# Double Effect and Terror Bombing

## Ezio Di Nucci

I argue against the Doctrine of Double Effect's explanation of the moral difference between terror bombing and strategic bombing. I show that the standard thought-experiment of Terror Bomber and Strategic Bomber which dominates this debate is underdetermined in three crucial respects: (1) the non-psychological worlds of Terror Bomber and Strategic Bomber; (2) the psychologies of Terror Bomber and Strategic Bomber; and (3) the structure of the thought-experiment, especially in relation to its similarity with the Trolley Problem. (1) If the two worlds are not identical, then it may be these differences between the two worlds and not the Doctrine of Double Effect to explain the moral difference; (2a) if Terror Bomber and Strategic Bomber have the same causal beliefs, then why does Terror Bomber set out to kill the children? It may then be this unwarranted and immoral choice and not the Doctrine of Double Effect that explains the moral difference; (2b) if the two have different causal beliefs, then we can't rule out the counterfactual that, had Strategic Bomber had the same beliefs as Terror Bomber, she would have also acted as Terror Bomber did. Finally, (3) the Strategic Bomber scenario could also be constructed so as to be structurally equivalent to the Fat Man scenario in the Trolley Problem: but then the Doctrine of Double Effect would give different answers to two symmetrical cases.

Since even before WWII[1], the discussion of the *Doctrine of Double Effect* (DDE[2]) has been intertwined with the discussion of *terror* bombing and *strategic* bombing.[3] The concepts of 'terror bombing' and 'strategic bombing' are, both in historical and philosophical context, quickly clarified by looking at how the British changed their directives to their pilots sometime in late 1940. Frankland writes that in June 1940 British authorities still "specifically laid down that targets had to be identified and aimed at. Indiscriminate bombing was forbidden." (1970: 24[4]) Here indiscriminate bombing is what has come to be known in the literature as terror bombing. And it has presumably acquired that name because the British soon changed their fighting ways: already in November 1940 "Bomber Command was instructed simply to aim at the center of a city... the aiming points are to be the built-up areas, not, for instance, the dockyards or aircraft factories" (1970: 24) And built-up areas here means residential areas, as the British did not care to hide: Churchill spoke in the Commons of the "the systematic shattering of German

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[1] For the earliest examples known to me, see Ryan 1933 and Ford 1944. Gury also talks about the killing of non-combatants in the context of his seminal discussion of double effect (see Boyle 1980: 528-29).

[2] Here I will just assume previous knowledge of the Doctrine of Double Effect, and restrict my discussion of the actual principle to this footnote with the following representative definitions:

- McIntyre in the Stanford Encyclopedia of Philosophy: "sometimes it is permissible to bring about as a merely foreseen side effect a harmful event that it would be impermissible to bring about intentionally" (http://plato.stanford.edu/entries/double-effect/);
- Woodward in the Introduction to his standard anthology on DDE: "intentional production of evil... and foreseen but unintentional production of evil" (2001: 2);
- Aquinas, which is often credited with the first explicit version of DDE: "Nothing hinders one act from having two effects, only one of which is intended, while the other is beside the intention" (Summa II-II, 64, 7);
- Gury: "It is licit to posit a cause which is either good or indifferent from which there follows a twofold effect, one good, there other evil, if a proportionately grave reason is present, and if the end of the agent is honourable – that is, if he does not intend the evil effect" (Boyle's translation 1980: 528);
- Mangan: „A person may licitly perform an action that he foresees will produce a good and a bad effect provided that four conditions are verified at one and the same time: 1) that the action in itself from its very object be good or at least indifferent; 2) that the good effect and not the evil effect be intended; 3) that the good effect be not produced by means of the evil effect; 4) that there be a proportionately grave reason for permitting the evil effect" (1949: 43).

I have discussed other aspects of double effect elsewhere: Di Nucci (2012), Di Nucci (forthcoming, a), Di Nucci (forthcoming, b), Di Nucci (dx.doi.org/10.2139/ssrn.1930832), Di Nucci (submitted, a), Di Nucci (submitted, b), and Di Nucci (book manuscript).

[3] Here the terminology is a bit confusing: in modern philosophical discussions, the talk is always of 'terror' bombing and 'strategic' or 'tactical' bombing. Some (such as for example Cavanaugh 2006: xii) distinguish between 'strategic' and 'tactical' on historical grounds, finding the latter more appropriate. Others (such as for example Ford 1944: 263) object to both 'strategic' and 'tactical' and opt for 'precision' bombing. Other terms for 'terror' bombing are 'obliteration' bombing, 'area' bombing, and 'indiscriminate' bombing (Walzer 1991: 11). To make matters more confusing, the adjective 'strategic' is sometimes used for 'terror' bombing as well. I stick to 'terror' bombing and 'strategic' bombing throughout because it is the most common usage in the literature (as a brief Google search revealed).

[4] Reference found in Walzer (1971: 11).

cities." (July 1943[5]); "the progressive destruction and dislocation of the German military, industrial and economic system and the undermining of the morale of the German people to the point where their capacity for armed resistance is fatally weakened." (joint British-American Casablanca conference); "To the RAF fell the task of destroying Germany's great cities, of silencing the iron heart-beat of the Ruhr, of dispossessing the working population, of breaking the morale of the people" (*Target: Germany*, an RAF official publication of that period). Finally they ended up calling it 'terror' bombing themselves: "Here, then, we have *terror* and devastation carried to the core of a warring nation." (Still from *Target: Germany* as quoted by Ford 1944: 294).

