The Use of Thought Experiments in Health Care Ethics

ADRIAN WALSH

INTRODUCTION

One striking feature of much philosophical debate in health care ethics is the extensive use of thought experiments, many of which are highly fanciful. Think, for instance, of James Rachels' defence of euthanasia which involves a hypothetical story concerning two different men, Smith and Jones, both of whom wish to see a cousin killed. In the first case Smith drowns his cousin. In the second, Jones walks into the bathroom with the intention of drowning his cousin, but at the very moment he intends to do so the cousin bumps his head and drowns without Jones laying a finger on his cousin. Both intend to actively terminate the life of their respective cousins, but only one needs to do so. Or for a more fantastical example, think of Judith Jarvis Thomson's article 'A Defense of Abortion' in which some forms of abortion are justified through a series of thought experiments involving, amongst other things, people-seeds that grow in one's carpet and rapidly expanding infants who crush their mothers to death. The use of these stories is particularly striking when one considers the practical nature of the discipline. Indeed, one might well argue that there is something odd about the extensive reliance upon thought experiments in areas of intellectual inquiry that are so obviously oriented towards practical life.

Somewhat surprisingly, there has been little detailed methodological examination of their use in health care ethics or, for that matter, applied ethics more generally. This is somewhat anomalous, especially if we consider other areas of philosophical inquiry, such as the philosophy of science or discussions of theories of personal identity, where there has been significant exploration of the role of thought experiments.

This is not to suggest that in this area of inquiry thought experiments are without their critics. A number of objections have been raised; thought experiments are variously held to be irrelevant, loaded, frivolous and even morally obnoxious. Do they have a legitimate place, then, in health care ethics? Should we agree with Henry Shue's more general suggestion that artificial cases make bad ethics (Shue, 1978)?

In this chapter I explore a number of questions concerning the legitimacy of their use in health care ethics. I begin by considering what a thought experiment is, the very different ways in which thought experiments are employed in arguments and then suggest a taxonomy based on these different uses. I then consider two blanket objections to thought experiments, neither of which I believe succeeds. My response to these objections is that thought experiments have a number of important clarificatory, analytic and explanatory roles to play in health care ethics. At the same time, this is not to say that their usage is always legitimate. Their legitimate uses are determined not so much by the modal content of any actual thought experiment itself, but by the extent to which the argument in which it is nested follows basic tenets of informal logic and respects the fundamental contingency of problems in health care ethics.

THOUGHT EXPERIMENTS AND ARGUMENTS

What exactly is a thought experiment? They are obviously a species of example, but what distinguishes them from, say, a story of derring-do from long ago or a literary example from one of the great novels? Tamar Gendler, examining thought experiments in the philosophy of science, suggests that '[t]o conduct a thought experiment is to make

a judgement about what would be the case if the particular state of affairs described in some imaginary scenario were actual' (Gendler, 1998, p. 398). Following Gendler's lead, we might define a thought experiment in ethics as involving making a judgement about what would be the case morally if the particular state of affairs described in the imaginary scenario were actual. We are asked to determine the moral status of that state of affairs. In this way thought experiments are distinct from what we might call 'illustrative examples' which simply illustrate or explain a preceding point. The thought experiment has a bigger role to play for it is intended to be part of our deliberative processes.

A further contentious question concerns the role of thought experiments in arguments. In the philosophy of science there has been considerable debate about whether or not a thought experiment is an argument. On one hand, John Norton argues that thought experiments are really just dressed-up arguments (Norton, 1991). But as Rachel Cooper notes in 'Thought Experiments', there are many thought experiments where this cannot be true (Cooper, 2005). Think of Hume's missing shade of blue. Hume asks us to consider whether someone could imagine what a missing shade of blue would look like without ever having seen it (Hume, 1978).

