his presence does not facilitate your attainment of the end — but you do something harmful to him as a means of being in time. Since advocates of DDE are likely to want to prohibit this behaviour, the notion of using people as means in a harmful way should not figure as a necessary condition for wrongness.

DDE has been taken to claim that it can be impermissible to bring about a lesser harm (to someone) as an end or as a means to a greater good, though it is permissible to bring about the greater good by a neutral means, even if the harm is a foreseen effect of the means or the good. As we will soon see, there are better ways of formulating DDE. DDE does not rule out that there may be goods so much greater than the harm of their means, that it is permissible to do the harm as a means to them. I shall not here discuss whether there is such a threshold. Nor shall I attempt to precisely specify the kind of harms that must not be caused as means. I will merely assume that the killing of a person who does not threat anyone’s life and does not consent to being killed is an instance of it. DDE is usually accompanied by another main deontological doctrine, the act-omission doctrine, AOD. AOD may be taken to claim that it is more difficult to morally justify actively causing certain kinds of harms, e.g., killing non-threatening, non-consenting people, than letting these harms occur, e.g., letting such people die. It is natural to take DDE to presuppose AOD. For a morality that features DDE, but not AOD, would be virtually as

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\(^7\) There is a thorough critical discussion of these matters by Kagan in The Limits of Morality, esp. chap 4.
demanding as consequentialism, since it would permit letting harm happen only when it is permissible to cause it, i.e., only when a greater good is brought about. But in a world with so many needy as the present one, the better-off usually let a lot of harm happen whenever they pursue their own good.

The following case, which we may call Unavoidable killing, shows why adherents of AOD have reason to accept DDE as well. Suppose that an unstoppable vehicle you are driving will kill either five people if you continue straight on or only one if you swerve. According to AOD, you may act wrongly whatever you do. DDE allows you to swerve with the end of saving the five and merely foreseeing that you will kill the one.

In the present paper, I will expose DDE, and revisions of it, to various counterexamples, some of which will be familiar from the literature. The conclusion is that there is no principle of right action which concords with our intuitions in all of these examples. I will suggest that DDE is nurtured by several mistakes about intention, such as the mistakes that a criterion of right action could appeal to the intention with which the agent acts, that some side-effects that are comparatively directly brought about are intended as means, and that it is wrong to intend to do something harmful as a means as it is to intend to do this as an end. It is in line with this suggestion that an alternative principle that eschews all reference to intention in favour of causal order has little intuitive credibility.

2. Reversal: Good Means to Bad Ends

In statements of DDE, there is often an explicit or implicit reference to the intention with which the agents acts. For instance, in the above statement there is an implicit reference to intention, since the fact, e.g., that you brought about Y as a means to (the end of) X implies that you brought about Y with the intention of achieving X. To this extent, it is like the locution ‘bringing Y about in order to bring X about’. In contrast, to say that you did X by (means of) doing Y does not imply that you intended either X or Y: for instance, you may unintentionally kill something by (means of) accidentally firing a shot. At least, we need some non-
intentional locution to express that doing some acts presupposes doing other acts. I shall use the italicized locutions in the fashion described.

It is worth mentioning that DDE must outlaw not merely doing something harmful as a means, but also doing something harmful as an end. For otherwise it would not censure as wrong your behaviour in a case Push in which you could have pushed a victim, Vic, in front of the trolley as a means of saving five innocent people, but you cause Vic’s being in front of the trolley as an end, foreseeing that it will have the effect of saving the five. But clearly, if it is wrong to push Vic in front of the trolley as a means to the greater good of saving five, it is wrong to do this as an end in itself.

Given this, the following principle about doing good as means to a harmful end seems inescapable:

If it is impermissible to bring about a greater good, G, as an end by means of a smaller harm, H, it is also impermissible to bring about H as an end by means of G.

In other words, a necessary condition for it to be impermissible for you to use H as a means to the end G is that it is impermissible for you use G as a means to the end H. Let us call this principle Reversal (since it concerns a reversal of the means-end ordering of the good and the bad). Reversal seems intuitively very plausible for surely it cannot be morally better to do good as a means to a harmful end than it is to do something equally harmful as a means to an equally good end. So, as DDE must forbid having the end H as well as doing H as a means to G, it must also forbid, in accordance with Reversal, the pursuit of G as a means to the end of H.