## 1. The thought-experiment

The British started with what in contemporary literature we refer to as strategic bombing and then turned to so-called terror bombing. As we have seen (Ford 1944), the connection between these practices and the DDE was drawn already at the time. In the post-war period, the distinction between terror bombing and strategic bombing has evolved into a philosophical thought-experiment widely used to illustrate (and often also to defend) DDE. An influential example is Jonathan Bennett's discussion in his *Tanner Lectures on Human Values*:

> In this lecture I shall exhibit some difficulties about a certain distinction which is thought important by many moralists - namely that between what you intend to come about as a means to your end and what you do not intend although you foresee that it will come about as a by-product of your means to your end. This has a role in most defences of the Doctrine of Double Effect, and is one source for the view that terror bombing is never permissible though tactical bombing may sometimes

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[5] This and the following quotes are taken from Ford 1944: 262 ff.

be - i.e., that it is never right to kill civilians as a means to demoralizing the enemy country, though it may sometimes be right to destroy a munitions factory as a means to reducing the enemy's military strength, knowing that the raid will also kill civilians. In the former case - so the story goes - the civilian deaths are intended as a means; in the latter they are not intended but merely foreseen as an inevitable by-product of the means; and that is supposed to make a moral difference, even if the probabilities are the same, the number of civilian deaths the same, and so on. (1980: 95)[6]

The similarity between Bennett's characterization of terror bombing and the British directives from WWII is striking: "to kill civilians as a means to demoralizing the enemy country" is offered as an example of terror bombing; strategic bombing is described as "to destroy a munitions factory as a means to reducing the enemy's military strength, knowing that the raid will also kill civilians". The case we are asked to imagine is, supposedly, one in which a pilot is ordered to bomb a munitions factory, so as to reduce the enemy's military strength; she is also informed that there is a very high probability of civilian casualties as a result of the bombing of the munitions factory. The day after the same pilot is ordered to bomb civilians as a means to demoralize the enemy; she is informed that there is a very high probability (the same very high probability as yesterday) that the numbers of civilian deaths will be the same as yesterday.[7] Now the idea that DDE is supposed to defend is that it is permissible on the first day but not on the second day for the pilot to drop her bombs.[8]

Michael Bratman develops this very scenario as follows:

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[6] To be sure: Bennett is a critic of DDE, but he has contributed decisively to the establishment of the thought-experiment as a standard one. See also Bennett 1995.

[7] The epistemic characterization is here important, but it can vary: we can talk of certainty, high probability, or even just possibility, as long as there is no epistemic gap between the two cases.

[8] As I already said, here I will not get into issues of interpretation of DDE. Let me just say that moral permissibility is both the strongest and most common interpretation of DDE (see Boyle 1980 for an argument as to why we should interpret DDE this way); alternative interpretations may involve different attributions of responsibility, excuse as opposed to justification, or different sentencing. At the other end of the spectrum we find the claim that not even the action-theoretical distinction upon which DDE is found is a legitimate one (this last possibility is discussed here too).

Both Terror Bomber and Strategic Bomber have the goal of promoting the war effort against Enemy. Each intends to pursue this goal by weakening Enemy, and each intends to do that by dropping bombs. Terror Bomber's plan is to bomb the school in Enemy's territory, thereby killing children of Enemy and terrorizing Enemy's population. Strategic Bomber's plan is different. He plans to bomb Enemy's munitions plant, thereby undermining Enemy's war effort. Strategic Bomber also knows, however, that next to the munitions plant is a school, and that when he bombs the plant he will also destroy the school, killing the children inside. Strategic Bomber has not ignored this fact. Indeed, he has worried a lot about it. Still, he has concluded that this cost, though significant, is outweighed by the contribution that would be made to the war effort by the destruction of the munitions plant. Now, Terror Bomber intends all of the features of his action just noted: he intends to drop the bombs, kill the children, terrorize the population, and thereby weaken Enemy. In contrast, it seems that Strategic Bomber only intends to drop the bombs, destroy the munitions plant, and weaken Enemy. Although he knows that by bombing the plant he will be killing the children, he does not, it seems, intend to kill them. Whereas killing the children is, for Terror Bomber, an intended means to his end of victory, it is, for Strategic Bomber, only something he knows he will do by bombing the munitions plant. Though Strategic Bomber has taken the deaths of the children quite seriously into account in his deliberation, these deaths are for him only an expected side effect; they are not – in contrast with Terror Bomber's position – intended as a means... In saying this I do not deny that Strategic Bomber kills the children intentionally. (1987: 139-140)[9]

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[9] From the point of view of military ethics in general and just war theory in particular, there is an important difference between talking about 'civilian casualties' in general, as Bennett does, and talking about school children, as Bratman does. The civilian casualties referred to by Bennett may very well be the munitions factory workers, and their moral status is controversial. On this, see debates on non-combatants, civilians-m, and civilians-w (where 'm' and 'w' distinguish between those civilians which provide military equipment such as munitions and those which provide welfare equipment such as food); in particular, see Fabre 2009 and McMahan 2009. While Bennett's reference to 'civilian

The philosophical discussion of terror bombing and strategic bombing starts with the intuition that there is a moral difference between them; indeed, the Doctrine of Double Effect is normally offered as an explanation of the moral difference between Terror Bomber and Strategic Bomber. Elsewhere (Di Nucci, submitted b), I have looked at this supposed moral intuition experimentally and found no evidence for it. Here I concentrate on theoretical considerations and offer three arguments against DDE's explanation of the thought-experiment. I show that, once the thought-experiment of terror bombing and strategic bombing is properly analysed, it should really be no surprise that there is no intuitive moral difference between Terror Bomber and Strategic Bomber: depending on how some crucial underdetermined aspects of the thought-experiment are interpreted, either the relevant differences around which the thought-experiment is constructed (such as intending/merely foreseeing and means/side-effects) do not explain the supposed moral differences or there are, indeed, no such moral differences – as the evidence from intuition suggests.