However, whatever is true in the philosophy of science, in ethics thought experiments are not arguments. Think of James Rachels' example of Smith and Jones (Rachels, 1975). As it stands this is nothing more than a story and without the background context of the debate over the moral status of active euthanasia, it might just appear like an ironic tale of two people's different fates. It is certainly not an argument. However, in some cases thought experiments function as premises of an argument or lead one to a premise in an argument. Admittedly, sometimes we might infer some conclusions from a story that is told to us, but that will be because of the surrounding context. In such cases we might think of the thought experiment as being the only explicitly articulated element in an enthematic argument. In other cases, a thought experiment functions as a mechanism for framing an argument.

Given this view that thought experiments function either as elements of an argument or to frame an argument, it follows that thought experiments go wrong in two ways. First, they go wrong when they are employed in arguments where conclusions drawn from them are unwarranted on the basis of the evidence provided by the thought experiment and surrounding premises.

Second, they go wrong when they frame the argument in a misleading way. Thought experiments can have remarkable rhetorical effects and often they lead one to lose sight of what was originally at issue.

In either case we might say that the thought experiment is illicit. Here it is important that we distinguish 'being illicit'

from imaginative failure. For a thought experiment to fail in this way is for it not to have any imaginative grip. For instance, if I am asked to imagine a square circle, I do not know what I am imagining. Rachel Cooper cites Bernard Williams' thought experiment concerning people that split like amoebas as an example of a thought experiment that fails because 'we are unable to answer the necessary "what if" questions' (Cooper, 2005, p. 342). She notes that we can ask the question 'What if people split like amoebas?', but we are unable to answer it. In the moral realm, equally there will be some scenarios for which we cannot determine what we think morally. Our interest, however, is not in cases of imaginative failure, but in cases where the use of thought experiments is illicit or pernicious (Gale, 1991). The use of a thought experiment will be illicit when the conclusions drawn from it are not warranted inferentially or when it frames the question in a misleading manner. It is not that any specific kind of thought experiment will be essentially illicit, but rather it will depend upon the argumentative context.

In considering the issue of the role of thought experiments in arguments, we should note the rhetorical function of bizarre thought experiments. Often the very strangeness of these thought experiments obscures the role that they are playing in an argument. One struggles just to get one's head around what to think morally in many of these cases, let alone to work out how exactly it might bear on the topic under discussion. The strangeness then hinders us in exercising the critical faculties we might otherwise employ. Similar points can be made about the over-use of thought experiments in an ethical debate. If an interlocutor presents numerous variants of a case, all involving minor changes, then this can sometimes lead the point of the discussion to be lost. Not only are such discussions tedious, but they can also lead participants to lose any sense of the nature of the topic under examination or of what their intuitions might be. Thought experiments should not be the whole method, but rather should be treated as but one tool at the disposal of the health care ethicist.

FOUR DISTINCT WAYS IN WHICH THOUGHT EXPERIMENTS ARE USED

If I am right that thought experiments are typically employed as elements within arguments or in framing the context of an argument, then we should be able to categorize them in terms of the different roles that they do play. I suggest we can distinguish four main types of role in the taxonomy below. (I make no pretence that the list is exhaustive.)

First, some thought experiments function as clarificatory devices. Perhaps the most common of these are what we might call commitment cleavers where thought experiments are used to enhance understanding by teasing apart distinct but potentially conflated principles. This, I suggest, is the very point of Plato's *Ring of Gyges* example (Plato, 1974), where he discusses what would motivate one to act justly when in possession of a ring by which one can escape detection and hence disapprobation. The point is that one might agree that it is right to act justly and yet it is not clear whether one endorses this as a rule of prudence or as a fundamental moral obligation. By having Glaucon discuss a ring that makes the bearer invisible, Plato provides a device for determining what principle underpins any claim for the necessity of acting justly. Is it prudence or the intrinsic rightness of acting justly? As C.L. Ten notes, such thought experiments help us to 'decide whether a particular principle is fundamental or subordinate' (Ten, 1987, p. 21). In doing so they increase our ability to deal with complicated normative issues.