* Alison McIntyre argues that the ban on intending harm as an end is not part of DDE (‘Doing Away with Double Effect’, Ethics 111 (2001), pp. 219-55, pp. 226-9). But whether or not this ban is a part of DDE, McIntyre agrees on the important point that this ban is something to which adherents of DDE are committed.
But then a formulation of DDE which, like the one above, refers to the agent’s actual intention cannot do as a criterion of right action. According to standard DDE-intuitions, you are not allowed to kill one as a means of saving five. Now it follows from this and Reversal that, in a case Lift, it must also be wrong of you to save the five, by lifting them off the track — with the help of a crane, perhaps — as a means to your end of killing Vic who is behind them on the track. The trouble is, however, that you may also do this act of lifting the five off the track intending as an end to save their lives, and merely foreseeing that an effect of achieving this end will be that Vic is killed. If so, you have done nothing impermissible according to DDE. Consequently, a statement of DDE like the one above entails that your act of lifting the five off the track is both permissible and impermissible, depending on your intention. So, adherents of DDE face the following problem: it seems that they must concede Reversal, but then it follows that DDE must be revised so that it does not refer to the agent’s actual intentions if it is to function as a criterion of right action.

We must therefore distinguish between the (im)permissibility of acts and the (im)permissibility of intentions. DDE must allow us to hold that, if you lift the five off the track as a means to realize your intended end to kill Vic, your action is permissible, but you perform it on the basis of a bad or blameworthy intention. As remarked, locutions featuring the term ‘means’ unfortunately tend to obscure this distinction, thereby facilitating the conflation of the (im)permissibility of acts and intentions.

Now, if we understand Reversal as implying the presence of intentions to bring about both G and H, it is very plausible. Supposing it would be wrong of you to use H as a means (in order) to bring about (end) G, it would surely be wrong of you to use G as a means to bring about (end) H. It is surely worse rather than better to intend harm as an end than as a means. Whereas it is evident that it is wrong to intend

harm as an end, it is not at all evident that it is wrong to intend it as a means to a greater good. For instance, if a patient needs to feel some pain in order to recover from a more painful disease, it seems perfectly justifiable to induce this pain in him (cf. Kagan, pp. 167-8). While harming somebody as an end is not compatible with having concern for the well-being of this individual, harming somebody as a means is compatible with such concern, as this case indicates. Similarly, harming somebody as a means to the greater good of others implies only that your concern for the greater good is greater. In contrast, using somebody merely as a means implies that there is no concern for this individual.

With respect to non-intentional means, however, adherents of DDE should deny Reversal’s claim that if it is impermissible to bring about G by means of H, it is impermissible to bring about H by means of G. For this is falsified by Lift in which we would kill Vic by means of saving the five.

But this does not mean that DDE must be so revised that it is shorn of all reference to intention. The following revision meets the above objection:

DDER: There are greater goods, G, and smaller harms, H, whose relative sizes make it wrong to bring about G by means of H, so that G could not be brought about as an end without H being brought about as a means to G, but permissible to bring about H when it is an effect of G or a side-effect of an (apart from H) non-harmful means to G, so that H could be merely foreseen when G is brought about as an end.¹

In Lift, killing Vic is an effect of your lifting the five off the track and nothing by means of which you lift the five. Therefore, you could execute the lift with the (intended) end of saving the five while merely foreseeing

¹ If it is thought that doing something intentionally implies an intention to do this, substitute ‘knowingly’ or ‘consciously’ for ‘intentionally’.
that you will kill Vic. Hence, DDE implies that this saving is permissible, even if it is in fact done with the intention of killing the one, for it could have been performed without this intention. In Push, however, saving the five is something that you could not pursue as an end without an intention to push Vic in front of the trolley because you have to achieve this end by means of pushing Vic. So, DDE condemns this action as impermissible (as will transpire, this is subject to qualification).