## 2.  Bratman and different options

Reading Bratman's version of the thought-experiment, one may think that we are in a twin thought-experiment, where everything is identical apart from the plans of the two pilots. But what Bratman writes after a few pages indicates that this is not what he meant:

> ...this does not tell us whether or not Strategic Bomber would also go ahead and bomb if his bombing option were precisely that of Terror Bomber's. The difference between Strategic Bomber and Terror Bomber

casualties' may be a reference to civilians-m who may actually turn out to be liable to attack, Bratman's reference to school children simplifies the thought-experiment by providing a group (school children) which none of the contrasting views would consider liable to attack. That is why I shall stick to Bratman's school children throughout, which help identify the DDE debate on terror bombing and strategic bombing as independent from the non-combatant debate.

in the original case lies in the options with which they are presented; it need not involve a difference in inclination to plump for terror-bombing if that is the only bombing option available. (1987: 161)

Bratman's though-experiment, then, is not only different in the psychology of the two pilots; it is also different in the options available to them; which means, supposedly, that the difference between the Terror scenario and the Strategic scenario goes beyond psychological differences between Terror Bomber and Strategic Bomber. From the way both Bennett and Bratman describe the though-experiment it would have been legitimate to suppose, for example, that the consequences of the bombings would be identical: both Terror Bomber and Strategic Bomber destroy the munitions factory, both kill the same number of children. But actually there is no munitions factory in the world of Terror Bomber, otherwise we could not make sense of the above remark that "this does not tell us whether or not Strategic Bomber would also go ahead and bomb if his bombing option were precisely that of Terror Bomber's". That the difference between Terror Bomber and Strategic Bomber need not involve "a difference in inclination to plump for terror-bombing if that is the only bombing option available" suggests that DDE may have to argue for the permissibility of what Strategic Bomber does even in the case in which Strategic Bomber would have behaved exactly as Terror Bomber had he been faced with the options that Terror Bomber was faced with.[10] We will see in Section 4 that this is a problematic position to defend.

Let us take stock: we have identified the classic terror-strategic thought-experiment as being underdetermined in a first important respect: the options with which Terror Bomber and Strategic Bomber may be presented need not be identical, as long as they kill the same number of children (or some such). This is left open to the extent that Bratman, for example, allows for the possible counterfactual in which Strategic Bomber would admit that, had she

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[10] This point does not depend on claiming that there is no munitions' factory in the world of Terror Bomber. The same point can be made by supposing that there is a munitions factory but that Terror Bomber does not know that or that the orders Terror Bomber receives do not mention one (this fits Bratman's talk of 'options').

been presented with the options Terror Bomber was presented with, she would have done just what Terror Bomber has done. This first point, then, can be summarized by saying that the thought-experiment is underdetermined as to the non-psychological differences between the two scenarios.

There is also an important underdetermination as to the psychological differences between the two agents, which I discuss in the next two sections: it may be that Terror Bomber and Strategic Bomber have the same causal beliefs; or it may be that they have different causal beliefs. Let us begin with discussing the variant in which the two pilots have the same causal beliefs.

## 3.  Same causal beliefs

Let us suppose that the two agents, Terror Bomber and Strategic Bomber, have the same causal beliefs[11]: of the sixteen possible permutations resulting from combining the two agents with the two beliefs 'killing children will weaken enemy' and 'destroying munitions will weaken enemy' (and their respective negations), twelve involve at least one of the two agents in some form of irrationality – I will therefore disregard those even though some of them are such that the two agents have the same causal beliefs.[12] Of the remaining four, three are such that the two agents have different causal

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[11] Here my talk of causal beliefs does not presuppose causalism about action-explanation: I say that the beliefs are 'causal' to refer to their being beliefs about the causal structures of the world, such as the causal effectiveness of different strategies. Elsewhere I have criticized causalism in action theory (Di Nucci 2008, Di Nucci 2011a, and Di Nucci 2011b), but my argument here supposed to be independent from the truth or falsity of causalism.

[12] Still, some of these irrational combinations may still play a role in the intuition that our moral judgement on Terror Bomber should be different from our moral judgement on Strategic Bomber. Take the following:

Terror Bomber does not believe that killing children will weaken enemy and she does believe that destroying munitions will weaken enemy. Strategic Bomber believes that destroying munitions will weaken enemy and she does not believe that killing children will weaken enemy.

This is a permutation in which Terror Bomber and Strategic Bomber have the same causal beliefs, but I have excluded it because it involves Terror Bomber in criticisable irrationality: why does she embark on the plan to kill the children in order to weaken enemy if she does not believe that killing children will weaken enemy? Still, maybe this possible combination of the two agents' beliefs may be at least a part of the intuition that Terror Bomber is morally criticisable while Strategic Bomber is not morally criticisable. But this would be seemingly unfair: the two, in such a case, have the same beliefs and cause the same amount of suffering. Can we possibly blame Terror Bomber more just because of her error of judgement? It seems not, because it was not an error of *moral* judgement (if it were, then Strategic Bomber would have committed the same error).

beliefs. So there is only one permutation such that neither of the agents is irrational and the two agents have the same causal beliefs, the following:

Terror Bomber believes that killing children will weaken enemy <u>and</u> she believes that destroying munitions will weaken enemy.

Strategic Bomber believes that destroying munitions will weaken enemy <u>and</u> she believes that killing children will weaken enemy.