Second, there is what I want to call re-imagining. This is where we use a thought experiment as a device to reframe or refocus a debate. There are a number of reasons why we might wish to do so. For instance, there will be cases where over-familiarity with an ethical issue might lead us no longer to engage in a genuine dialogue with opponents. Abortion debates might well be a case in point. This a topic about which most people will have an opinion. Often the views on either side are so entrenched that those debating the topic are unable to interact in a meaningful way. In such cases, to avoid intellectual stalemate, thought experiments function to reopen debate. Judith Jarvis Thomson's violinist would be a case in point. Thomson asks the reader to imagine that you awake to discover that you have been kidnapped by a group of music lovers and attached to a famous violinist. If you detach yourself from the violinist then he will surely die. The idea is that the case is analogous to a woman who finds herself pregnant after being raped. The fantastical example is intended to make us reassess our views on abortion.

Such reimaginings can also function as mechanisms for avoiding irrelevancy. Often philosophical discussion of ethical issues can be sidetracked by debates over irrelevant legal, historical or technical detail. Imagine that one is involved in a debate over whether it is ever permissible to use weapons of mass destruction. Here one might be tempted to raise the deployment of the atomic bomb on Hiroshima as an example. However, in some instances, such a discussion can turn into an historical debate over the reasons why the bomb was in fact dropped and questions about the normative legitimacy of this kind of action become obscured. In this case it would have been better to have used an imaginary example - even perhaps a highly improbable science fiction example - in order to maintain focus on the questions of general principle. We might call this the 'Star Wars solution'. Discussing a wrong act that is a long way from us often makes it easier to discuss the general principles. Thought experiments are often used for such purposes.

Third, some thought experiments function as *counter-examples* and *reductios*. For instance, one philosopher might present a theory or a definition which is intended to be either necessarily or universally true. In response, the person's opponent provides a counter-example or shows that the theory has absurd consequences (Gale, 1991). These are what Roy Sorenson calls 'refuters', and it goes without saying that not all refuters involve thought experiments (Sorenson, 1992). In ethics these are very common. One writer claims that it is always wrong to steal and in response an interlocutor tells a story of a starving orphan child whose only way of feeding herself is by thieving bread from the rich. This obviously is an example intended to refute the general moral claim.

Finally, there are what I want to call *intuition pumps*. This term has some currency in the literature, though, with no standardized meaning (Sorenson, 1992). Indeed in ethics it often functions simply as a synonym for 'thought experiment'. Herein I define it stipulatively to refer to a particular class of thought experiments in the moral realm that aim to lead us to some general kind of conclusion from our reactions to a single thought experiment. We might think of it as a form of inductive reasoning. One can read Rachels' *Smith and Jones* example here as an intuition pump that aims to convince us that there is no intrinsic moral difference between active and passive euthanasia.

These then are the four main ways in which thought experiments, as a matter of descriptive fact, are used in health care ethics. But is their employment legitimate? Are there grounds for thinking that some thought experiments are always illicit in this context? I want to consider now two objections which make such a case.

THE OBJECTION FROM MODALITY

One obvious objection to the use of thought experiments in health care ethics is that they are illicit when they involve modally bizarre cases. Let us call this the 'Objection from Modality'. This is not an objection to *all* thought experiments, but rather to those that involve fanciful examples. The idea is that there are specific kinds of thought experiments – namely the modally bizarre – that are intrinsically inadmissible.

A prime target for this objection would be Judith Jarvis Thomson's people-seeds thought experiment where, in the context of the debate over the morality of abortion, she asks us to imagine a world in which people-seeds float freely about. If we do not keep our windows closed those people-seeds will settle in our carpets and begin to grow into children. She asks whether we would have any moral obligations to provide for such beings and whether it would be permissible to rip out any growing plants that we find in our carpets.

According to the Objection from Modality, this experiment would count as illicit since it involves counter-factuals that invoke possible worlds very distant from our own. On this line of argument, thought experiments in applied ethics can be legitimate, but only in so far as they do not involve modally remote worlds.

Is proximity to our world a way of differentiating between the licit and the illicit? I believe that we should reject this way of drawing the distinction. First, there will be occasions where bizarre examples provide useful re-imagining devices. If we take the abortion debate it is quite clear that, in many instances, the discussants are no longer engaged in a genuine dialogue, for the positions on each side are so fixed. The advantage of a thought experiment like Thomson's is that it allows for dialogue to begin again.