In Unavoidable killing, the earlier formulation of DDE implies that your action of swerving and killing the one instead of the five is wrong if it is done with the end to kill the one and the foresight that attaining this end will as a side-effect produce the greater good of saving the five. DDE, however, permits you to swerve and hit the one, irrespective of whether your intention is to save the five, and the killing of the single person is something you merely foresee as a consequence of swerving, or your intention is to perpetrate this killing. For you could swerve while being in the first mental state.

3. Harming as a Means Not Sufficient for Wrongness

DDE is however doubly defective because the impossibility of achieving the greater good without intending the lesser harm as a means is neither sufficient nor necessary for a wrongness which would not be there if the harm were just a foreseeable effect of G or a side-effect of a means to it. A variation of Lift, Double saving, brings out that if it is permissible to cause harm of a certain magnitude as an effect of the good, causing this harm as a means to the good is not sufficient to make your action wrong. In Double saving, the operation of the crane by means of which you have to lift the five off the track is such that you will unavoidably drop them further along the track, behind Vic. After being dropped on the track, the five are saved by Vic’s body from being killed by the trolley.

As the name announces, you here save the five from deaths threatening them at two times. When you lift the five off the track with the help of the crane, you save them from being hit and killed by the trolley at a time $t_1$. After being dumped on the track, at $t_2$, the five are saved by Vic’s...
body from being hit and killed by the trolley at a later time, $t_3$. The first saving prolongs the lives of the five only by a few moments, to $t_3$, if the second saving does not occur. The second saving appears to be the greater good because (we assume) it saves the five from death for a longer time. True, this saving presupposes the first saving, thereby bestowing upon the first saving a greater value which is conditional upon the occurrence of the second saving.

It would seem that DDER does not permit you to use the crane to lift the five off the track in Double saving because the second saving is accomplished by means of Vic’s being hit just as in Push, say. So, knowing about the crane’s restrictions, you must intend that Vic be thus used when you decide to operate the crane. For the first saving would be pointless were Vic’s body insufficient as a buffer. Suppose, however, that the first saving would substantially postpone the death of the five without the use of Vic as a means. Suppose, e.g., that the crane would not drop the five on the track until just after $t_3$, when Vic has been hit. Then DDER would not imply that it would be wrong to lift the five off the track, since the saving of the five for a substantial time would not then occur by means of Vic. But, surely, it could not make any moral difference whether the five are dropped just before or after Vic is hit by the trolley. If the aim is to save the five, Vic is sacrificed for their sake irrespective of whether they are dropped before or after he is hit. The problem is that, although Vic is harmed by being used as a means in Double saving, he could permissibly be as much harmed without being used as a means. Since the use of Vic as a means does not add any harm, the verdict DDER gives on Double saving seem counterintuitive.

Consider a similar case in which some prominent deontologists regard saving five by means of killing one as permissible. In Loop a trolley will kill five people unless you redirect it onto another track. However, after making a huge loop, this track connects from the opposite direction with the track on which the five are placed. The trolley fails to kill them only because Vic’s body stops it just before it gets to the five. In contrast, the trolley’s hitting the five is not necessary for its not hitting Vic, since be-
yond the five there is a hill which is steep enough to bring the trolley to a standstill by itself. The intuitions of at least some deontologists, like Kamm\(^1\) and Judith Thomson who designed the case,\(^4\) are that it is permissible to redirect the trolley onto the loop. But in Loop the lesser harm of Vic’s being hit is really as much something by means of which the saving of the five occurs as in Push in which the saving is forbidden.

Consideration of an intermediate case makes this clearer. In Shortcut the track leading to the five is slightly curved. Vic is placed on a track that splits off from this track and goes straight to the site of the five where it reconnects with the other track. Redirecting the trolley onto Vic’s track would be like aiming it at him who is then perceived to be in-between the redirected trolley and the five. Since the five are saved by means of Vic’s being hit as clearly in Shortcut as in Push, deontologists could hardly judge it permissible to redirect the trolley in Shortcut. On the other hand, it is also hard to see how this judgement can be reconciled with the one they make in Loop, since the presence of Vic in-between the five and the trolley is a necessary causal condition in both cases.

