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The Morality of Weapons Research

Why it is Wrong to Design Weapons

Springer

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For my grandson Sasha Barretto

Preface

My interest in the topic of this book, the morality of weapons research, goes back some 25 years to the time I was teaching a course on science and ethics in a Department of Science and Technology Studies (STS). The Manhattan Project, of which more about in this book, had been standardly used as a case study in STS in regard to the relations between science and government. The use of the atomic bombs was also a topic for discussion. My interest was with the responsibility of the scientists who designed the bombs for their use, and when examining that issue it becomes clear that there would have been no atomic weapons available by the end of the war had not a number of scientists managed to convince the governments of Britain and the United States to sponsor the research. However, the scientists in question were worried about having a means to deter Germany should it make an atomic bomb, not with destroying Japanese cities. Japan was not in the war when the first research project was set up in Britain and many of these pioneers regretted what they did. I began to think about this issue, about weapons research being done in one context for a given reason and then being used in another. I wondered whether this was true in general, for all weapons research. What is true is that this is certainly possible, because what weapons research does is to create designs and these survive the beginnings and ends of war, changes of governments, changes of international relations and so forth. I eventually came to the conclusion that undertaking weapons research is always morally wrong and always morally unjustifiable.

My first monograph on this subject, *Designed to Kill: The Case Against Weapons Research*, was published by Springer in 2012. So I am very pleased that the same publisher is producing this much shorter, Springerbrief, version of my argument against weapons research. I should add that while this is essentially the same argument as before, it is couched in quite different terms to that of my first book—it is not a summary or précis of that work. So I would like to express my thanks to Floor Oosting, Christopher Wilby, who was one of my previous editors, and all the other excellent people at Springer. I'm also grateful to the referees who made interesting and helpful suggestions to my original proposal.

Sydney, Australia — John Forge

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Introduction

The aim of this book is to 'make the case against weapons research', that is, to provide good reasons to accept that weapons research is always morally wrong and never morally justified. I will briefly state my argument in favour of these claims, make some comments by way of clarification, comment and interpretation, and give a quick sketch of the chapters which follow.

Outline of the Case Against Weapons Research

To begin, we can all agree that if one person harms another, then this is *prima facie* morally wrong. The force of '*prima facie*' here is that if all we know is that an action which harms someone has taken place, then we immediately judge that action to be (morally) wrong and consider the person who did it blameworthy until further notice. The judgement may be withdrawn or qualified when more is known about the circumstances in which the harming took place. For example, if the person who was charged with harming in fact did not do so—it was someone else, or the action did not actually harm anyone, for example—then she has an *excuse*: she did not do what she was accused of doing. When someone has an excuse, they are not to be blamed for what they did, and we withdraw the judgement that the action was morally wrong. Another possibility is that the person in question deliberately and intentionally caused the harm, but did so because she was defending herself. Provided that the harm she inflicted was not too excessive, then under these circumstances, she is also not to be blamed because her action was *justified*. In this case, we also normally withdraw the original judgement that her action was morally wrong, though I prefer to say in such a case that it turned out to be morally *permissible*, as this acknowledges that harm was deliberately caused. This leaves those instances where there is no excuse or justification and these are such that the original judgement is re-affirmed and the person who did the harming is held to be morally blameworthy.

Talking about harming and moral wrongdoing is relevant here because weapons are the means to harm. Weapons are specifically designed to harm, and they are the most effective means available for harming. This is not controversial. The standard justifications, what I call as a whole the *standard rationale*, for everything to do with weapons, weapons acquisition, weapons production and so on, including weapons research, research that aims to design weapons, are defence and deterrence. The assumption is that weapons are the best way to defend oneself from others, who also have weapons, and, better still, deter them from using their weapons, because weapons harm. I will argue that defence and deterrence are what I call *derivative* functions of weapons, these uses of weapons 'derive from' their *primary* function, which is as means to harm. This claim and its implications, it turns out, are far from uncontroversial. I go on to argue that if harming is wrong, then so is providing the means to harm to others. I call this the *means principle*. And it follows that weapons research is morally wrong. This, in terse outline, is the first step in my case against weapons research. However, we have seen that judgements about the moral wrongdoing may be withdrawn if the person who performed the action had an excuse, and moreover, such actions may turn out to be morally permissible if the agent had justification.