Second, the objection overlooks the role that general moral principles play in discussions by philosophers of topics such as just war, abortion and euthanasia. In attempting to determine the rightness or wrongness of a case, philosophers often appeal to some kind of ethical universal. These principles are presented as universal truths and, indeed, part of their argumentative force comes from their status as moral universals. For instance, pacifists in discussions of just war might appeal to a principle that says killing is always wrong. In considering the merits of the argument, it is quite legitimate to ask, given its presentation as a universal, whether the premise that 'killing is wrong' is true in all possible worlds. Are there any counter-examples to the case? These are legitimate questions to ask. Thus, although applied ethics deals with real-world cases, if an argument regarding such a case relies on a universal moral principle, then it is quite acceptable to test it against possible scenarios, bizarre or otherwise.

This is not to suggest that bizarre thought experiments cannot be illicit. I suggest that legitimacy or otherwise depends upon what role the thought experiment is playing in an argument. There will be cases where the modally bizarre are inappropriate, but this is not because the story is bizarre. Instead, in these cases the bizarre are illicit because the 'evidence' does not warrant the conclusions drawn provided by the thought experiment. There will also be cases where the bizarre over-stretch our intuitive competence and give rise to 'imaginative failure'. Indeed, one might well feel that it is difficult to determine whether it would be wrong, in one of Thomson's case, to pull people-seeds out of one's carpet.

Conversely, on these grounds there will also be more quotidian cases that fail because of the structure of the argument in which they are embedded. Here I think that on one reading of the argument, James Rachels' *Smith and Jones* experiment would be a case in point (Rachels, 1975). Rachels' story, if we accept that there is only the bare difference between actively bringing about X – as opposed to

not intervening to prevent X (and no genuine moral difference) — would demonstrate that there is not always a moral difference to be had between the active and the passive. But much more work would be required to show that the difference between active and passive does not hold in the case of euthanasia or does not hold in a wide range of other cases. All that is refuted here is any argument that says that there is an intrinsic moral difference between active and passive euthanasia because killing is always morally distinct from letting die. It does not, however, show that there is no intrinsic difference between active and passive euthanasia, as one reading of Rachels' argument would seem to suggest. But this would simply represent a failure of informal reasoning.

When distinguishing legitimate thought experiments from the illegitimate ones we should examine the role that any thought experiment plays in the argument in which it is embedded. It is the relevance of the example to the argument and not the modal distance that is the key here.

THINGS WE SHOULD NOT THINK?

It might also be argued that there is something morally objectionable about the use of thought experiments in the context of issues as important as abortion, euthanasia and cloning. We find this attitude famously expressed by G.E.M. Anscombe when she contemptuously writes of the methods of Oxford philosophers. She claims that the examples they use are either banal or fantastic – and of the fantastic she writes that they ask such things as the ones that follows:

. . . what you ought to do if you had to move forward, and stepping with your right foot meant killing twenty-five fine young men while stepping with your left foot would kill fifty drooling old ones.

She continues:

Obviously the right thing to do would be to jump and polish off the lot (Anscombe, 1957, p. 267).

Clearly, the point here is that such thought experiments treat morally serious issues in a frivolous manner.

Anscombe would presumably be equally horrified by a great deal of contemporary health care ethics, for there the literature abounds with examples that might be thought to be morally frivolous. Think, for instance, of Michael Tooley's super-kittens case (Tooley, 1983, p. 191) in which cats are given a drug so that they have the rational capacities of persons. It might well be argued that in these thought experiments the content is such that they encourage us to think about non-trivial issues, such as abortion or euthanasia, in a highly insouciant or casual manner. It might even be argued that the very act of engaging with these kinds of examples is morally corrupting in itself:

it would be a case of having 'one thought too many'. One collaborates with vice simply by contemplating the frivolous scenarios raised by such thought experiments.