Here there is both a cognitive problem and a normative problem. In brief, the cognitive problem is how we get a difference in intention out of the same motivation and the same causal beliefs.[13] The normative problem is why Terror Bomber sets out to kill the children. Both Terror Bomber and Strategic Bomber believe that killing the children will weaken enemy. Both Terror Bomber and Strategic Bomber believe that destroying munitions will weaken enemy. Their instrumental beliefs are the same, then. And their motivation is the same too: they both want to promote the war effort by weakening enemy. That is, they have the same motivating reasons or, if you will, pro attitudes. And the same beliefs too: they both believe that 'killing children' will satisfy their pro attitude towards 'weakening enemy' and they both believe that 'destroying munitions' will satisfy their pro attitude towards 'weakening enemy'. They also both know that they cannot destroy munitions without killing children (and that they cannot kill children without destroying munitions). Where does the difference in intention come from?

What we have, here, is a kind of Buridan case: both 'killing children' and 'destroying munitions' satisfy the agent's pro attitude, and the agent does not seem to have distinctive reasons to do one over the other. Still, the agent has overwhelming reasons to do one, and therefore we may suppose that she just picks one because of her overwhelming reasons to do one of the two things.

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[13] This is, indeed, the core of Bratman's non-reductive planning theory of intention; and here I am not offering a general critique of Bratman's theory, which I have discussed at length elsewhere (Di Nucci 2008, Di Nucci 2009, and Di Nucci 2010).

But here we may think that from the motivating perspective this may be like a Buridan case, but from the normative perspective it is outrageous to talk about *picking* between 'killing children' and 'destroying munitions'. There are strong normative reasons to *choose* 'destroying munitions' over 'killing children'. And since there are no instrumental reasons to choose 'killing children' over 'destroying munitions' or to not choose 'destroying munitions' over 'killing children', then the agent ought to choose 'destroying munitions' over 'killing children'. And so we have already come to the normative problem: starting from a cognitive identity, we get a duty to choose 'destroying munitions' over 'killing children'. And Terror Bomber violates this duty to choose 'destroying munitions' over 'killing children'. But then, and this is the crucial point here, it is not DDE, but Terror Bomber's violation of her duty to choose 'destroying munitions' over 'killing children' – duty which Strategic Bomber has not violated – which explains the moral difference between Terror Bomber and Strategic Bomber.

The following plausible moral principle may be what is implicitly doing the work here: if you believe that both A and B satisfy your legitimate goal C, and you believe that A involves the death of no one while you believe that B involves the death of many children, then other things being equal you have a duty not to choose or do B. It is this very plausible moral principle, and not DDE, that may justify the distinction between Terror Bomber and Strategic Bomber if the two have the same causal beliefs.

Here it may be objected that this principle does not apply because both agents choose or do both A and B: but whether or not one wants to talk about 'choosings' or 'doings' in cases of merely foreseen side-effects (see next paragraph), the point stands: given that there is an obvious moral difference between A and B such that B is morally much worse than A, why does Terror Bomber settle on B instead of A when she believes that A would be just as effective in satisfying her goals? She may be ignorant of the obvious moral difference between A and B but then, given that Terror Bomber knows all too well what A and B are, her ignorance about their relative moral value would be itself a serious moral shortcoming on the part of Terror Bomber – and that

moral shortcoming would be able to distinguish, morally, between what Terror Bomber does and what Strategic Bomber does. On the other hand, Terror Bomber may not be ignorant of the moral difference between A and B but just indifferent to it – but that's as serious a moral shortcoming as the previous one.

Here it could still be objected that my critique depends on being able to say that Terror Bomber 'settles' on B or 'chooses' B or 'does' B but does not do A; and that, in turn, we need DDE to be able to distinguish between Terror Bomber's attitude towards A and B. But that's just not true: DDE contains a distinction between intended means and merely foreseen side-effects which could be applied to distinguish between Terror Bomber's attitudes towards A and B. But, crucially, that distinction need not exhaust the difference between Terror Bomber's attitude to A and her attitude to B; and, more importantly, DDE claims that it is the distinction between intended means and merely foreseen side-effects which is, itself, morally relevant; while here we have shown that the moral work is being done by other considerations. Notice, also, the advantage of my solution over the solution offered by DDE: DDE requires an is-ought gap in that it claims that a theoretical distinction in the psychology of the agent makes a moral difference; while my solution only appeals to normative distinctions, which are in themselves *basic* – as the simple moral principle I put forward.

Alternatively, it may be objected that we should not understand this interpretation of the thought-experiment as a Buridan case because the two agents may have different motivations despite having the same causal beliefs. The two agents may indeed be taken to have different moral motives in that they may be following different moral principles: but then, as in the argument already offered, it is the difference in the moral principles they are following and not the Doctrine of Double Effect that is doing the normative work: namely, nothing would depend on the difference between intended means and merely foreseen side-effects.

We have just shown that if we understand the thought-experiment in terms of same causal beliefs, then we can show why this thought-experiment does not support DDE – and this without even beginning to get into the usual arguments on DDE that dominate the literature. This, it may be argued, is a reason to think that we should not understand the thought-experiment in terms of Terror Bomber and Strategic Bomber having the same causal beliefs – even though such an understanding is compatible with the standard versions of the thought-experiment (as those by Bennett and Bratman that we have been following here): in the next section I discuss the alternative interpretation of the agents' psychologies according to which the two agents have different causal beliefs.

## 4.  Different causal beliefs

Let us then look at the interpretations on which Terror Bomber and Strategic Bomber do not have the same causal beliefs. There are three permutations which do not involve either of the two agents in criticisable irrationality where the two agents do not have the same causal beliefs:

A) Terror Bomber believes that killing children will weaken enemy <u>and</u> she believes that destroying munitions will weaken enemy.

Strategic Bomber believes that destroying munitions will weaken enemy <u>and</u> she does not believe that killing children will weaken enemy.


B) Terror Bomber believes that killing children will weaken enemy <u>and</u> she does not believe that destroying munitions will weaken enemy.

Strategic Bomber believes that destroying munitions will weaken enemy <u>and</u> she believes that killing children will weaken enemy.

