

# *Drones, courage, and military culture.*

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## ***Introduction***

The controversy that erupted when the (then) US Defence Secretary, Leon Panetta, announced plans to award Distinguished Warfare Medals, which would have outranked US combat medals such as the Bronze Star and Purple Heart, to the operators of drones highlighted the deep-seated ambivalence that exists within both the US public and the US military about the extent to which these weapons represent an honourable way of warfare.<sup>1</sup> On the one hand, drones — and their operators — are lauded for their capacity to find and kill those the US government identifies as its enemies anywhere in the world and to do so with — at least in theory — the minimum number of civilian casualties. On the other hand, the unwillingness of the public and of at least some sections of the US military to countenance awarding drone operators combat medals suggest that they do not believe that

those who operate the systems are really “at war” or deserve the honour accorded to those who risk their lives in the service of their nation.

In this chapter, I will concentrate on just one of the ethical controversies that has erupted around drone warfare: the implications of remotely operated weapon systems for the future of the core martial virtue of courage.<sup>2</sup> In so far as long-range tele-operated weapons, such as the United States’ Predator and Reaper drones, allow their operators to fight wars in what appears to be complete safety, thousands of kilometres removed from those whom they target and kill, it is unclear whether drone operators either require courage or have the opportunity to develop or exercise it. This chapter will therefore investigate the implications of the development of tele-operated warfare for the extent to which courage will remain central to the role of the warrior and for the future culture of the armed services.

### ***The rise of the drones***

Uninhabited aerial vehicles (UAVs) — or “drones” — are remotely piloted aircraft. These systems range from small, man-portable helicopters and planes, which can operate only small distances from their controllers, to long-range surveillance aircraft such as Global Hawk, and Armed Uninhabited Combat Aerial Vehicles (UCAVs), such as Predator, Reaper, and (now) Avenger, capable of carrying multiple munitions, which may be controlled via satellite links by operators halfway around the world. These latter systems, which will be the focus of my discussion here, have (at least) two features relevant to the extent to which their operations require — or allow — courage. First, long-range UCAVs allow their operators to attack targets thousands of kilometres away from what looks to be, at first sight at least, more-or-less complete safety.<sup>3</sup> Second, despite the geographic distance between the operators of these

systems and their targets, drones allow their operators a detailed knowledge of the battlespace which is typically denied to those who fire other long-range weapons. As we shall see below, while the first feature calls into question the need for courage to operate the systems, this second feature of drones suggests the matter is more complex than first appears.

The perceived success of drones in the course of the US invasion and occupation of Iraq and Afghanistan has led to a flurry of interest in — and research into — tele-operated weapons for use in land and sea warfare, including robotic trucks, tanks, artillery pieces, ships, and submarines.<sup>4</sup> These systems are also intended to keep warfighters out of “harm’s way”. While they are unlikely to provide the “God’s eye” view drones allow, it is likely that they will be equipped with powerful sensor suites, which will provide their operators with a rich awareness of the battlespace.

There are a number of reasons to believe that tele-operated weapons will play an increasingly central role in wars over the coming decades.<sup>5</sup> Most obviously, the willingness of the citizenry of democratic nations to tolerate friendly casualties currently constitutes an important constraint on the capacity of such nations to assert their interests internationally through the use of armed force, especially where these interests fall short of the defence of the nation itself. By removing warfighters from harm’s way tele-operated weapons systems make it possible for governments to conduct military campaigns without risking domestic unpopularity as a result of the sons and daughters of the citizenry returning home in body bags. In so far as governments are concerned to avoid causing civilian casualties amongst the *enemy* population, which may also — if the domestic population or international community becomes aware of them — undermine public support for military adventures, drones, in particular, also offer advantages over other means of waging war. Their capacity to loiter for

extended periods and provide real-time imagery of potential targets means that the targets may be selected carefully and the timing and nature of the attack chosen with an eye for reducing collateral damage.<sup>6</sup> Finally, tele-operated systems are arguably significantly cheaper than the manned systems which would otherwise carry out the same or similar roles, which makes them especially attractive to governments in an era in which budgets are under pressure.

To this point, I have been emphasising the political benefits to governments from investing in — and using — remotely operated weapons. However, contemporary enthusiasm for tele-operated weapons is also a product of their military utility. The comparatively low price of tele-operated systems makes them attractive to military planners as well as governments and allows militaries to purchase more systems and field them at a higher pace of operations than they could maintain with manned alternatives. Drones' capacity to conduct surveillance over extended periods and provide real-time video footage of the theatre of operations greatly reduces the fog of war and allows commanders to coordinate the activities of their forces more efficiently and attack targets more precisely.<sup>7</sup> UCAVs also make a much higher tempo of operations possible by allowing enemy forces to be targeted in real time deep into enemy territory and by providing damage assessments within moments of a target being struck. This fact alone places militaries that do not possess drones at a very serious disadvantage.<sup>8</sup> Perhaps most importantly, tele-operated systems save lives by keeping warfighters out of “harm's way”. This is an obvious moral good; it also has the military advantage of preserving those troops to be available to fight another day.<sup>9</sup> For all these reasons, nations which can afford drones are striving hard to acquire them as soon as possible.

***Is “risk-free warfare” really new?***

The claim that drones enable “risk-free warfare” has become a platitude in discussion of the ethics of drone warfare. Later in this chapter I will discuss how much (if any) truth there is in this claim. However, before I do so, it is important to confront another observation often made in discussions of this topic, which questions just how new this phenomenon is. Critics have been decrying killing at a distance ever since the invention of the crossbow or the sling and drones are hardly unique amongst the arsenal of modern militaries in enabling warfighters to kill from comparative safety. Long-range artillery, cruise missiles, and high-altitude bombing, especially when used against enemies without equivalent systems, all allow warfighters to attack targets with very little risk to themselves. The operators of these systems also appear to have little need for courage. Why, then, it might be asked, single out drones for critique?

There are, I think, three answers to this question, which, while individually of varying strengths, together suggest that the debate about the implications of the use of drones for the martial virtue of courage, at least, is worth having.