One might also think that the content of many thought experiments is morally objectionable because they are so structured as to foreclose on any genuine moral engagement with the issues they are intended to illuminate. We might label this the 'Objection from Moral Creativity', and it involves the idea that the highly artificial construction of many thought experiments leaves little space for genuine choice and accordingly we should not have any truck with them since they do not develop our moral sensitivities. Such an objection would most plausibly be directed at our intuition pumps. In these thought experiments, a single case is constructed with the aim of leading us to some more general conclusion and it does so by asking us to choose between the experimenter's favoured choice and some entirely unpalatable alternative. In offering us only Hobson's Choice, the thought experiment fails to foster genuine moral engagement. This is presumably John Stuart Mill's point when he writes that 'A test of right and wrong must be the means, one would think, of ascertaining what is right and wrong, and not a consequence of having already ascertained it' (Mill, 1972, p. 2).

However, I do not believe that either of these objections provides grounds for the complete repudiation of thought experiments, bizarre or otherwise. Let us begin with the accusation of moral frivolity. This objection accords a great deal of moral significance to what it is we imagine. This strikes me as a mistake for it is our genuine and considered moral attitudes that are of greatest importance, and what we imagine is conceptually distinct from those attitudes. For the objection to bite, we require to have a causal connection between the tone of what it is we imagine and our moral modes of regard. But this overestimates the fragility of many of our genuine moral attitudes – merely talking in a frivolous manner about an issue like abortion is unlikely, by itself, to lead us to treat it with a lack of due seriousness.

Further, there will be cases where obtaining some distance from our ingrained moral views – if need be through a slightly jocular tone – is necessary if we are genuinely to attend to the case. When dealing with ethical issues, such as euthanasia and stem-cell research, which most of us take to be of great import, a lack of moral seriousness is rarely the problem. The real problem is our dogged unwillingness to engage in a genuine dialogue with those who hold differing views. If a thought experiment through its jocular tone allows us to stand back from the case and re-examine our views in the light of reason, then this can only assist in a genuine moral engagement.

In response to the Objection from Moral Creativity, I would suggest that this objection only has any grip if one views thought experiments as having apodictic force. On this strong view it is assumed that by engaging with a thought experiment that is highly loaded, one automatically provides one's interlocutor with a 'knockdown argument'. But this is a mistaken view: engaging with a thought experiment - no matter how loaded - does not mean that one has to accept the conclusions drawn by the thought experimenter. There are a number of ways of responding. If we take Thomson's violinist example, one might agree that in this case it would be justifiable to unhook oneself from the violinist, but then argue that there are a number of important disanalogies between this case and that of the woman who falls pregnant through rape. Alternatively, one might offer in response a different but related case where our intuitions seem to run in the other direction. The point is that so long as we do not regard the thought experiment as the final word, but rather as an opportunity for continual dialogue, then imagining what it is the thought experimenter wants us to imagine need not stifle our moral creativity.

I would conclude then that these objections do not give grounds for abandoning the use of thought experiments. To be sure, there are other objections one might raise to the use of thought experiments; and space does not permit that we cover even all of the extant ones let alone the possible ones. However, the preceding discussions should provide some indication of possible ways of responding to abolitionist critiques that would eliminate their use altogether. I would suggest that they provide us with extremely valuable intellectual resources and any plausible criticism would need to demonstrate that its concerns outweigh the intellectual benefits that thought experiments bring. Further, given the highly divergent variety of uses to which they are put, it is hard to imagine a criticism that could successfully demonstrate all the different varieties as illicit. I suggest that any genuine criticisms would be of particular uses not their use in general.

THE CONTINGENT CONTEXT OF HEALTH CARE ETHICS

So far in defence of the continued use of thought experiments in health care ethics, I have focused on their usefulness, suggesting that there is nothing intrinsically wrong with their employment. At the same time, I have also stressed that on some occasions their use is illicit. The primary way in which such use is illicit is when they fail to provide the inferential basis for the conclusions which philosophers intend them to support. But notice this: such a constraint could apply to the use of thought experiments in any area of philosophy. I want to add a further constraint that is specific to applied ethics, for there is something special about our deliberative processes in health care ethics that arises out of the very *contingency* of the problems

with which such ethicists deal. Although bizarre thought experiments are not illegitimate when they tell us something about the principles we employ, the arguments in which they are 'nested' need to respect the contingency of the context of health care ethics. In this area of inquiry we aim to determine the rightness and wrongness in very particular sets of circumstances. Given that context, our ethical claims do not need to be true in all possible worlds in order to be legitimate. This is not to rule out the possibility that some ethical claims will be true in all possible worlds, but simply that they need not be.