C) Terror Bomber believes that killing children will weaken enemy <u>and</u> she does not believe that destroying munitions will weaken enemy.

Strategic Bomber believes that destroying munitions will weaken enemy <u>and</u> she does not believe that killing children will weaken enemy.

Readings (A) and (B) share a problem with the interpretation on which Terror Bomber and Strategic Bomber have the same causal beliefs: namely, on (A) it is not clear why Terror Bomber chooses 'killing children' over 'destroying munitions' and on (B) it is not clear why Strategic Bomber chooses 'destroying munitions' over 'killing children'. The problem with (A) we have already discussed. The problem with (B) is symmetric, and may have a symmetric effect on morally preferring Strategic Bomber over Terror Bomber. Namely, we may morally prefer Strategic Bomber because, in the absence of instrumental reasons to choose between 'killing children' and 'destroying munitions', we assume that she must have had some moral reasons to prefer the morally superior alternative, namely 'destroying munitions'. But this need not be the case: maybe, in the spirit of Buridan, Strategic Bomber flipped a coin; and then it would be difficult to morally prefer Strategic Bomber over Terror Bomber, after such a show of indifference towards the moral difference between 'destroying munitions' and 'killing children'.

Let us then leave (A) and (B) aside and focus on (C), which has clear advantages over the interpretation on which Terror Bomber and Strategic Bomber have the same causal beliefs. (C) explains, namely, why Terror Bomber sets out to kill children and not to destroy munitions. And (C) explains, also, why Strategic Bomber sets out to destroy munitions and not to kill children. Terror Bomber opts for the plan of killing children over the plan of destroying munitions because she believes that killing children will weaken enemy and she does not believe that destroying munitions will weaken enemy. And Strategic Bomber opts for the plan of destroying munitions over the plan of killing children because she believes that destroying munitions will weaken enemy and she does not believe that killing children will weaken enemy. And

this leaves open the crucial possibility that, had Strategic Bomber had the same beliefs as Terror Bomber, she would have also chosen as Terror Bomber (and *vice versa*). This counterfactual is importantly different from the counterfactual – mentioned also by Bratman – about what Strategic Bomber would have done had she been presented with the same options as Terror Bomber. That counterfactual was about non-psychological options; this counterfactual is about the beliefs of Terror Bomber and Strategic Bomber, not the strategic options offered by their worlds. Still, both counterfactuals generate similar problems for DDE.

Reading (C) leaves open both the possibility that Terror Bomber, had she had Strategic Bomber's beliefs, would have acted as Strategic Bomber did; and the possibility that Strategic Bomber, had she had Terror Bomber's beliefs, would have acted as Terror Bomber did. And one may think that this is going to be a problem for those who want to offer different moral judgements for what Terror Bomber and Strategic Bomber did. On the other hand, it may be objected, what is at issue are moral judgements over actions (for example, the permissibility of killing the children in the case of Strategic Bomber) and not moral judgements over agents, and suggest that therefore not being able to distinguish, morally, between the two agents does not imply that we will not be able to distinguish, morally, between the two actions.

The symmetrically opposite position is often put forward as a softer version or last resort of DDE: namely, that in the impossibility of distinguishing, morally, between the two actions, we may at least distinguish, morally, between the two agents – for example talk about differences in character between the two agents; or talk about "the way the agent went about deciding what to do" (Scanlon 2008: 36). Without discussing the merits of this position, it illustrates the difficulties of its symmetrical opposite: if we can't even find moral differences in the agents, where are the moral differences in the actions going to come from, given that what actually happens in the world is identical in both cases? So interpreting the thought-experiment as supposing that Terror Bomber and Strategic Bomber have different causal beliefs is problematic because then we can't even distinguish, morally,

between Terror Bomber and Strategic Bomber as we do not have any reason to think that Strategic Bomber would have acted differently from Terror Bomber had she had her beliefs. There is another problem with tracing back the moral difference to a difference of belief, which I shall just mention here briefly: it exposes the normative judgement to too much luck, and agents should be judged for their actions and inclinations, and not for their causal beliefs.

Let us take stock: we have here analysed another way in which the thought-experiment is underdetermined, namely the beliefs of the two agents. We have shown that there are important differences between interpreting the two agents as having the same causal beliefs and interpreting the two agents as having different causal beliefs. In both cases, though for different reasons, the thought-experiment is shown not to support DDE: in the former case because there is a much more basic moral principle which explains the moral difference; in the latter case because there is no moral difference – which was also the problem with Bratman's allowing for the two pilots being confronted with different options.

## 5.  Structural similarity with the Trolley Problem

There is another, important, variable. Before discussing it, it helps to introduce the other classic thought-experiment in the DDE literature, the Trolley Problem (Foot 1967; Thomson 1976, 1985, and 2008). In one of the infamous thought-experiments of analytic philosophy, a runaway trolley is about to kill five workmen who cannot move off the tracks quickly enough; their only chance is for a bystander to flip a switch to divert the trolley onto a side-track, where one workman would be killed. In a parallel scenario, the bystander's only chance to save the five is to push a fat man off a bridge onto the tracks: that will stop the trolley but the fat man will die. This is how Thomson introduces the two cases, *Bystander at the Switch* and *Fat Man*:

In that case you have been strolling by the trolley track, and you can see the situation at a glance: The driver saw the five on the track ahead, he stamped on the brakes, the brakes failed, so he fainted. What to do? Well, here is the switch, which you can throw, thereby turning the trolley yourself. Of course you will kill one if you do. But I should think you may turn it all the same (1985: 1397).