Nonetheless, Kamm has made a couple of different attempts to justify a permission to turn the trolley in Loop. In Morality, Mortality she writes that the ‘lesser harm helps sustain the greater good’ and that the harm occurs ‘as a way of maintaining this state’ (II, p. 175). This implies that the lesser harm to Vic does not precede the greater good of the five being saved from death for a substantial period of time. But of course it precedes it, since his being hit is a causal condition of this saving. True, we might say that, even if Vic had not been present on the loop, redirecting the trolley onto it would have slightly postponed the death of the five, i.e., saved

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them from death at an earlier time. But this is a comparatively small
good, surely smaller than the harm to Vic.

In ‘The Doctrine of Triple Effect (etc.)’, Kamm tries ‘to distinguish
between doing something in order (or intending) to bring about something
else and doing something because something else will be brought about’ (p.
22). She maintains that in Loop one turns the trolley only because (as one
believes) it will thereby hit and be stopped by Vic. Since one does not
turn the trolley in order, or intending, to hit Vic, this act is permissible.
However, I do not find the examples by means of which Kamm tries to
press home her distinction convincing.

She supposes, for instance, that she wants to give a party to entertain
her friends, but that she does not want to be left with a big mess to clean
up afterwards. She predicts, however, that if her friends have fun, they
will feel indebted to her and help her to clean up. So, she gives her party
in order to entertain her friends because she believes her friends will be
indebted and help her clean up. But, she claims, ‘I do not give the party
even in part to make my friends feel indebted nor in order to not have a
mess’. This is not part of the ‘goal of my action of giving the party’ (p.
26). Granted, but Kamm’s goal is not just to give a party to entertain her
friends; it is doing this without being left with a big mess to clean up. And in or-
der to attain this goal, she has to intend to make her friends feel indebted.
Similarly, in Loop one’s intention in turning the trolley is not just to pre-
vent it hitting the five from the front, but doing this without making it hit
them from another direction. And in order to attain this goal, one must intend
the trolley to be stopped by Vic.

There is not space here to review all of the moves Kamm might at-
tempt to avoid this objection. I believe that they must all fail for to say
that one performs an action because (as one believes) something X will
result from one’s action is to explain why one performed this action. But
it is hard to see how the citation of the result X could help explain one’s
action unless X is something that one desires, aims at, etc.; if it is not a
relation to desire, etc. what is it that makes the belief about X, in contrast
to many other beliefs, relevant to explanation? This is however precisely
what Kamm has to deny when she denies that doing something because X will result from one’s action entails doing this in order (intending, aiming, etc.) to bring X about. My conclusion is then that Kamm fails to vindicate the permissibility of saving the five in Loop.

But it seems to me less evident that this saving is permissible than the saving in Double saving, for the saving in Loop is so like the saving in Shortcut which in turn is like that in Push. True, in Loop we could distinguish between two savings just as we can in Double saving, for even in the absence of Vic, redirecting the trolley to the loop is tantamount to saving the five from death at an earlier time (this is not so in Shortcut). But seeing this as a saving is more dependent upon Vic’s presence than is the case as regards the first saving in Double saving, since in Loop (just as in Shortcut) the five would be constantly under the threat of death were it not for Vic’s position, whereas this is not so in Double saving when the five are swinging in the air. This seems to make stronger the intuition that the saving of the five is permissible in Double saving than that it is permissible in Loop.

There is another type of case which supports the same conclusion, that harming as a means is insufficient for wrongness. In this case, Circuit, the track ends in a closed circuit. If the trolley is not redirected from the five on the left, it will kill not only them, but go round and kill Vic as well. On the other hand, if it is redirected to Vic on the right, it will kill only him. Perhaps there is a steep hill before the trolley reaches Vic, which will slow it down considerably, but there is nothing to slow it down on the lefthand track. Then it no longer seems intuitively wrong to redirect the trolley to Vic because he will in any case die soon. It is however still true that, if this is done, the smaller harm of his being hit is a necessary means to the greater good of the five being saved. So, it must be intended if the five are to be intentionally saved. This sort of case, in which the harm will befall the victim however you act, provides another reason for concluding that DDER fails to provide a sufficient condition for wrongness.
4. Harming as a Means Not Necessary for Wrongness