First, although these other long-range systems do allow killing at a distance and make doing so relatively risk-free in many circumstances, there will usually remain an element of physical risk involved in operating them. Bombers may crash or be shot down in friendly fire incidents; artillery pieces may malfunction catastrophically or become the targets of enemy shelling. As I will discuss further below, while there may well also be some risks involved in operating drones, the operators of drones are mostly immune from even those minor physical risks involved in waging war by other long-range means. Moreover, while it may be true that operators of these other systems are seldom at risk of enemy fires, it is clear that these weapons could be — and are designed to be — used in roles where the operators may well be

killed and therefore where courage is required. Drone operators *can't* fly dangerous missions and thus will struggle to find themselves in a role where it is possible to demonstrate courage by risking physical injury or death.<sup>10</sup>

Second, even if many of the issues raised by drone warfare are not in fact unique to these systems, it may still be worth having the conversation about the ethical implications of their increasing use. It must be granted, for instance, that ever since the invention of the telegraph wire, there have been any number of people on the command staff of armies who have “fought” wars from more or less complete safety far from the front lines. It is also hard to see that the risks involved in ordering the launch of a cruise missile to strike a target chosen by studying satellite photographs differ much, if at all, from those involved in the firing a Hellfire missile from a Predator drone. It may be, then, that the debate about the ethics of drone warfare should prompt us to think harder about the implications of these other means of waging war, which are already, moreover, somewhat controversial.

Third, while drones may not be unique in enabling risk-free warfare, they *are* new in so far as they provide their operators with a point of view located within the battlespace even while they are physically thousands of kilometres distant from it. The closest analogy amongst previous military technologies would be the situation of a sniper armed with a rifle with a telescopic sight. Yet although snipers can often kill people who are far away and unaware of them, they are at least physically located in the theatre of combat and vulnerable to other enemy fires by virtue of being so. The combination of geographic distance from, and psychological proximity to, conflict made possible by drones is arguably unprecedented in history of warfare and thus the unease critics have expressed in the past about the ethics of snipers is magnified many times when it comes to UCAVs. As we shall see below, though,

this feature of drones makes the argument about the extent to which their operators require courage more rather than less controversial.

## ***Courage and the “warrior code”***

Before we can address the impact of tele-operated warfare on courage and the organisational culture of the armed services, we must also provide a (brief) account of the central role that courage plays in military operations and culture. A growing body of work in military ethics argues that the best way to theorise the moral demands on the behaviour of those serving in the armed forces is through the lens of a “role morality”. Warfighters themselves seem to operate with a set of explicit and implicit understandings about what it is to be “a good warrior” — a “warrior code” — and thus with an implicit virtue ethics.<sup>11</sup> A “good warrior” is a person who cultivates and exercises a distinctive set of martial virtues.<sup>12</sup> Good warriors are praised and admired by their comrades and serve as exemplars to others hoping to cultivate the martial virtues, including courage.

Any account of the nature of a good warrior must begin with courage, which is the martial virtue *par excellence*.<sup>13</sup> Without a “willingness to face fear and overcome it” warriors will not be capable of confronting the challenges they face in serving their nation and (especially) in going into battle. Discussions of courage typically distinguish between *physical* and *moral* courage; the “good warrior” will need both. Physical courage involves the capacity to confront fear of bodily injury, discomfort and death. Its value to warriors is obvious. Moral courage consists in the willingness to confront and overcome fear of making difficult moral decisions and the personal costs that may flow from doing what is right rather than what is expected, customary, or prudential. Good warriors require moral courage in order to do what

is right in the difficult moral circumstances of war and (especially) to resist the social and institutional pressures that are brought to bear on them as members of military organisations.

The relationship between physical and moral courage remains contested. Peter Oolsthorn has argued that the two forms of courage are only weakly correlated — if at all — and suggested that training for contemporary military operations should emphasise moral rather than physical courage.<sup>14</sup> Yet despite the lack of consensus about the connection between them, military training often proceeds as though training physical courage will also promote moral courage, perhaps in the belief that both require a strength of will that is most easily trained in the context of physical hardship.<sup>15</sup> Moreover — and perhaps more importantly — moral courage may not be sufficient to guarantee success in war. Where one party to a dispute is willing to resort to violence, the other party may require physical courage if they are to avoid being cowed into surrender.<sup>16</sup> Thus, ultimately, warriors must be prepared to risk their lives for the sake of a just cause.<sup>17</sup> This is perhaps the most striking illustration of the fact that the connection between moral and physical courage is deeper than first appears: someone who is paralysed with fear at the thought of suffering or (even) their own death may find it impossible to summon moral courage when they most need it. *In extremis*, then, when the price of acting rightly is especially high, moral courage will also require physical courage and it may even be unclear which description is more appropriate. However, in more ordinary circumstances, where acting morally will result only in social or bureaucratic sanctions, it will often be worth singling out those who are willing to risk these outcomes in order to do what is right as possessing the virtue of moral courage.

It is important to emphasise that in order to be “a good warrior” and to have the virtue of courage more is required than simply acting courageously in one or two instances. The

character of agents consists in a broad set of dispositions to experience and express certain emotions and to act from particular motives as well as to act in particular ways.<sup>18</sup> That is, warfighters who have the virtue of courage will not only overcome their fear but will do so in a certain spirit, in a manner appropriate to the context, and (arguably) only in a just cause; their responses to acts of courage and cowardice by others and to courageous and cowardly people will also be shaped by, and characteristic of, the virtue of courage.<sup>19</sup> Like habits, virtues must be learned through practice and maintained through their exercise. Both the development and the exercise of virtue depend, to a certain extent at least, on the existence of a surrounding community that values and acknowledges virtuous actions and individuals with the virtues, which is one of the reasons why the notion of moral exemplars plays such a strong role in accounts of the virtues.<sup>20</sup>

The distinction between individual acts of courage and the virtue of courage, and the importance of a moral community in the development and exercise of the virtues, will prove important for the argument that follows. It is clearly conceivable that drone operators might act courageously on occasions when they are not flying drones. As we shall see, perhaps it is even possible for them to act courageously — for instance by refusing an immoral order — while they are flying drones. However, what is less clear is whether remote operations allow those who participate in them to develop and exercise the larger set of dispositions that the virtue of martial courage requires.

### ***Courage in tele-operations?***

We are now in a position to consider the role of courage in tele-operated warfare.

The challenge drones and tele-operated weapons pose to ideas about the importance of courage as a military virtue is obvious. Courage, understood as “the ability to face fear and overcome it” requires cause for fear for its exercise. Yet the operators of long-range UCAVs control these systems from half-a-world away, beyond the reach of enemy fires. They will not be killed or injured if the systems they are operating crash or if the weapons they are firing detonate catastrophically. They are, at first sight at least, completely safe and consequently have no cause for fear—or need for courage.