Here we need to exercise some caution, for this might sound rather like a repudiation of the defence of the bizarre in the previous section. The difference here is between the content of a thought experiment and the argumentative context. It is not that the modal content of the thought experiment fails to respect the contingency of applied ethics, but that the argument in which it is nested does so.

Perhaps an illustration would be helpful at this point. Imagine a debate between a vegetarian and a carnivore on the morality of eating meat. Suppose that the vegetarian says that eating meat is wrong because it involves killing. To this the carnivore responds that he can imagine a scenario in which various cuts of meat are grown in chemical solutions and that no live being is killed in the production of this meat. Is this a legitimate counter-example? It depends upon what our vegetarian is arguing. If the claim is that meat-eating is intrinsically wrong because it always involves killing then this strikes me as a legitimate counter-example. However, if the claim is more muted and the vegetarian simply defends the view that, as it stands, meat-eating involves killing and killing animals is wrong, then I do think the thought experiment is illegitimate. The vegetarian need not be opposed to meat-eating in the hypothetical scenario. Here we also see the rhetorical powers of thought experiments, for the counter-example distracts us from the fundamental question which concerns whether or not killing animals for food is morally justifiable.

Equally, in health care ethics we are dealing with very particular contexts. We are typically asking whether an action in this particular context is right or wrong. To answer that question by showing other contexts in which it is permissible will often involve changing the subject. For instance, if the topic under discussion was the question of whether it is morally permissible to incarcerate human beings without trial, it would be changing the subject to point to creatures that did not mind being incarcerated. Here we are assuming that the prisoners in question do not differ substantively in terms of their philosophical anthropology from us and do not wish to be in jail.

The wider point is that in health care ethics the contingent details of the decision-making context are vitally important, and thought experiments which overlook these are pernicious. In such cases we stop talking about the rightness or wrongness of a decision in one particular circumstance and end up talking about the moral status of a far broader class of circumstances. To do so is to change the subject. Note that this line of criticism certainly does not rule out bizarre thought experiments, but simply advises us to be cautious of those which lead us to change the topic under discussion. What it involves is simply a repudiation of the philosophical nostrum that any genuine ethical claim, in order to be genuine, must hold true in all logically possible worlds (Jacquette, 1997).

CONCLUDING REMARKS

One common – and entirely understandable – response to the thought experiments employed by many health care ethicists is to refuse absolutely to engage with any of them. This response is most marked when readers are confronted by bizarre imaginary cases such as Thomson's. However, any such response which would have us rule out all thought experiments – or even all bizarre ones – is ultimately mistaken, for it would deny us a very important intellectual resource. Thought experiments have a legitimate role to play in discussions of health care ethics, in focusing our attention on the morally salient features of a moral problem, providing counter-examples to general moral claims and allowing us to re-imagine moral problems that for various reasons have become stale.

This is not to suggest that our use of thought experiments in health care ethics cannot go wrong. First, they are illicit when they are elements of invalid arguments. In addition, there is a second way of going wrong that is specific to both health care ethics and applied ethics. When thought experiments fail to respect the *contingent context* of problems in health care ethics, then here too their use is illicit. On this line of reasoning, legitimacy or illegitimacy is not a property of any thought experiments in itself, but depends upon the argumentative context in which it is embedded.

The upshot of this approach is that if one finds a particular thought experiment wrong-headed, the proper response is not to reject it entirely or to refuse to engage with it. Instead the proper course of action is to seek to discover exactly where the argument goes wrong or why the framing of the argument might be misleading. It would be a genuine mistake for us to stop imagining.

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