Some deontologists have conceded that it is not necessary for wrongness that the smaller harm is brought about as a means to the greater good instead of as a foreseen effect. For instance, Kamm argues that in a case we may call Blow up, in which you could save five lives only by blowing up a trolley, but foresee that in doing this, you will also blow up an innocent bystander, it would be wrong to do so, though the blowing up of the bystander obviously is not anything by means of which the saving is done, but a side-effect of a means to it (Morality, Mortality, II, p. 151). Consequently, it need not be intended, but could be merely foreseen. Yet, we seem to find it as wrong to blow up the bystander here as if it had been a means to saving the five (e.g., if he had been blocking the entrance to a hole in which the five are dying). Hence, DDER fails to formulate a necessary condition for a killing in the pursuit of a greater good being wrong (or, in other words, a sufficient condition for it to be permissible).

This conclusion could have been drawn from familiar cases which have been thought to accord with DDE, such as Push. For in this case the five are not really saved by means of harming Vic, as is often assumed; this is rather a side-effect very intimately related to the means. In Push, what is a means is, strictly speaking, that Vic’s body stops the trolley, not that he be (fatally) injured. If, miraculously, Vic’s body prevented the trolley from killing the five, without him being injured — if it simply bounced off him — this would not prevent the accomplishment of the end of saving the five. In other words, Vic’s body stopping the trolley causes the five not to be killed by it. This is a requirement for the presence of Vic’s body being a causal means to this end, a means that is sufficient in the circumstances. But Vic’s being harmed is not part of that which causes this end to be attained.

Since our deontological intuitions however declare it to be wrong of you to push Vic in front of the trolley, we must reject DDER (alongside DDE) as a canonical expression of these intuitions. But, it might be thought, if it is only in Push, and not in Blow up as well, that your killing of the one is wrong, a revision of DDER might save it. This revision could
fasten upon the fact that it is only in *Push* that something done to the one is a means; the blowing up of the bystander is not a means to the saving of the five. It should be remembered, from in section 1, that this notion of your doing something to, or acting on, somebody as a means (which causes harm) is not the same as saying that you are using *somebody* as a means (in a harmful way). It would not do to say that the latter is necessary for wrongness since, as we have seen, it is deontologically wrong to save five by means of running over one, though the one is not here used as a means (whereas something is of course done to him). But, as we will now see, it will scarcely do to require for wrongness that something harmful is done to the one as a means.

In *Bounce*, you cannot throw the explosives straight at the trolley. You have to throw them at the innocent bystander’s helmet from which they will bounce to the trolley and explode. As in *Blow up*, the bystander is blown up with the trolley. But here the killing of him is not simply a foreseen side-effect; it is a foreseen ‘side-doing’ generated by your doing something to him as means (hitting him with the explosives). It is however difficult to see how this could make your behaviour worse (if the knock on his helmet is not painful, etc.). Hence, if your act is wrong is *Bounce*, it is wrong in *Blow up*, though it is only in *Bounce* you do as a means something to someone that is harmful to him.

In view of this comparison, I think it is reasonable to conclude that Kamn’s intuition about *Blow up* is correct and, thus, that a revision of *DDER* which restricts its prohibition to doing to someone as a means an action which is harmful will not yield a sufficient condition for permissi-

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*Cf.* what Jeff McMahan distinguishes as the broad sense of intending as a means from the narrow one (*The Ethics of Killing*, New York: Oxford U. P., 2002, p. 410). This is probably also what Warren Quinn is after when he proposes that it should be harder to justify ‘agency in which harm comes to some victims, at least in part, from the agent’s deliberately involving them in something in order to further his purpose precisely by way of their being so involved’ (*Actions, intentions, and consequences: The Doctrine of the Double Effect*, reprinted in his *Morality and Action*, Cambridge: Cambridge U. P., 1993, p. 184).
bility because the pursuit of an end that is a greater good may be wrong, even though the subject harmed is not involved in the means, but is involved only in some side-effect of the means.