The case that drone operators *can* display courage has been made (to my knowledge) most extensively in a compelling paper by Jesse Kirkpatrick and I will therefore use Kirkpatrick’s discussion to frame my own discussion here.<sup>21</sup> Kirkpatrick accuses critics of tele-operated warfare of two failings when it comes to their understanding of the implications of these systems for the capacity of their operators to display courage.<sup>22</sup> First, he suggests that critics of drones are operating with a truncated notion of courage, which overemphasises the role of the risk of bodily injury at the expense of other sorts of risk, such as the risk of psychological harms or moral hazards, which courage is also required to face. Second, he claims that critics neglect the risks which drone operators *do* face.

I will argue that while Kirkpatrick’s account usefully draws our attention to the risks faced by drone operators and to the possibility that courage may be required to face these risks, he is much less successful in establishing that operators are capable of cultivating and displaying *martial* courage. The risks that drone operators face are also faced by members of other professions who are very far from being “warriors”.

### ***Physical courage in tele-operated warfare***

Before turning to address Kirkpatrick's arguments, however, it is worth observing that the fact that drone operators are physically safe is not solely a function of the nature of drones themselves but is also due to the nature of the adversaries against which they have (thus far) been deployed. In a conflict against a well-armed and technologically sophisticated adversary the air bases from which drone operations are conducted would likely become the targets for cruise missile strikes. In such a conflict, operating drones *would* require physical courage because the operators would be risking injury and/or death in reporting for duty; of course, in this context, the janitors and the admin personnel on base would also require courage to do their work.

Even in asymmetric warfare of the sort that the US is currently engaged in, operators of drones must be presumed to be potential targets for enemy operations. It would, for instance, represent a propaganda coup if one of the armed nationalist, jihadi, and/or resistance groups the US is battling in Pakistan, Syria, Afghanistan, Iraq, or North Africa, carried out an attack on one of the air force bases in the US from which drone operations are controlled. If these groups should succeed in making recruits in the US or otherwise infiltrating operatives onto US soil, one might anticipate that they would attempt to attack the operators of drones.<sup>23</sup> Thus even those operating drones today do, it might be argued, face some (admittedly low) risk of bodily injury.

Yet it is difficult to make a case that operating drones requires physical courage — and (therefore) allows operators to cultivate and exercise this virtue — in their current role in asymmetric warfare. When the US's enemies in its current wars have managed to carry out attacks on US soil, their targets have typically been civilian.<sup>24</sup> The bases from which drones operate are heavily guarded and the risks to operators must therefore be considered to be

extremely low — arguably lower than that faced by ordinary US citizens. At most, then, it might be argued that the operators of drones do face some risk of bodily injury and that this level of risk is not qualitatively different to that faced by the operators of some other long-range weapons or weapon systems, such as cruise missiles or stealth bombers. What would appear to follow from this, however — especially if we concede that civilians face similar risks — is not that drone operators need courage but that many others currently thought of as warfighters have little — or no — need for physical courage either.

### ***The courage to risk psychological injury***

To return now to Kirkpatrick's arguments... Kirkpatrick rightly points out that the absence of physical risk — of risk of bodily injury — is not the same thing as the absence of risk. There is an emerging literature on the risks of psychological injury faced by drone pilots and, in particular, on the risk of Post-Traumatic Stress Disorder (PTSD). Psychological wounds may be as disabling as physical injuries suffered in combat and so to the extent that the risk of PTSD exists (and is known to exist) the operators of drones will (and presumably do) require courage to confront it.

Until recently, much of the evidence adduced for the claim that the operators of drones sometimes suffer from PTSD was anecdotal and appeared alongside accounts which suggested that operators found it all too easy to kill using these systems, suggesting that there was little trauma involved.<sup>25</sup> However, recently two studies have been published, which provide some data regarding the rate of psychological injuries amongst drone operators as compared to the civilian population, other serving military personnel, and the pilots of manned aircraft.<sup>26</sup> These studies show that (some) drone operators do experience adverse mental health outcomes, including symptoms characteristic of PTSD, at rates comparable to

those affecting pilots of manned aircraft.<sup>27</sup> To date, however, the published data does *not* bear out speculations that the fact that drones provide their operators with real-time video imagery of those they are targeting and of the fate of their targets when they launch their weapons, makes operators especially vulnerable to PTSD. Nevertheless, now that these risks are known, operating drones arguably requires significant courage.<sup>28</sup>

### ***The courage to make tough moral decisions***

Kirkpatrick argues that drone operators may also be called upon to exercise *moral* courage in the course of their duties. They may need to exercise courage to risk their “reputation, financial security, career, psychological health, personal relationships...” in order to do what is right.<sup>29</sup> A moment’s thought suggest that there are actually two different cases where, it might be argued, moral courage is (or might be) required of drone operators: when they obey orders to kill; and, when they disobey orders which they believe to be illegal or immoral.<sup>30</sup>

Kirkpatrick suggests that it takes significant moral courage to take a human life and suggests that “there seems little difference between drone operators and those physically present in the battlespace” when it comes to the moral courage required to do so. This latter claim is one of the key controversies in the debate about drone warfare. The idea that killing requires moral courage relies crucially upon a folk-psychological belief in an innate human reluctance to kill, which is most plausible in the context of personal violence. The notion that it takes moral courage to launch a missile at — and kill — a person thousands of kilometres away, whom one has only ever seen in images on a computer monitor, is precisely what critics of drones contest.<sup>31</sup>

Kirkpatrick cites the fact that (some) drone operators experience PTSD as evidence that it requires moral courage for them to kill. Yet the fact that operators sometimes regret what they have done or suffer psychological injury after doing it does not establish that they require moral (as opposed to psychological) courage to kill. One can, for instance, be traumatised by something one had no moral qualms about doing at the time. Indeed, one suspects that this is reasonably common when warfighters develop PTSD; the memory that they were untroubled about what they were doing at the time is part of what makes the memory of what they did so traumatic. Unless it can be shown that operators of drones are typically reluctant to kill and are fully conscious of the moral seriousness of killing when they do it, the argument that it requires moral courage to operate the systems will be unconvincing.