According to the standard rationale, weapons research is carried out for defence, or for deterrence (or both). So it seems that such defensive or deterrent weapons research aims to produce defensive or deterrent weapons. If it were true that there are weapons that could only defend or only deter, weapons that could only cause harm if employed to prevent harm, then would not a weapons researcher who undertook to design such weapons have an excuse? Could she not say that she was not producing the means to harm but, primarily, the means to defend against harm? This response amounts to an excuse because the agent did not do what she was accused of doing, she did not produce the means to harm. On my account of the matter, this response implies that weapons can have more that one primary purpose: they can be the means to harm, the means to defend against harm and possibility also the means to deter harm. In my view of designer responsibility, what designers need to answer for or are called to account over, is the primary purpose of what it is they design. They are, in my view, 'committed to' the primary purpose. I reply to these claims about defence and deterrence by showing that there are no weapons that are either defensive or deterrent in the requisite sense, and hence establish that weapons are indeed primarily the means to harm.

I have considered the claim that weapons research intended to design defensive or deterrent weapons as an excuse, which seeks to have the charge of moral wrongdoing dropped altogether. However, defence and deterrence can also be put forward as justifications. Suppose it is accepted that weapons are primarily the means to harm, and as such, they can be used to defend against harm by harming aggressors, those who initiate hostilities. Justification aims to establish that the harmful act in question was morally permissible because it prevented further harms. An important distinction here is this: if there actually were weapons that could only prevent harm, then it would not be necessary to refer to the circumstances or context in which the corresponding weapons research was carried out. The actual

historical circumstances would not be relevant because the only 'missions' the weapons could take part in would be to prevent harm. The only thing that would be relevant would be the technical character of the weapons which render them incapable of doing anything but preventing harm. The attempted denial of moral wrongdoing here is what I call *ahistorical* because there is no reference to the context of the weapons research. By contrast, justifications that accept that weapons are the means to harm but that they are needed to stop others from harming must refer to the context in which the work is to be conducted, to the actual historical circumstances in which harm is prevented. Such justifications are therefore *historical*. But the problem with such historical justification is this: how can anyone, the weapons researcher included, know that the products of her work will prevent more harm than they cause?

Weapons research produces *knowledge*, in the form of designs. This knowledge enables those with the requisite skills and materials to make the weapons in question, the only limits on weapons manufacture being the materials, skills, economic costs and desire to have the weapons. The designs themselves do not wear out or impose any limits on how many times they are reproduced, nor on the time or place where they are used. Designs project into the future, and they tend to spread out. To take an example, which I will discuss in more detail in the book, the first nuclear weapons were designed during the Manhattan Project, between 1942 and 1945, and three nuclear weapons, atomic bombs, were produced. There were only three made because of the limited amount of (fissile) material. There are other kinds of nuclear weapons available now, much more powerful thermonuclear weapons, which all incorporate systems based on one of the two original designs as 'fission triggers', primary components which ignite the secondary. The US still keeps the original Manhattan Project designs under tight control. However, essentially the same designs were discovered, with only slight variations, by the Soviet Union, Britain, France and China, and Israel, India, Pakistan, South Africa, and one assumes Iran and North Korea. All of these states, with the probable exception of Iran, have made nuclear weapons very similar to the three originals and now the majority also have thermonuclear weapons.

No one knows if nuclear weapons will be used again. Most certainly the people who worked on the Manhattan Project, all deceased, could not know this, indeed, they did not know, until the very end, that their weapons would be used to kill Japanese civilians in Hiroshima and Nagasaki. But their work brought nuclear weapons into existence and set up the US nuclear weapons programme, which in turn inspired the Soviet Union and others to follow suit. The Manhattan Project weapons researchers could not have known this either. Weapons researchers are simply not in a position to know what they must know before they undertake their work if this is not to judged morally wrong and for them to be held blameworthy. Any attempted justification of weapons research will have great difficulty even getting past the first step of determining what harms the weapons will cause, let alone working out how much harms would thereby be prevented, and then estimating that the latter outweigh the former. I conclude that not only is weapons research morally wrong, it is also morally unjustifiable.

I think many people may be uneasy about the pace of weapons acquisition and the kind of weapons that have been procured, nuclear weapons in particular. I think many believe that producing more and more weapons makes the world less, not more, safe. But perhaps they are seduced by the mantra of defence and believe that weapons are a necessary evil. If so, I hope my argument will make my readers revise their opinions, or confirm their intuitions, and agree with me that weapons research should cease because it is morally wrong. However, even if the case against weapons research can be made, the prospect of the activity coming to a halt is remote, to say the least. In which case, it may seem that this book is simply an interesting—if nothing else, it is interesting—exercise in applied philosophy, and nothing more. This response raises a number of questions and issues about the point or aim of doing philosophy, philosophy in general, and applied ethics in particular. I have three comments.