Consider a case - which I shall call Fat Man - in which you are stand-ing on a footbridge over the trolley track. You can see a trolley hurtling down the track, out of control. You turn around to see where the trolley is headed, and there are five workmen on the track where it exits from under the footbridge. What to do? Being an expert on trolleys, you know of one certain way to stop an out-of-control trolley: Drop a really heavy weight in its path. But where to find one? It just so happens that standing next to you on the footbridge is a fat man, a really fat man. He is leaning over the railing, watching the trolley; all you have to do is to give him a little shove, and over the railing he will go, onto the track in the path of the trolley (1985: 1409).

Briefly, DDE is often used to argue that in Bystander at the Switch it is morally permissible to intervene because the killing of the one workman is just a side-effect of saving the five while in Fat Man it is not morally permissible to intervene because the killing of the Fat Man is a means to saving the five. Roughly, then, Bystander at the Switch should be paired with Strategic Bomber and Fat Man should be paired with Terror Bomber. There are some obvious differences between the Trolley thought-experiment and the Terror-Strategic thought-experiment: in the Trolley Problem, there are definite non-psychological differences between the two scenarios. In Fat Man there is a bridge, in Bystander at the Switch there is no bridge, for example. Secondly, in the Trolley Problem there is no talk of intentions, we rather talk of 'means' and 'side-effects'. This suggests that, borrowing respectively from

the other thought-experiment, we could analyse the Trolley Problem and the Terror-Strategic thought-experiment as follows: we can say that Terror Bomber kills the children as a means to weakening enemy, while Strategic Bomber's killing of the children is just a side-effect of weakening enemy. Similarly, we can say that, in Bystander at the switch, the bystander does not intend to kill the one workman; and we will say that on the other hand in Fat Man the bystander does intend to kill the fat guy.

We have introduced the Trolley Problem because the thought-experiment of Strategic Bomber and Terror Bomber is underdetermined also with respect to its structural similarity with the Trolley Problem. Suppose that the munitions are kept under the school's ground[14]; that is, supposedly, why we cannot destroy the munitions without killing the children. That the munitions be geographically located under the school is compatible with the way in which the thought-experiment is normally told (see Bennett and Bratman above, for example) and it presents a structural similarity with Fat Man as opposed to Bystander at the Switch, as the children are now physically between the bombs and the munitions just as the poor fat guy will find himself physically between the trolley and the five workmen. The bombs will hit the school and then, and only then, hit the munitions; the same way in which the trolley will hit the fat guy and then, and only then, stop; while in Bystander at the Switch we may say that the five are saved before the trolley kills the one, as it is enough that the trolley is deviated on the side-track.

Now we know where the munitions and the school are located, but nothing is supposed to hinge on this. We will still say that Terror Bomber's plan is to kill the children in order to weaken the enemy, and that she knows that in killing the children she will also destroy the munitions. Similarly, we will say that Strategic Bomber's plan is to destroy the munitions in order to weaken the enemy, and that she knows that she will also kill children. The proposed analysis is that Terror Bomber intends to kill children and merely foresees

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[14] Delaney (2008) proposes a similar scenario. I criticize Delaney in Di Nucci (submitted, a).

that she will destroy munitions; and that Strategic Bomber intends to destroy munitions and merely foresees that she will kill children.[15]

We can see that the above structure is supposed to make no difference to Bratman's analysis of Terror Bomber's intention to kill the children, which Strategic Bomber lacks. The three roles of intention individuated by Bratman (1987: 140-143) are: (i) 'posing problems for further reasoning', (ii) 'constraining other intentions', and (iii) 'issuing in corresponding endeavouring'. As these roles are applied to Terror Bomber's intention, Bratman says that Terror Bomber's intention will (i) pose the problem of how he is going to kill the children: "Terror Bomber must figure out, for example, what time of day to attack and what sorts of bombs to use" (1987: 141). (ii) Terror Bomber's intention will also be incompatible with other possible strategies. Terror Bomber may not, for example, implement a plan to deploy some troops if this deployment would result in the enemy evacuating the children: "So Terror Bomber's prior intention to kill the children stands in the way of his forming a new intention to order the troop movement (1987: 141). (iii) Terror Bomber will also guide his conduct so as to cause the death of the children: "If in midair he learns they have moved to a different school, he will try to keep track of them and take his bombs there" (1987: 141-142).

Bratman claims that these three roles are not true of Strategic Bomber's attitude towards killing the children: Strategic Bomber will not engage in practical reasoning about how to kill the children; if further intentions of Strategic Bomber should be incompatible with killing the children, that will not be a prima facie reason to disregard them; and, to put Bratman's point crudely, if the children move, Strategic Bomber will not follow them. These three claims are independent of the three underdetermined elements that we

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[15] Let me here note that even though I have imported the structure of the trolley problem, the two thought-experiments remain different in that in the trolley problem there are obvious non-psychological differences (the bridge, for example) which need not be the case in the terror-strategic thought-experiment. Also, it may be argued that there is a further difference in that the agent in Fat Man physically uses the fat guy for her purposes, while the agent in Strategic Bomber does not physically use the children for her purposes – the difference being, supposedly, that the agent in Fat Man physically pushes the fat guy while the agent in Strategic Bomber does not have any such contact with the children. Here I would be worried that we would then be just talking, as in Harris's irony, about the difference between throwing people at trolleys and throwing trolleys at people (or throwing bombs at people and throwing people at bombs). But for those who take this challenge more seriously, see my critique of Quinn (1989) in Di Nucci (submitted, a).

have so far identified: (a) whether or not there is a munitions factory in the world of Terror Bomber, his attitude towards killing the children will have these three roles and Strategic Bomber's attitude will not have these three roles; (b) whether Terror Bomber and Strategic Bomber have the same causal beliefs (for example about the efficacy of killing children to weaken the enemy) will not alter the three roles of Terror Bomber's attitude towards killing the children. And the same goes (c) for the structure of the scenario, so that even if the munitions are hidden under the school, then it will still be the case that Strategic Bomber will have to engage in practical reasoning which has to do with, say, the sorts of bombs that will penetrate deep enough in the ground while that element will not play a role in Terror Bomber's reasoning.