However, there are now a number of publicly available accounts, both by and about drone operators, which report that operators are in fact acutely aware of the moral consequences of their actions and struggle with them. Indeed, because they may spend weeks watching the people they are ultimately ordered to kill and witness the aftermath of the attacks they carry out in vivid detail, courtesy of the powerful spy cameras on their drones, drone operators arguably have a much better sense of the moral reality of killing than do the pilots of manned aircraft or those who launch cruise missiles or fire long-range guns.<sup>32</sup> On the other hand, it must be acknowledged that a number of media stories suggest that those who fly drones are typically eager to attack targets and are excited when they do and that an important task in training the operators of Predator and Reaper is reminding them that they are not just “shooting electrons” and that real people die when they carry out an attack.<sup>33</sup> The evidence available (to people outside of the US military at least) on this question is mixed, then, but it seems pretty clear that at least some drone operators do kill reluctantly and exercise moral

courage in doing so — and therefore that drones allow, even if they do not necessarily encourage, the cultivation of moral courage.

The other circumstance in which drone operators may be called upon to demonstrate moral courage is when they are ordered to do something that they believe to be immoral or illegal, such as fire on a group of people they believe to be civilians. Refusing to carry out an order may have dire consequences for the career, reputation, and well-being of operators. The institutional culture of the armed services typically emphasises and reinforces discipline, loyalty, and solidarity, which means that it can require extraordinary strength of character to stand out from the crowd by refusing to obey an order; these pressures are especially strong in close-knit communities of the sort that the operators of remotely-piloted aircraft often become.

There are, admittedly, some reasons to believe that drone operators have *less* need of moral courage to disobey illegal or immoral orders than combatants physically located in the area where combat operations are occurring. Because the telemetry to and from drones is recorded, commanders are likely to be cautious about the nature of the commands they issue. A number of authors have argued that drone operators are less likely to experience strong emotions like terror or anger, which may cloud the judgement of those engaged in combat, and thus are better situated to consider the ethics of their actions.<sup>34</sup> Finally, as I have argued elsewhere, the demands of loyalty are likely to be weaker on drone operators than on combatants physically located in the theatre of operations so, even given the strong social bonds between them, they are much better placed to resist peer pressure to carry out immoral acts than, for instance, members of a squad of marines.<sup>35</sup>

Despite these observations, Kirkpatrick's claim that drone operators may require moral courage to disobey illegal or immoral orders — and therefore can exercise it by doing so — seems right. Indeed, given that the immediate consequences for the operators of drones of disobeying rather than obeying orders to kill are likely to be more severe, this would appear to be the epitome of moral courage amongst this cohort.

### ***Courage, yes, but martial courage?***

Thus, Kirkpatrick is correct in claiming that tele-operated weapons still require their operators to be courageous and offer them opportunities to cultivate and exercise the virtue of courage. Yet intuitively there still seems to be something different about the opportunities to exercise courage available to drone operators — and the sorts of courage they may exercise — as compared to (some) other warfighters. The absence of physical risk matters. Indeed, the arguments I adduced above about the extent to which drone operators are or might be at risk as a result of enemy action are telling by virtue of the way they struggle to establish that the operators of drones are subject to any more risk of bodily injury as a result of enemy action than civilians or non-military personnel co-located on their bases. While drone operators may fight wars, they don't "go to war", and while they may kill people, they do not engage in combat.<sup>36</sup> For this reason, the courage they display does not appear to be an especially "martial" courage.

A similar dialectic is present in discussions about the courage required to confront the risk of psychological injury. Medics, chaplains, and military psychologists are often exposed to stressful and traumatic experiences, and may suffer psychological harms as a result, but we would hesitate to characterise them as displaying martial courage in these roles. Moreover,

when drone operators *do* suffer psychological injury, it is not the case that they are injured by enemy action. Thus, the courage displayed by the operators of drones when they carry out their duties in the face of the known psychological risks of doing so looks more like the courage, both physical and mental, displayed by people working in other demanding or dangerous, but non-martial, professions.

The role and nature of the moral courage required by drone operators is more complicated.

The operators of drones are hardly alone in needing moral courage in wartime. Members of other professions, such as doctors and aid-workers do often have to make life and death decisions. However, while those working in these roles may sometimes decide to let someone — or even a whole group of people — die, they do not have to be able to make the deliberate choice to kill which drone operators must be able to make to carry out their duties.<sup>37</sup> Thus, the moral courage required of drone operators to kill people *is* arguably distinctively “martial”.

However, as we saw above, moral courage will mostly be required of drone operators to *refuse* to kill — or at least to refuse to obey orders they believe to be immoral or illegal. Once more, drone operators are not the only military personnel who might receive immoral or illegal orders and need courage to disobey them. Lawyers, accountants, and supply officers may encounter circumstances where their conscience requires them to disobey orders. Indeed, arguably people in these professions are *more* likely to find themselves in these situations than drone operators given the incentives for — and, consequently, prevalence of — corrupt or immoral activities in large bureaucracies. On the other hand, members of these professions are unlikely to be commanded to kill someone and to require moral courage in order to refuse

to do so, which suggests that moral courage of this sort in drone operators is also more martial.

Yet emphasising the moral courage required to refuse to kill has a paradoxical implication, which unsettles this conclusion: it suggests that those who refuse to kill — or who even leave the military or refuse military service — demonstrate the most courage. To become a conscientious objector or a deserter on moral or political grounds does, I strongly suspect, require great moral courage but it stretches the imagination to call this martial courage.

While Kirkpatrick succeeds, then, in demonstrating that the advent of tele-operated weapons need not prohibit the development and exercise of the virtue of courage *per se* in those who operate them, it still seems likely that these weapons constitute a significant threat to the virtue of martial courage that is currently at the heart of the self-conception of warriors. At most, the operators of these weapons may require a distinctively martial moral courage when they kill in full awareness of the moral significance of this act. Just how many operators exercise this virtue and how often is likely to remain controversial until we have a better understanding of the impact of tele-operation on the experience of war.

### ***The future of courage in the military***

How serious the threat to martial courage posed by the development of drones is will depend — at least in part — on how pervasive the impact of tele-operated weapons is on the way wars are fought in the future and also on the ways in which military organisations respond to the challenge of remote operations.

### ***Tele-operated weapons and the future of war***

All the various factors outlined at the beginning of this essay suggest that tele-operated weapons are likely to play an increasingly important role in future wars. However, the idea that we could ever be confident about our capacity to fight wars without placing warfighters in situations where they would be likely to require martial courage may appear far-fetched for at least two reasons.

First, the success of drones to date has arguably been a product of the fact that they have overwhelmingly been used in conflicts where the enemy has very limited – if any — capacity to contest the airspace in which the drones have operated or to attack the communications infrastructure upon which they rely. It remains to be seen how effective tele-operated systems will be in conflict between adversaries that are even roughly matched in technological capacity and/or material. It would therefore be very premature indeed for any nation to rely too much on remote control weapons.