I would be surprised if the scientists, engineers and other specialists who are engaged in weapons research do not accept the standard rationale for their work and believe that what they are doing is providing the means to prevent harm; or at lease I believe that this would be how they would represent to themselves what they do if they reflected on it at all. So my first comment is that if (some) weapons researchers knew that what they do is morally wrong, maybe they would do something else. If that is true, then it is a good idea to try to inform them. As a second comment, I note that activities that were once done routinely are now proscribed and illegal in many countries because it came to be accepted that they are morally wrong—slavery is an obvious example (Forge 2018: x–xii). There can therefore be *moral progress*, but for this to be possible, it needs to be demonstrated and accepted that the activities in question are morally wrong. Finally, although many people and many institutions are not themselves moved by the demands of morality, nevertheless they realise that others are and they realise that it is not good for them to be seen to do what is morally wrong. Therefore, they have reason to respond and try to justify themselves, even if they are not sincere. What follows therefore need not be understood as a purely intellectual exercise: if I am able to show that people ought not to undertake weapons research, maybe they will eventually stop doing so?

Turning to two other matters, I am going to understand a weapon to be a military weapon or something intended for the military, weapons for warfare. Thus, research aimed at producing more effective means for law enforcement, or for recreation, is not something I will address. It is true that some ‘military-style’ weapons are used by police and other law-enforcement agencies, especially riot police and other heavily armed paramilitaries. But it seems that these weapons are the product, or by-product, of military weapons research. If not, then again I will have nothing directly to say about the research in question, though I think it will be clear how to extend my argument in that direction. In the second place, I am not going to discuss non-lethal weapons. I have discussed these elsewhere and again I think it will be clear how my argument applies to weapons research aimed to produce weapons of this kind (Forge 2012: 173–175).

Outline of the Book

The book has six chapters. The first chapter develops the framework that will be used to make moral judgements about weapons research. This is a 'bare bones' morality which maintains that it is wrong to harm without justification—and so is entirely uncontroversial. Given this principle, I contend, along with Bernard Gert, that the only justification for harming is if the harmful act prevents at least as much harm as it causes. The standard rationale for everything to do with weapons and war is defence, the protection of people and their assets, and hence Gert's justificationary principle is appropriate to the present inquiry. In Chap. 2, I discuss two examples of weapons research in some detail. The first of these, the Manhattan Project, shows how scientific theory can guide weapons research, and the second, the evolution of torsion artillery, shows that weapons research can be conducted without knowledge of the underlying scientific principles. I conclude from this comparison that weapons research has been done for at least two and a half thousand years. In this chapter, I describe weapons research as the activity aimed to design new weapons systems or improve existing systems.

In Chap. 3, I give reasons why weapons should be taken to be the means to harm and that this is the 'canonical description'. Thus, weapons are not primarily the means to defend or the means the deter, but only have these roles because they are the means to harm. The primary aim of weapons research is therefore to design new ways to harm. I argue that it is morally wrong to do this, which is the first step in my case against weapons research. In Chap. 4 I talk about defence and address the issue as to whether there are inherently defensive weapons, weapons that cannot aid aggression in any way, and hence whether the conclusion of Chap. 3 needs to be revised and weapons research aimed to develop such weapons allowed as an exception to the rule. I maintain that there are no such weapons and, moreover, aggressive wars of conquest are punctuated by periods of defence and re-grouping, so weapons that are best suited to defensive roles are needed for that purpose.

Chapters 5 and 6 are concerned with justification. I argue that weapons research can never be justified because the demand that more harms are seen to be prevented than caused cannot be satisfied. Indeed, the harms caused cannot be determined, let alone the harms prevented and a comparison made between the two 'amounts' of harm. In Chap. 5, I discuss two possible ways of side-stepping this problem. The first holds that weapons research done by democratic states is justifiable because such states do not embark of aggressive wars, and hence, any weapons they possess will only be used for defence, so the prevention of harm. However, it is simply false that democratic states are never the aggressor. The second suggestion is that weapons research done to aid a just war is acceptable. However, I show that weapons research is in fact incompatible with the theory of just war. So the task of estimating the harms caused and harms prevented, and then comparing them remains. In Chap. 6, I give three examples to show that there is no prospect of this being possible. I begin Chap. 6 by talking about the idea of the context of weapons research and identify two 'contextual factors' that condition weapons research. One

of the aims of the examples is to show what happens when contexts change. I then review and summarise the argument in my conclusion. I have included five appendices. Unlike the six main chapters, these are not concerned with the development of the main argument, but rather elaborate matters raised in the chapters (appendices 1 and 4) or address certain implications of the main argument as these arise (appendices 2, 3 and 5).

References

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