5. An Appeal to Causal Priority

Compare Blow up to a similar case in which the bystander’s death is involved as a side-effect in a way that is apparently not wrong-making. Since the only relevant difference between these cases seems to lie in how directly the bystander’s death is brought about, any moral difference between them can hardly have to do with anything else. For instance, in Delayed death the explosion that stops the trolley does not blow the bystander to pieces, but instead releases some chemical that slowly and imperceptibly undermines his health so that he drops dead days later. Under these circumstances, Kamm claims that it is permissible, according to our deontological intuitions, to blow up the trolley in order to save the five. This emerges most clearly from a ‘possible’ principle she puts forward for consideration, a principle which

permits lesser harm to come from greater good, but only permits lesser harm to

be an indirect effect of a means that directly produces a greater good; for example,

if the trolley being moved is the greater good, the grenade that moves the trolley

may cause death by a rockslide (Morality, Mortality, II, p. 202n).

But rather than laying down that a necessary condition for wrongness must make it wrong to attain G, unless it is a more direct effect of the means than is H, it may be wiser to claim more weakly that H must not be a more direct effect of the means than G.” For in cases such as Unavoid-

* Cf. the principle Kamm advances in ‘Harming Some to Save Others’ (Philosophical Studies, 57 (1989), pp. 227-60): ‘It is permissible to cause harm to some in achieving the greater good of saving a greater number of others from comparable harm, if events
able killing it seems safer to hold that the saving of the five is not a more indirect effect rather than that it is a more direct effect of the swerving than is the killing. It will not do to claim that the saving is a more direct effect because the swerving itself is sufficient for it, whereas the vehicle must continue along its new course for a while to kill the one. For if the saving is to be a greater good, it must not only be a saving from being hit by the trolley; the setting must also be such that the swerving triggers nothing else that will kill the five roughly at the time at which the trolley would have hit them.

Such a requirement of the harm not being causally prior to the good — i.e., not occurring earlier than the good in the causal process that an action is or starts — implies that the harm cannot be a causal means to the good. But this requirement is stronger, since it excludes also harmful side-effects of the means to the good end that are caused more directly than the end. Thus, it may be said that in Blow up the death of the bystander is caused more directly by the explosion than is the saving of the five. For although the trolley is blown up simultaneously with the bystander, wrecking the trolley is not enough for a saving of the five that is a greater good, as already remarked. In contrast, in Delayed death the death of the bystander is caused less directly than the saving of the five by the blowing up of the trolley, since it is caused via another, slow-working cause, the release of the chemical (or the landslide in Kamm’s example). So let us then consider the following causal priority doctrine.

**CPD:** There are greater goods, G, and smaller harms, H, whose relative sizes make it wrong to bring about both when H is causally prior (or brought about more which produce the greater good are not more intimately causally related to the production of harm than they are to the production of the greater good’ (p. 232). Contrast Quinn who wants to make ‘no appeal to the problematic notion of “closeness”’ (‘Actions, intentions and consequences’, p. 185).
directly) than G, but not when H is not causally prior to G (or G is brought about at least as directly as H).

We have however already in section 3 come across two sorts of cases in which CPD does not square with our moral intuitions. First, it cannot make it permissible to save the five in Double saving (and Loop). In this case, the second saving, which is the greater good, is caused less directly than the killing of Vic, since it is caused via the causing of this event (or rather the trolley hitting Vic). It is true that in this case there is a first saving which is causally prior to Vic’s being hit and harmed. In this respect, it differs from Shortcut in which it is impossible to regard the redirecting of the trolley as a save independently of the presence of Vic on the track, for under these circumstances redirecting would not delay the death of the five. But the existence of a causally prior, first saving in Double saving cannot help CPD to permit the saving of the five, since it is a good that is smaller than the harm. The second sort of case with respect to which CPD yields counterintuitive results is Circuit, in which it seems permissible to redirect the trolley so that it hits Vic who will in any case be hit.