Second, tele-operated weapons can make only a limited — albeit valuable — contribution towards two objectives which are likely to be central to achieving victory in asymmetric wars, which are widely predicted to constitute the majority of future armed conflicts. In order to secure a lasting peace at the end of a conflict, or even to be able to exit a conflict without political and strategic embarrassment, the “victorious” nation must be able to dictate terms to (or at least negotiate them with) the political forces ruling over the enemy’s territory. This in turn means that the victor must wield significant influence in the political and economic affairs of the enemy state. In the worst case, this will necessitate occupying the enemy’s territory; at the very least it will require the capacity to install a friendly government or impose terms on an unfriendly one. Occupying territory will always require sending in ground troops. Installing a friendly government and defending it from its domestic enemies

will often require winning the “hearts and minds” of the civilian population, which is again hard to do without the capacity to carry out operations, including “nation building”, on the ground.

Given these limitations of tele-operated systems, it seems likely that most wars will, for the foreseeable future, continue to involve soldiers being placed “in harm’s way” in the theatre of operations. To the extent that this is the case, it may seem as though we have little reason to fear that a distinctively martial conception of courage, emphasising the courage to confront physical risks, will continue to be central to the identity — and essential to the role — of the modern warrior.

### ***Martial courage in military culture***

Yet the argument that physical courage will always be necessary in war does not establish that tele-operation does not pose a profound threat to the extent to which martial courage remains central to the cultures of high-tech militaries. If UAVs render martial courage mostly irrelevant and difficult to exercise in their operations then when such courage is required of their operators, they may be found lacking. This possibility is especially threatening given that drones are already the weapon of choice for governments who wish to continue to fight wars in the face of decreasing public support for their military adventures and without risking the politically dangerous prospect of television pictures of soldiers returning from war in body bags. The resulting public expectation that wars can be fought without any danger of friendly casualties may eventually effectively force governments to use drones wherever possible. Even if it is only the operators of tele-operated weapons who have no need for courage, then, this may have profound implications for the culture of the armed services, if this cohort comes to form a large proportion of those at the “sharp end of the spear”.

It may also be difficult to confine the cultural impact of tele-operated weapons to those who operate them. The more the militaries of industrialised societies aspire to risk-free warfare, the harder it may be to convince those anywhere in the armed services that they should aspire to the martial virtues. Importantly, when it comes to the role of courage in the armed services, what matters is not just opinion on the topic within the services themselves, but also the perception of the broader society. If the public believes that the military no longer values martial courage or offers the opportunity to develop and exercise it, those who might otherwise prize this virtue may no longer be attracted to military service. Moreover, because individuals' development of the virtues depends upon the social support of a community, a public perception that warfighters neither have nor need martial courage will make it harder for warriors to develop and maintain it.<sup>38</sup> For these reasons, any threat to the virtue of martial courage amongst drone operators, who now figure prominently in the public perception of war, may have broader consequences for military culture and the place of martial courage within it.

### ***Conclusion: the virtues (and vices) of post-heroic militaries?***

As I acknowledged at the outset of this discussion, the implications of the use of tele-operated weapons for the martial virtue of courage is only one of the many ethical issues raised by this new and powerful technology. Even if I am correct in my argument that these systems pose a profound threat to the martial virtue of courage amongst their operators — and perhaps even to the culture of the armed services more generally — there is a very large gap indeed between *this* claim and any conclusion that the use of drones is unethical or should be abandoned.<sup>39</sup>

Although martial courage is central to the mythos of war today and to the self-conception of warriors, the nature of war has changed over the millennia, especially as a result of the impact of new technologies, and military cultures have changed along with it, without obvious catastrophe. If the use of tele-operated weapons will save the lives of those combatants who would otherwise be placed in harm's way then those individuals, at least, may think that missing the opportunity to display martial courage is a price worth paying. The civilians living in the territories in which battles are fought may also prefer that decisions about the use of lethal force be made by diligent — and, where necessary, morally courageous — technicians operating remote-controlled weapons systems rather than warriors wielding less accurate weapons for the sake of the opportunity to display martial courage.<sup>40</sup> If martial courage comes to play less of a role in military culture, moral courage — and the courage to perform psychologically difficult tasks — may still be valued, applauded, and rewarded.<sup>41</sup>

Before concluding, though, let me suggest two reasons why we should, perhaps, be reluctant to see an emphasis on martial courage disappear from the organisational cultures of modern militaries. First, like skills, virtues involve distinctive ways of seeing the world as well as dispositions to act in certain ways. Consequently, warriors with martial courage may understand truths about war that those lacking this virtue do not. A decline in martial courage within the military therefore risks a loss of knowledge of the nature of war and its consequences, which we may ultimately regret. Wars fought by industrious technicians, even morally courageous technicians, might look very different — and not necessarily in ways that we would prefer. Second, as long as wars require physical, as well as moral courage, people are likely to be at least somewhat reluctant to fight them. Obviously, the fact that soldiers (as well as civilians!) are maimed and killed in war has not halted them to date. Yet one cannot

help but worry that if it should ever become possible to fight — or at least start — wars without martial courage, still more wars would be fought for less reason.

These speculations are far from settling the question of the ethics of tele-operated warfare. There is, clearly, much to be said for – and against – tele-operated weapons on many other grounds. However, my modest hope is that this essay has succeeded in demonstrating that the implications of tele-operated weapons for the future of martial courage and the “warrior culture” of the armed services are a not insignificant consideration in this larger debate.

## ***References***

Adams, R.M. *A Theory of Virtue: Excellence in Being for the Good*, Oxford: Oxford University Press, 2006.

Adams, T. K. “Future Warfare and the Decline of Human Decision-making,” *Parameters: US Army War College Quarterly*, Winter 2001, pp. 57-71.

Aronovitch, H. “Good Soldiers, A Traditional Approach,” *Journal of Applied Philosophy* 18:1, 2001, pp. 13-23.

Bender, B. “Attacking Iraq, from a Nev. Computer,” *Boston Globe*, April 3, 2005, p.A6.

Chappelle, W., T. Goodman, L. Reardon and W. Thompson. “An analysis of post-traumatic stress symptoms in United States Air Force drone operators,” *Journal of Anxiety Disorders* 28:5, 2014, pp. 480-487.

The Economist. "Medals for drone pilots? The fraught debate over how to honour cyber-warriors," *The Economist*, March 29, 2014, available at <http://www.economist.com/news/united-states/21599785-fraught-debate-over-how-honour-cyber-warriors-medals-drone-pilots> (accessed 12.8.14).

