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Ethics Bites

Trolleys, Killing and the Doctrine of Double Effect

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This is *Ethics Bites*, with me David Edmonds.

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Ethics Bites is a series of interviews on applied ethics, produced in association with The Open University.

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David
OK. Bear with me. You're standing by a railway line. An out-of-control trolley is heading towards you. Tragically, there are five people tied to the track ahead. It looks like they'll all be killed. Fortunately you have a chance to save them. By turning a switch you can send the trolley hurtling down a spur, a side track, where, most unfortunately, one man is tied to the rails. But killing him would save the five. There's another option. A second switch would operate a trap door on an overhead footbridge, dropping an overweight unsuspecting train-spotter onto the track below, stopping the train (he's large enough to do this), but, of course, killing the train-spotter. What should you do?

A ludicrous scenario? Maybe. But these, and other trolley problems, have been used by philosophers such as Judith Jarvis Thompson and Philippa Foot, to dissect and clarify our deepest intuitions about the morality of killing – about, for example, terrorism and euthanasia. Michael Otsuka is one of the leading experts on what's been called Trolley-ology.

Nigel
Michael Otsuka, welcome to *Ethics Bites*.

Michael Otsuka
Nice to be here.

Nigel
Now the topic we're going to focus on today is known as 'the trolley problem', which is essentially about the problem of killing one person to save many. I wonder if you can outline the kind of case that it's supposed to deal with.

Michael
Well let's begin with another problem. What one might call the tramp problem. We're to imagine that a homeless man walks into a hospital and the doctor who's treating him notices that he happens to be a perfect match for five different people who are dying of various organ failures. The question is would it be permissible for the doctor to carve him up in order to transplant his heart into one of the patients, lungs into another patient, liver and so forth. Now most people have the immediate reaction that this would be a moral outrage for the doctor to do this. And the thought is that it's impermissible to kill one person even to prevent five people from being killed.

Nigel

And that contrasts with the trolley problem?

Michael
Right. The trolley's an American word for a tram. And so we're to imagine the following case. A trolley is careening down a track, out of control, and here you are, you see this horrible scene unfolding because you see there are five people stuck at the end of this track. Now, if you do nothing the trolley will run over the five. But you notice that there's a lever alongside the track and if you push the lever that will turn the points of the track and send the trolley down a side spur, therefore you could save the five. But unfortunately there happens to be one person stuck on the side track. So if you turn the trolley onto the side track you'd end up killing the one person.

Now interestingly most people have the intuition that it's permissible to turn the trolley onto the side track. In fact the BBC did an online poll. And 77% of 14,000 respondents agreed that you ought to turn the trolley onto the side track. And another online survey 90% said you ought to do this.

Nigel
So you've got this problem. In the one case it's permissible to kill an individual on a track, but in the tramp case you couldn't possibly kill the tramp to get the organs to save the five.

Michael
Right, how do we explain the difference? Well here's one explanation. In the tramp case we're to imagine that the doctor is to do the killing, and there might be special institutional reasons not to want doctors to engage in this sort of behaviour. It's very important that people feel enough confidence to go to the hospital in order to be treated. If we started to fear that whenever we went to the hospital if our organs happened to be a perfect match for people who were dying the doctor would decide to carve us up rather than cure us, we'd be less likely to go to hospital and that would have bad effects overall.

Nigel
So the really interesting thing is the contrast between these two cases, because our intuitions go in completely different directions. In the trolley case it's ok to kill. In the tramp case it really isn't. And one explanation is that in the tramp case there are serious consequences beyond the death of the tramp, our faith in doctors and what they're going to do to us when we go into hospital will actually break down. But actually it's more complicated than that.

Michael
Right. We can just consider another trolley case. This case involves a footbridge that's over the main track. So once again you have this trolley careening down the track out of control and if you do nothing the trolley will run over five people at the end of the track. Now instead of sending the trolley off onto a side spur, this is how you stop the trolley from killing the five. You use your bare hands to push someone off the footbridge over the track, so he tumbles onto the track. The trolley hits him and his weight is sufficient to prevent the trolley from hitting the five. Unfortunately, you end up killing that one person. Now in this case the vast majority of people who have been asked about this case have the intuition that it's impermissible to push the one from the footbridge onto the path of the trolley in order to prevent the trolley from killing the five. Now we can't offer the sort of explanation against killing the one that we offered in the medical case. There's no institutional reason that parallels the institutional reason that we have to ensure that doctors behave in a way that elicits the trust of patients. So we've got a new problem. Call this the footbridge versus the original trolley case problem. How do we explain why it is permissible to kill the one in the act of saving the five in the original trolley case, while it's impermissible to kill the one by pushing him off the footbridge in the second trolley case?

Nigel
I think the temptation of some people would be to jump themselves rather than push somebody over.