A further objection to CPD is that it has none of the intuitive plausibility that DDE and its descendant, DDER, have. One wonders how it could have moral significance whether or not the harm is produced before the good. It is tempting to think that it matters that the harm is caused more directly simply because it can then be used as a causal means to produce the good.

Kamm imagines a case, Munitions plant, which enables us to gauge the intuitive moral force the phenomenon of intending something as a means exercises independently of causal priority (Morality, Mortality, II, note 10, p. 255). This case features a bomber whose end is to blow up some munitions plant.

Certainly, what is caused indirectly is generally harder to predict. This could make you less responsible for it, but we should now set aside such differences in probability and consider what only makes your act permissible or impermissible.
tions plant, but, because of a cloud cover, he cannot see whether his bombs hit this target. However, he knows that if the plant blows up, this explosion will cause some people nearby to be blown to pieces, and he can see whether this occurs. He goes on bombing until he observes these people being blown up. That is, he uses their being blown up as a sign or guide as to whether he has attained his end — or, in other words, he uses the blowing up of the people as a means of telling whether he has accomplished his end of hitting the factory. He cannot use this killing as a means of accomplishing this end because this presupposes that the killing is causally prior to the end. Still, he intends the people’s being blown up to occur as a means to something. Kamm claims — in opposition to Thomas Nagel* — that this ‘[g]uidance by evil does not make bombing the munitions plant wrong’.

There is reason to believe that Kamm is right against Nagel. For if, say, the cloud cover had been absent, the bomber would not have needed to be ‘guided by evil’. According to Nagel, he would then not act wrongly, but in a clear sense he would be doing the very same thing, bombing the munitions plant and, thereby, causing certain civilian casualties. It is hard to believe, however, that whether or not the bomber acts wrongly hinges upon the accidental presence of a cloud cover. Nagel’s suggestion seems even less plausible than the claim, criticized in section 3, that der gives a sufficient condition for wrongness. On the other hand, it is undeniable that Nagel’s position carries some intuitive appeal and that is of course why he occupies it. This is an indication that we intuitively take there to be something morally repellant about intending harm as a means, even in the absence of causal priority. All in all, my suggestion is that Munitions plant gives rise to a conflict in our deontological intuitions because it sets against each two notions that are welded together in the notion of something that is done as a causal (intended) means: the notions of that which is causally prior and that which is done as an (intended) means.

So, there are several reasons to reject CPD. But it can nevertheless be put to some use. The contrast between Blow up and Delayed death shows that, when the harm is brought about as a side-effect of the means to the good end, it makes a difference to our moral intuitions how directly the harm is caused in relation to the good end. Thus, a part of CPD can serve as a restriction on the last bit of DDER, to the effect that when the harm is caused as a side-effect, it must not be causally prior to the good end if the action is to be permissible. But, although this revision would make DDER a more accurate expression of our intuitions, it would not salvage DDER against the criticisms levelled at it in section 3. Further, it raises the question how it could matter morally whether the harm is causally prior to the good. One might suspect that the causal proximity plays a part only by leading us to overlook that the harm is not intended.

6. Conclusion
In section 2 I started out by considering a counterexample, Lift, to a standard formulation of DDE and concluded that a revision, DDER, could handle it. In the following two sections, I reviewed cases, e.g., Double saving, Circuit and Blow up which indicated that DDER gives neither a sufficient nor a necessary condition for wrongness. This prompted an investigation in section 5 of the causal priority doctrine, CPD, but, apart from the fact that CPD does not respect our intuitions in Double saving and Circuit, it gives the wrong verdict in a further problem case, Munitions plant.

The conclusion is that no sound principle of right action can be got out of DDE. Instead, DDE probably has its source in several mistakes about intention. There is the confusion of wrongness of intention with wrongness of action, the idea that since it is wrong intend to harm people as an end or to use them merely as a means when this harms them, the intentional actions that embody these intentions must be wrong. Then there are the mistakes of thinking that intending to harm people as a means is wrong like intending it as an end and of thinking that immediate effects of the means intended are part of what is intended. But other confusions
are possible, since the terminology of means and ends is full of ambiguities."

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