French, S. E. *The Code of the Warrior: Exploring Warrior Values, Past and Present*, Lanham, Md.: Rowman & Littlefield, 2003.

Gorman, R. R. "War and the Virtues in Aquinas's Ethical Thought," *Journal of Military Ethics* 9:3, 2010, pp. 257-258.

Hursthouse, R. *On Virtue Ethics*, Oxford: Oxford University Press, 2001.

Kaag, J. and S. Kreps. *Drone Warfare*, Cambridge: Polity Press, 2014,

Kilcullen, D. and A. M. Exum. "Death From Above, Outrage Down Below," *New York Times*, 2009, May 17, WK13.

Kirkpatrick, J. "Drones and the Martial Virtue of Courage," *Journal of Military Ethics*, forthcoming.

Lee, P. "Remoteness, risk and aircrew ethos," *Air Power Review* 15:1, 2012, pp. 1-20.

Lewis, L. *Drone Strikes in Pakistan: Reasons to Assess Civilian Casualties*. CNA Analysis and Solutions, April 2014.

Londono, E. "Pentagon cancels divisive Distinguished Warfare Medal for cyber ops, drone strikes," *The Washington Post*, April 15, 2013, available at <http://www.washingtonpost.com/world/national-security/pentagon-cancels-divisive->

[distinguished-warfare-medal-for-cyber-ops-drone-strikes/2013/04/15/62335492-a612-11e2-8302-3c7e0ea97057\\_story.html](http://distinguished-warfare-medal-for-cyber-ops-drone-strikes/2013/04/15/62335492-a612-11e2-8302-3c7e0ea97057_story.html) (accessed 11.8.14).

Matthews, M. D. "Stress among UAV operators — post-traumatic stress disorder, existential crisis, or moral injury?" *Ethics and Armed Forces* 1, 2014, pp. 53-57.

Moelker, R. and P. Olsthoorn. "Virtue Ethics and Military Ethics," *Journal of Military Ethics* 6:4, 2007, pp. 257-258.

Office of the Secretary of Defense. *Unmanned Systems Integrated Roadmap FY2013-2038*. Washington D.C.: Department of Defense, United States Government, 2013.

Olsthoorn, P. "Courage in the Military: Physical and Moral," *Journal of Military Ethics* 6:4, 2007, pp. 270-279.

Olsthoorn, P. *Military Ethics and Virtues: An Interdisciplinary Approach for the 21st Century*, London and New York: Routledge, 2011.

Otto, J. L. and B. J. Webber. "Mental health diagnoses and counseling among pilots of remotely piloted aircraft in the United States Air Force," *Medical Surveillance Monthly Report* 20:3, 2013, pp. 3-8.

Power, M. "Confessions of a Drone Warrior," *GQ*, October 23, 2013. Available at <http://www.gq.com/news-politics/big-issues/201311/drone-uav-pilot-assassination> (accessed 14.8.2014).

Riza, M. S. *Killing Without Heart: Limits on Robotic Warfare in an Age of Persistent Conflict*, Dulles: Potomac Books, 2013.

Shachtman, N. "Drone School, a Ground's-Eye View," *Wired Magazine*, 27 May, 2005, available at

<http://archive.wired.com/science/discoveries/news/2005/05/67655?currentPage=all> (accessed 13.8.14).

Shachtman, N. "Attack of the Drones," *Wired Magazine* 13: 6, June 2005. Available at <http://archive.wired.com/wired/archive/13.06/drones.html> (accessed 14.8.2014).

Shah, P. Z. "My Drone Wars," *Foreign Policy* March/April (2012), available at [http://www.foreignpolicy.com/articles/2012/02/27/my\\_drone\\_war?page=full](http://www.foreignpolicy.com/articles/2012/02/27/my_drone_war?page=full) (accessed 13.8.14).

Singer, P. W. *Wired for War: The Robotics Revolution and Conflict in the 21st Century*, New York: Penguin Books, 2009.

Sparrow, J. *Killing: Misadventures in Violence*, Carlton, Vic.: Melbourne University Publishing, 2009.

Sparrow, R. "Killer Robots," *Journal of Applied Philosophy* 24:1, 2007, pp. 62-77.

Sparrow, R. "Predators or plowshares? Arms control of robotic weapons," *IEEE Technology and Society* 28:1, 2009, pp. 25-29

Sparrow, R. "Building a better warbot: Ethical issues in the design of unmanned systems for military applications," *Science and Engineering Ethics* 15:2, 2009, pp. 169–187.

Sparrow, R. "Robotic weapons and the future of war," in P. Tripodi and J. Wolfendale (eds), *New Wars and New Soldiers: Military Ethics in the Contemporary World*, Surrey, UK & Burlington, VA: Ashgate, 2011, pp. 117-133.

Sparrow, R. “‘Just say no’ to drones,” *IEEE Technology and Society* 31:1, 2012, pp. 56-63

Sparrow, R. “War without virtue?” in B. J. Strawser (ed) *Killing By Remote Control*, Oxford and New York: Oxford University Press, 2013, pp. 84-105.

Strawser, B. J. “Moral predators: The duty to employ uninhabited aerial vehicles,” *Journal of Military Ethics* 9:4, 2010, pp. 342-368.

Watson, B. C. S. “The Western Ethical Tradition and the Morality of the Warrior,” *Armed Forces and Society* 26:1, 1999, pp. 55-72.

Whetham, D. “Remote Killing and Drive-By Wars” in D. Lovell & Igor Primoratz (eds) *Protecting Civilians During Armed Conflict: Theoretical and Practical Issues During Violent Conflict*, Farnham: Ashgate, 2012, pp. 199-214

Yi, J. “MCMAP and the Marine Warrior Ethos,” *Military Review* 84:6, 2004, pp. 17-24.

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<sup>1</sup> For an account of the controversy surrounding this decision, see: The Economist, “Medals for drone pilots? The fraught debate over how to honour cyber-warriors,” *The Economist*, March 29, 2014, available at <http://www.economist.com/news/usa/21599785-fraught-debate-over-how-honour-cyber-warriors-medals-drone-pilots> (accessed 12.8.14); E. Londono, “Pentagon cancels divisive Distinguished Warfare Medal for cyber ops, drone strikes,” *The Washington Post*, April 15, 2013, available at [http://www.washingtonpost.com/world/national-security/pentagon-cancels-divisive-distinguished-warfare-medal-for-cyber-ops-drone-strikes/2013/04/15/62335492-a612-11e2-8302-3c7e0ea97057\\_story.html](http://www.washingtonpost.com/world/national-security/pentagon-cancels-divisive-distinguished-warfare-medal-for-cyber-ops-drone-strikes/2013/04/15/62335492-a612-11e2-8302-3c7e0ea97057_story.html) (accessed 11.8.14).