Michael

If only you could sacrifice yourself by jumping off the footbridge yourself you would do that. Unfortunately you're just not large enough to prevent the trolley from running over the five. There does happen to be a much larger person sitting next to you so you decide, with a heavy heart, to push him off the footbridge instead of yourself.

Nigel
And luckily you're strong enough to do that.

Michael
Right, yes, as Philippa Foot who was actually the person who invented the trolley problem would say at this point, philosophers have arranged that things are exactly as we've described them.

Nigel
Ok. My intuitions are very strongly that I shouldn't push this large person in front of the train.

Michael
In fact, you might be surprised to learn that psychologists have actually hooked individuals up to what are called functional magnetic resonance imaging machines. People are able to see what bits of the brain light up when people are confronted with these problems and decide what they should do. And as it happens, when people are presented with the footbridge case and the prospect of pushing someone off the footbridge and when they recoil at that prospect, parts of the brain that are associated with emotional responses light up, whereas when people contemplate turning the switch so that the trolley goes off onto the side spur and decide that they ought to do that, other bits of the brain light up, where these bits of the brain are associated with cognition and means, and reasoning and the like.

Nigel
So what do you think that shows?

Michael
Well the philosopher, Peter Singer, says that it shows the following. Some cases have a certain evolutionary history. We once lived in small groups where it was possible to kill other individuals with your bare hands, and it's a good thing that people develop inhibitions against killing other people with their bare hands because it's usually the case that when you go off and kill another non-threatening person as this large person along side you is, with your bare hands, that will do much more harm than good. So we have this general inhibition or taboo that's been evolutionarily selected for against using your bare hands to kill non threatening individuals. Now in the case where you push a lever that then causes a bit of machinery to go off into a side spur, of course our long evolutionary history will not have confronted us with such high tech problems, so Singer says that our evolutionary selected emotional reactions just don't apply to that case and there we can let reason take over. Now Singer comes to the conclusion that we should actually trust reason and acknowledge that our emotional inhibitions are not going to be all that fine-grained. They're usually reliable, because usually when we are inhibited against killing it would do more harm than good to kill, but in some unusual cases, such as the case that philosophers have arranged involving pushing someone off a footbridge you'll actually do more good than harm by killing the one with your bare hands.

Nigel
So Singer says you should push the guy off the bridge because that would produce the best consequences in terms of outcome, because only one person would die rather than five.

Michael
That's right. So Singer ends up endorsing the utilitarian point of view according to which you should always do the most good. And we ought to trust our reasoning over our evolutionary selected inhibitions.

Nigel
But you disagree with Singer?

Michael
That's right. We can simply once again modify the footbridge case. So that rather than involving the killing of someone with your bare hands by shoving him off a footbridge we can imagine that as in the original trolley case the way to save the five is to push a lever. But in this case rather than the levers turning the points of the trolley so it goes off the main track and onto the side spur, if you push the lever what happens is that the trap door opens underneath the large man on the footbridge, sending him down on the main track so that the trolley hits him and comes to a halt, rather than carrying on down and killing the five.

Now most people have the intuition that it's impermissible to push the lever that activates the trap door. So the problem is how do we explain why it's impermissible to activate the trap door but it's permissible to send the trolley down the side spur where there's one person? In each case you kill one where the killing of the one is necessary to save five lives.

Nigel
It does seem strange doesn't it? Because they're both switch pushing events, they both have the same consequence that somebody dies, and they both have the same consequence that five people are saved.

Michael
So at this point it's useful to appeal to the doctrine of double effect, a doctrine that actually goes back to the catholic teaching of Thomas Aquinas.

Nigel
OK, so what is the law of double effect?

Michael
Well this doctrine prohibits the intending of an evil such as for example the hitting of an innocent person with a trolley; it prohibits intending an evil either as an end in itself, or as a means to some greater good. But the doctrine, by contrast, says it's sometimes permissible to do that which you merely foresee will bring about an evil so long as you don't intend the evil.

Nigel
So that might be easier to understand if you gave a specific example of how that might be applied.

Michael
Here's one application. Take the case of euthanasia. The Catholic Church teaches that it's impermissible to give someone a massive dose of, say, morphine with the intention of killing that person. But it's permissible in certain circumstances to administer a dose of morphine in order to alleviate excruciating pain even though you foresee that that dose of morphine will also bring about the death of that person: so long as the intention is alleviation of pain not the death of the person which would be regarded as an evil by the Catholic Church.

Nigel
So let's get back to the trolley problem, how does that illuminate what's going in those cases?