The problem for DDE is that, apparently, borrowing the structure of Fat Man from the Trolley Problem does not make any difference to the attribution of the relevant intention to Strategic Bomber. But then we have two structurally similar scenarios, Fat Man and Strategic Bomber, to which DDE gives different answers, as it says that it is not morally permissible to kill the fat guy in Fat Man while it says that it is morally permissible to kill the children in Strategic Bomber: and this latter claim seems in turn less plausible if the munitions are hidden under the children – think of the case of human shields.

## 6.  The three roles of intention

What happens if we apply Bratman's analysis of the three roles of intention to the Trolley Problem? As we said, the comparison between the Trolley Problem and the Terror-Strategic thought-experiment is complicated by the use of different terminologies in discussing the two cases: for the Trolley Problem the talk is of side-effects as opposed to means, for the Terror-Strategic thought-experiment the talk is of intended as opposed to merely foreseen. But if both thought-experiments are to be explained by DDE, then there must be an available common reading.[16] There are, in fact, two common readings: we

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[16] As it is quickly shown that means and side-effects must be understood intensionally and not extensionally (see, for example, Davis 1984 or Roughley 2007), I will not repeat here arguments for the

can either talk in both cases of side-effects and means, or we can talk in both cases of intended and merely foreseen. The outcome is that we would say, of Bystander at the Switch, that the bystander does not intend to kill the one workman and that the killing of the one workman is just a side-effect of the bystander's rescue of the five. Of Fat Man, we would on the other hand say that the bystander does intend to kill the fat guy and that the bystander's killing of the fat guy is a means to the bystander's end of saving the five. Of Terror Bomber, we will say that she intends to kill the children and that killing the children is a means to Terror Bomber's end of weakening the enemy. Finally, we will say of Strategic Bomber that she merely foresees the killing of the children without intending it, and that killing the children is, for Strategic Bomber, merely a side-effect of her destruction of the munitions factory.

With this common understanding in place, we can test Bratman's three roles of intention on the attribution of the relevant intentions to the Trolley scenarios. Let us for example take the bystander's intention, in Fat Man, to kill the fat guy. This can be compared to the bystander's intention to stop the Trolley. Defenders of DDE have, traditionally, difficulties in explaining why in these cases we may not just say that the agent only intended to stop the trolley but did not intend to kill the fat guy.[17] We can look in the Fat Man scenario for the three roles identified by Bratman: (i) posing problems for further reasoning; (ii) constraining other intentions; and (iii) issuing in corresponding endeavouring. Does the bystander's attitude towards killing the fat guy have the following three roles? If it does not have these three roles, it is no intention, and then we cannot say, at least on Bratman's understanding of intention, that the bystander intended to kill the fat guy.

equivalence of the side-effect/means reading with the merely foreseen/intended reading. It is commonly accepted in the literature that means are intended while side-effects are not. For an exception, see Kamm 2000 & 2007.

[17] This is the so-called problem of closeness, already identified by Foot (1967) and which has since played a major role in the debate on DDE. I have discussed closeness elsewhere (Di Nucci submitted, a), so here I shall just mention some representative major contributions to this particular stream of the debate: Foot 1967, Bennett 1980, Quinn 1989, Fischer/Ravizza/Copp 1993, McMahan 1994, McIntyre 2001, and Wedgewood 2011. My discussion of the problem of closeness here is very brief and only focuses on Bratman's three roles of intention because in Di Nucci (submitted, a) I go in much more detail by looking at ten different recent proposals to deal with the problem of closeness in order to rescue DDE: I find each of these ten recently suggested solutions wanting.

And this would be particularly damaging for DDE, as Bratman's understanding – as we have seen – is meant to be sympathetic to DDE.

Let us start with the first role, posing problems for further reasoning. I think we can here contrast the supposed intention to kill the fat guy with the intention to stop the trolley, and see that only the latter attitude has the role for further reasoning identified by Bratman, and that therefore only the latter attitude is an intention. The bystander will have to reason about whether the fat man is heavy enough, for example; because if the fat man is not heavy enough to stop the trolley, then it will not make any rational sense to throw him off the bridge. But the bystander will not have to reason about a way of throwing him off the bridge so as to increase the chances that the trolley will hit head on the fat guy's vital organs, so as to guarantee the fat guy's death. The sort of further reasoning that the bystander will have to engage in has to do, then, only with how the fat guy will ensure that the trolley will be stopped; and not with the actual death of the fat guy.[18] Similar points can be made about the other two roles of intention: if the trolley happens to stop, for example, before I have pushed the fat guy, then I will no longer endeavour to throw him off the bridge – just as, in Bratman's discussion, Strategic Bomber will not pursue the children in case they leave the school. But now Fat Man looks like Strategic Bomber and not like Terror Bomber, so that we would say that the bystander in Fat Man intends to stop the trolley but merely foresees the death of the fat guy (or, in the other terminology, that the killing of the fat guy is a side-effect of the bystander's stopping of the trolley, which is in turns a means to his end of saving the five).

We have here shown, then, that in the debate on DDE one cannot just isolate an action-theoretical part of the argument: the problem of closeness has been here applied to Bratman's three roles of intention to show that, even if we understand the concept of intention as suggested by Bratman, in the application of this concept to the relevant thought-experiments we still have

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[18] Just to be clear, I do not pretend to be offering original kinds of arguments, as those familiar with the discussion of closeness will recognise at least some of these kinds of arguments. What I want to show is just that the three roles of intention identified by Bratman are not independent of the classic problem of closeness.

the usual difficulties. This also implies that we have offered a critique of Bratman's account of intention: but a general critical engagement with Bratman is not within the scope of this work.