<sup>2</sup> This paper draws upon and expands ideas first developed in my chapter “War without virtue?” in B. J. Strawser (ed) *Killing By Remote Control*, Oxford and New York: Oxford University Press, 2013, pp. 84-105. I have surveyed and discussed the other ethical issues raised by the development and use of tele-operated weapons in: R. Sparrow, “Predators or plowshares? Arms control of robotic weapons,” *IEEE Technology and Society* 28:1, 2009, pp. 25-29; R. Sparrow, “Building a better

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warbot: Ethical issues in the design of unmanned systems for military applications,” *Science and Engineering Ethics* 15:2, 2009, pp. 169–187; R. Sparrow, “‘Just say no’ to drones,” *IEEE Technology and Society* 31:1, 2012, pp. 56-63; and, R. Sparrow, “Robotic weapons and the future of war,” in P. Tripodi and J. Wolfendale (eds), *New Wars and New Soldiers: Military Ethics in the Contemporary World*, Surrey, UK & Burlington, VA: Ashgate, 2011, pp. 117-133.

<sup>3</sup> These systems are typically flown by one person while another operates the sensor suite and/or weapon systems. For this reason, I prefer to write of the “operators” of drones rather than their pilots.

<sup>4</sup> I say “perceived success” because the precise extent of the contribution of these systems to achieving the US’s goals in Afghanistan and Iraq remains contested, with some critics arguing that they make more enemies than they kill. See, for instance, D. Kilcullen and A. M. Exum, “Death From Above, Outrage Down Below,” *New York Times*, 2009, May 17, WK13. For an overview of the current state-of-the-art and prospects for tele-operated weapons, see, Office of the Secretary of Defense, *Unmanned Systems Integrated Roadmap FY2013-2038*. Washington D.C.: Department of Defense, United States Government, 2013.

<sup>5</sup> The reasons surveyed below are also reasons to believe that “unmanned systems” more generally — including “autonomous weapon systems” capable of identifying and attacking targets without human oversight — are likely to play an increasingly important role in war in the future. I have confined my discussion here to the implications of tele-operated systems for courage simply because this is where the popular debate is currently located. I have discussed the ethical questions raised by the development and use of autonomous weapons systems elsewhere, in: “Robotic weapons and the future of war,”; and, R. Sparrow, “Killer Robots,” *Journal of Applied Philosophy* 24:1, 2007, pp. 62-77.

<sup>6</sup> In another context (Sparrow, “Predators or Plowshares?”) I have argued that these “advantages” of drones also have the consequence that governments are more likely to resort to violence. Thus, any overall assessment of the impact of drones on casualty levels (both combatant and non-combatant) must take into account the possibility that deaths caused by drones would not have occurred except for the fact that drones allow governments to deploy violence without risk of friendly casualties and the argument that these weapons are more precise than the alternatives.

<sup>7</sup> Of course, the fact that drones make it possible to use force more precisely does not necessarily mean that it will be. For a sophisticated analysis of the impact of the use of drones on civilian casualties and discussion of the factors determining the number of casualties, see: L. Lewis, *Drone Strikes in Pakistan: Reasons to Assess Civilian Casualties*. CNA Analysis and Solutions, April 2014. My thanks to Mark Gubrud for correspondence on this matter and for directing me to this source.

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<sup>8</sup> T. K. Adams, "Future Warfare and the Decline of Human Decisionmaking," *Parameters: US Army War College Quarterly*, Winter 2001, pp. 57-71.

<sup>9</sup> B. J. Strawser, "Moral predators: The duty to employ uninhabited aerial vehicles," *Journal of Military Ethics* 9:4, 2010, pp. 342-368.

<sup>10</sup> With the possible exception, as I discuss below, of circumstances in which the bases from which drones are operated come under enemy attack.

<sup>11</sup> S. E. French, *The Code of the Warrior: Exploring Warrior Values, Past and Present*, Lanham, Md.: Rowman & Littlefield, 2003; R. Moelker and P. Olsthoorn, "Virtue Ethics and Military Ethics," *Journal of Military Ethics* 6:4, 2007, pp. 257-258; P. Olsthoorn, *Military Ethics and Virtues: An Interdisciplinary Approach for the 21st Century*, London and New York: Routledge, 2011; B. C. S. Watson, "The Western Ethical Tradition and the Morality of the Warrior," *Armed Forces and Society* 26:1, 1999, pp. 55-72.

<sup>12</sup> Perhaps the most explicitly "virtue ethical" "warrior code" of a contemporary armed service is the value statement of the US Marine Corps at <http://www.marines.com/history-heritage/principles-values> (accessed 17.7.2014). For similar statements of sentiments, see: the US Army page at <http://www.army.mil/values/> (accessed 17.7.2014); and the British Army page at <http://www.army.mod.uk/join/25736.aspx> (accessed 17.7.2014).

<sup>13</sup> H. Aronovitch, "Good Soldiers, A Traditional Approach," *Journal of Applied Philosophy* 18:1, 2001, pp. 13-23, at p. 17.

<sup>14</sup> P. Olsthoorn, "Courage in the Military: Physical and Moral," *Journal of Military Ethics* 6:4, 2007, pp. 270-279. It is not entirely clear how one *would* train moral courage *en masse* without deliberately putting trainees in situations of the sort that it would be unethical to actually contrive.

<sup>15</sup> J. Yi, "MCMAP and the Marine Warrior Ethos," *Military Review* 846, 2004, pp. 17-24.

<sup>16</sup> Olsthoorn, "Courage in the Military," p. 274.

<sup>17</sup> R. R. Gorman, "War and the Virtues in Aquinas's Ethical Thought," *Journal of Military Ethics* 9:3, 2010, pp. 257-258, at p. 254.

<sup>18</sup> R. Hursthouse, *On Virtue Ethics*, Oxford: Oxford University Press, 2001, pp. 10-12.