Michael
So in the trap door version it seems pretty clear that you intend that the trolley hit the one. Your intention is that you bring the person down from the footbridge onto the track of the trolley so that the trolley will hit him in order to come to a halt. So it appears you intend the evil of this trolley hitting this one innocent person. Now recall the original trolley case. In the original trolley case the hitting of the one person on the side spur isn't at all useful. So if that one person didn't exist on the side spur you'd be able to save the five simply by sending the trolley down the empty side spur. Now note that you actually need the trolley to hit the one person in the trap door case. So it seems that you merely foresee the death of the one in the original trolley case but you intend that the trolley hit the one in the trap door version of the trolley case.

Nigel
So the doctrine of double effect could explain the difference between the two cases. It could illuminate why we're prepared to flick the switch in the ordinary trolley problem, but we're not going to push the button to let the large person stop the train.

Michael
It does appear to do a very nice job of sorting out these two cases. Unfortunately, there are other cases which the doctrine of double effect doesn't deal well with. Let's consider one such case. This is what's known as the loop version of the trolley case. Now this case is just like the original trolley case with one big difference. So, remember in the original trolley case the trolley is heading towards the five and you send it off onto a side spur where it will end up hitting one on that side spur. Now in the loop version the side spur involves a bit of track that eventually loops back around and rejoins the main track. So if the side track had been empty then your sending the trolley onto the side track wouldn't really do much good because it just goes off onto this temporary detour but then rejoins the main track and kills the five in any event. If, however, there's someone on the side track then the trolley will come to a halt by hitting that one person.

Now, a majority of philosophers have the intuition that it's permissible to turn the trolley in the loop version of the trolley case, yet it also appears that you're using the hitting of the one person as a means to save the five people in this version.

Nigel
Well that's weird isn't it? Assuming that person's large enough to stop the trolley, that person is being used as a block, a human shield against the other five.

Michael
It does seem strange that people would think it's permissible to kill the one in this case where it's clear you're using the one as a means, whereas it's impermissible to kill the one in the trapdoor case where once again you're using the person as a means.

Nigel
So you're saying that most philosophers won't drop a large person from a footbridge by pressing a button, but they will flick a switch that sends a trolley on a loop with the result that it kills a large person on a track and stops the trolley. At first glance that seems fine because the loop problem looks almost the same as the original trolley problem. You've got a trolley coming up to a fork, you either kill one person or you kill five.

Michael
Well I think people do actually tend to assimilate the loop case to the original trolley case. It seems so similar to the original trolley case. Some philosophers have said well the only difference between the two cases is that there's an extra bit of track that loops around behind that person. How can the addition of that extra bit of track make a morally significant difference?

Nigel
But you think it's wrong for philosophers to say it's ok to go down the loop?

Michael
Even though it seems hard to distinguish the loop case from the original trolley case, you're using the hitting of the one as a means in the loop case not in the original trolley case. And the doctrine of double effect distinguishes between using as a means and merely foreseeing the hitting of the one. So I think the loop case should really be assimilated to the trap door case where we use the ones as a means. Rather than be assimilated to the original trolley case. The respect in which it's like the trap door case, namely you're using the one as a means, is more morally relevant than the respect in which it seems so similar to the original trolley case. And I think it's worth mentioning that though most philosophers think that it's permissible to turn the trolley onto the side track in the loop case, when individuals are polled and they're confronted with the loop case first before they've been confronted with any other case, a majority of them don't say it's permissible, in fact people split fifty-fifty. So I think the

history of the trolley case, in the philosophical literature, the fact that the loop case is presented after the trolley case about which people have such strong intuitions should lead us to question the intuitive response of philosophers that it's permissible to turn the trolley in the loop case.

Nigel
These trolley cases are quite artificial. I mean most people in their daily life aren't going to encounter run-away trolleys in this sort of way, fortunately. But it's not just a philosopher's game this. There are real life implications for this kind of thinking.

Michael
Right, so I mentioned euthanasia, and the distinction that people draw between administering morphine to relieve pain foreseeing that someone will die and administering morphine with the intention of killing someone. Now the other application is the case of terrorism and warfare. People who apply the doctrine of double effect to warfare will insist that it's impermissible to drop a bomb onto a city, whether it be Hiroshima or whether it be the fire-bombing of Dresden, with the intention of killing innocents, even if that's in pursuit of the worthy goal of bringing about an end to this war. Whereas they won't take the same attitude towards the dropping of a bomb on a military target, say on a munitions factory, even if a comparable number of people will die. The latter of course has acquired the repugnant name of collateral damage but even if we reject that terminology we still want to draw a distinction. It's never permissible to intend the death of innocents in warfare, whereas it's sometimes permissible to foresee that the same number of people will die in pursuit of a military objective.

Nigel
So this is a case of what seems to be a very abstract philosophical discussion impinges directly on how we decide to live our lives.

Michael
That's right. It's actually incorporated into rules of warfare that most people accept.

Nigel
Michael Otsuka, thank you very much.

Michael
Thank you.

David
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