## 7.  Historical closeness

I want to discuss one further aspect of the problem of closeness, which brings us back where we started, namely to the explicit character of the directives and language of the British Bomber Command in WWII. We have seen how, in the course of 1940, the British went from explicitly forbidding indiscriminate bombing ("specifically laid down that targets had to be identified and aimed at. Indiscriminate bombing was forbidden" (1970: 24)) through ordering that bombs be directed at inhabited areas ("Bomber Command was instructed simply to aim at the center of a city... the aiming points are to be the built-up areas, not, for instance, the dockyards or aircraft factories" (1970: 24)) to, finally, referring themselves to their own operations as *terror* ("Here, then, we have *terror and devastation* carried to the core of a warring nation" (as quoted by Ford 1944: 294)). This is interesting because it gives a very clear historical context to the Terror-Strategic thought-experiment that we have been examining throughout. But there is a further element of interest in the directives and language of the British: they never actually explicitly talk about killing civilians. The following Air Ministry directif and Air Staff paper from 1941 are illustrative (cited by Harris):

"to focus attacks on the morale of the enemy civil population, and, in particular, of the industrial workers." (1995: 7)

"The ultimate aim of the attack on a town area is to break the morale of the population which occupies it. To ensure this we must achieve two things: first, we must make the town physically uninhabitable and,

secondly, we must make the people conscious of constant personal danger. The immediate aim, is therefore, twofold, namely, to produce (i) destruction, and (ii) the fear of death." (1995: 7)

Let me first note that the civil servants of the time appear to have read Bentham, when they talk of the *immediate* aim of the operation.[19] More importantly, they explicitly talk about destruction, fear of death, and of making German cities "physically uninhabitable". It could not be any clearer that the targets are no longer only military or industrial sites; but, interestingly, the British stop short of writing down the obvious, in their orders: namely that the immediate aim is to terrorize civilians ("constant personal danger" and "fear of death") by killing as many of them as possible. That is, the order of killing civilians is nowhere explicitly formulated. And this shows a surprising sensibility of the British authorities to the problem of closeness: we only intend to scare them; we only intend to destroy their houses and workplaces; but we do not intend to actually kill them. As we bomb their houses at night while they sleep in them, we only intend to destroy the houses, not to kill those sleeping inside. Yeah, right! Here I am not making an historical point: firstly, for all I know, it may be that there are documents that talk about the explicit killing of the civilian population; secondly, I am not even claiming that the killing of the civilian population was deliberately left implicit in the formulation of orders.[20] All I am saying is that we can find in those historical documents all the argumentative force of the problem of closeness, as the challenge for DDE is exactly to spell out why an agent who intentionally bombs houses she knows to be full of people cannot be said to merely intend to destroy the houses without also intending to kill the inhabitants.[21]

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[19] Bentham (*An Introduction to the Principles of Morals and Legislation*) famously distinguishes between *oblique* intention and *direct* intention. The talk of immediacy takes us back to Gury and Mangan's definitions of double effect. To see that immediacy, when talking about double effect, is a way of denying that the relevant effect is a means, think of its German translation 'unmittelbar', which already includes in itself the denial of 'means' (mittel).

[20] This is indeed very plausible, but it is an historical hypothesis and this is not the place to defend it.

[21] Another possibly interesting question about DDE with relation to the history of WWII is whether we find it plausible that DDE offers different judgements for what the RAF did in the first part of 1940 and for what they did in the second part of 1940 – even though we must be careful in not overstating the

## 8. Conclusion

Summarizing, we have here identified three different ways in which the terror-strategic thought-experiment is underdetermined, all of which are crucial to its support of DDE: (1) the thought-experiment is underdetermined as to whether the non-psychological worlds of Terror Bomber and Strategic Bomber are identical: but if the two worlds are not identical, then it may be those differences and not DDE which explain the supposed moral difference between Terror Bomber and Strategic Bomber. The thought-experiment is also underdetermined as to (2) whether the psychologies of Terror Bomber and Strategic Bomber are identical: we have shown that, whether or not we interpret Terror Bomber and Strategic Bomber as having the same causal beliefs, DDE has a problem: if the two agents have the same causal beliefs, then why does Terror Bomber choose killing the children over destroying munitions? Terror Bomber's choice is morally problematic in the absence of a difference in causal beliefs; but then it may be Terror Bomber's dubious moral choice, and not DDE, that explains the moral difference between Terror Bomber and Strategic Bomber. And if the two have different causal beliefs, then we can't rule out the counterfactual that, had Strategic Bomber had the same beliefs as Terror Bomber, she would have also acted as Terror Bomber did. But then how are we to morally distinguish between the two? And if we can't distinguish, morally, between the two agents, and the two worlds are identical, then where is the moral difference going to come from? Finally, the thought-experiment is also underdetermined as to (3) its structural similarity with the Fat Man scenario of the Trolley Problem: what if, namely, the munitions were kept under the school? Here DDE would give different

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application of DDE to WWII: the technology was such that only 22% of bombers dropped their load within 5 miles of the target (Walzer (1971: 15) and Frankland (1970: 38-39)); with this kind of success rate it is likely that we are not even allowed to talk of intentions in the first place, as we would violate belief constraints: the bombers' attitude towards their targets was at the time more one of hope than one of intention, at least if we accept rational constraints on intention (Bratman 1984 & 1987; McCann 1991, 2010, and 2011; Di Nucci 2009 & 2010).

answers to two structurally symmetrical cases, Strategic Bomber and Fat Man.

**Ezio Di Nucci**

Universität Duisburg-Essen
*ezio.dinucci@uni-due.de*

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