<sup>19</sup> The literature on courage is divided on whether it is only possible to exercise the virtue of courage in a just cause. The idea that virtues contribute to human flourishing — and especially the idea that they contribute to the flourishing of human communities — suggests that "brave" acts only exemplify courage when they are done in the service of a just cause (J. Kirkpatrick, "Drones and the Martial

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Virtue of Courage”, *Journal of Military Ethics*, forthcoming). On the other hand, it is intuitively plausible to think that warriors fighting in an unjust cause might nevertheless display courage, especially as those fighting in wars typically have little choice as to which side they fight on (Olsthoorn, “Courage in the Military,” p. 277). I do not need to resolve this controversy, which is independent of my argument, here — although it is worth noting that given that both the United States’ invasion of Iraq and Afghanistan were arguably unjust by virtue of failing both the “reasonable chance of success” and the “proportionality” criteria within *jus ad bellum*, the conclusion that courage requires a just cause might be bad news for US drone operators.

<sup>20</sup> R. M. Adams, *A Theory of Virtue: Excellence in Being for the Good*, Oxford: Oxford University Press, 2006, pp. 144-170. I would like to thank Justin Oakley for alerting me to Adams’ work on this topic.

<sup>21</sup> Kirkpatrick, “Drones and the Martial Virtue of Courage.”

<sup>22</sup> My own discussion of the implications of drones for the martial virtues in “War without virtue?” is a particular target of his criticism.

<sup>23</sup> I owe this point to a conversation with David Blair.

<sup>24</sup> Possible exceptions here are the September 11, 2001, attack on the Pentagon (arguably a legitimate military target according to just war theory) and the Fort Hood shooting carried out by Major Nidal Malik Hasan.

<sup>25</sup> For different treatments of the topic, see, for instance: P. W. Singer, *Wired for War: The Robotics Revolution and Conflict in the 21st Century*, New York: Penguin Books, 2009, 346-347; B. Bender, “Attacking Iraq, from a Nev. Computer,” *Boston Globe* April 3, 2005, A6; and, N. Shachtman, “Drone School, a Ground’s-Eye View,” *Wired Magazine*, 27 May, 2005, available at <http://archive.wired.com/science/discoveries/news/2005/05/67655?currentPage=all> (accessed 13.8.14).

<sup>26</sup> J. L. Otto and B. J. Webber, “Mental health diagnoses and counseling among pilots of remotely piloted aircraft in the United States Air Force,” *Medical Surveillance Monthly Report* 20:3, 2013, pp. 3-8; W. Chappelle, T. Goodman, L. Reardon and W. Thompson, “An analysis of post-traumatic stress symptoms in United States Air Force drone operators,” *Journal of Anxiety Disorders* 28:5, 2014, pp. 480-487.

<sup>27</sup> M. D. Matthews, “Stress among UAV operators — post-traumatic stress disorder, existential crisis, or moral injury?,” *Ethics and Armed Forces* 1, 2014, pp. 53-57, notes that it is arguable that because UAV operators do not directly experience a traumatic event such as “a violent crime, serious bodily

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injury, or threat of death or serious bodily injury” they cannot, strictly speaking, suffer from PTSD. Nevertheless, Matthews acknowledges that operators may experience psychological distress as a result of a loss of meaning in life or “moral injury”. However, if we interpret “traumatic event” more widely, to include witnessing such episodes, then it is clear that drone operators are exposed to such trauma and might be expected to experience stress-related symptoms as a result.

<sup>28</sup> Kirkpatrick, “Drones and the Martial Virtue of Courage.”

<sup>29</sup> Kirkpatrick, “Drones and the Martial Virtue of Courage.”

<sup>30</sup> In fact, it is possible to imagine a situation where moral courage was required to disobey an order *not* to kill (for instance, in order to defend a comrade one’s commanding officer was willing to sacrifice in to achieve some trivial military goal). However, I take it that the discussion below will also deal adequately with this case.

<sup>31</sup> For useful discussions, see: D. Whetham, “Remote Killing and Drive-By Wars” in D. Lovell & Igor Primoratz (eds) *Protecting Civilians During Armed Conflict: Theoretical and Practical Issues During Violent Conflict*, Farnham: Ashgate, 2012, pp. 199-214; and, J. Sparrow, *Killing: Misadventures in Violence* Carlton, Vic.: Melbourne University Publishing, 2009.

<sup>32</sup> See, for instance: M. Power, “Confessions of a Drone Warrior,” *GQ*, October 23, 2013. Available at <http://www.gq.com/news-politics/big-issues/201311/drone-uav-pilot-assassination> (accessed 14.8.2014); and, P. Lee, “Remoteness, risk and aircrew ethos,” *Air Power Review* 15:1, 2012, pp. 1-20.

<sup>33</sup> See, for instance: Bender, “Attacking Iraq, from a Nev, Computer”; N. Shachtman, “Attack of the Drones,” *Wired Magazine* 13: 6, 2005, available at <http://archive.wired.com/wired/archive/13.06/drones.html> (accessed 14.8.2014); and, Shachtman, “Drone School, a Ground’s-Eye View.”

<sup>34</sup> See, for instance: Whetham, “Remote Killing and Drive-By Wars”; and, J. Kaag and S. Kreps, *Drone Warfare*, Cambridge: Polity Press, 2014, p. 115. It is worth observing that this argument, often deployed to assert the moral benefits of using drones, cuts against the claim that operators experience strong and troubling emotions when they kill.

<sup>35</sup> Sparrow, “War without virtue?”, pp. 96-97.

<sup>36</sup> M. S. Riza, *Killing Without Heart: Limits on Robotic Warfare in an Age of Persistent Conflict*, Dulles: Potomac Books, 2013, pp. 86-95.

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<sup>37</sup> Police officers must sometimes make this decision but arguably do so in a much less contested moral and political context than warfighters; nor is killing people the defining task of their profession, as it is for warfighters.

<sup>38</sup> Lee, “Remoteness, risk and aircrew ethos,” p. 12.

<sup>39</sup> Which is not to say that I do not think that there are powerful arguments that can be made against the development and use of drones. See, for instance, Sparrow, “Predators or Plowshares?”, and, Sparrow, “‘Just say no’ to drones.”

<sup>40</sup> See, for instance, sentiments quoted in, P. Z. Shah, “My Drone Wars,” *Foreign Policy* March/April (2012), available at [http://www.foreignpolicy.com/articles/2012/02/27/my\\_drone\\_war?page=full](http://www.foreignpolicy.com/articles/2012/02/27/my_drone_war?page=full) (accessed 13.8.14).

<sup>41</sup> For a compelling account of how such a culture is already developing amongst the community of those who fly drones, see, Lee, “Remoteness, risk and aircrew ethos”.