

THE ETHICS OF REMOTELY PILOTED AIRCRAFT (RPA)

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The United States Air Force currently operates 57 MQ-1B Predator and MQ-9 Reaper Combat Air Patrols (CAP). That means that at any given time, there are 57 airborne aircraft ready to release live ordnance in combat, while the pilots of these aircraft are thousands of miles from the area of operations. This concept of operations invokes ethical questions, if not ethical problems. Is a state justified under Just War Theory to engage an enemy, while its own forces face no risk? The following is an assessment of and response to two distinct criticisms of RPA operations on the grounds of long-standing Just War Theory tradition.

Introduction

Consider two scenarios: In Scenario 1, a technologically dominant State X employs an F-22 carrying an assortment of precision-guided munitions against a tribal warrior of technologically limited State Y who is wielding only a rocket propelled grenade (RPG).¹ In Scenario 2 the State Y tribal warrior's weapon remains the same, but this time State X employs a Remotely Piloted Aircraft (RPA)² whose pilot is some 7,500 miles away in an air-conditioned trailer. Two questions develop from the contrasting scenarios: Is the RPA as it is employed above any more or less ac-

ceptable to just war theory than the F-22? And if there is a difference, is just war theory sufficient to govern the remotely piloted war?

While there are a number of serious philosophical criticisms against the use of RPAs,³ I address two specific arguments here; both of which suggest that the use of RPAs reaches a threshold resulting in just war theory violations. Criticism 1 is concerned with the inherent technological asymmetry between the state which employs RPAs and the state which, for whatever reason, does not. There are two different formulations of this criticism based upon two different theories of justice. I have broken the criticisms into 1a and 1b below for clarity. This criticism is naturally concerned then with one's *conduct in the context of war*. The second criticism suggests that RPAs lower the risk threshold associated with combat to such a degree that deciding on war as a course of action is too easy, and as a result, an otherwise just cause for war may become unjust. This criticism, by comparison, is not concerned with one's conduct in the context of war, but the circumstances of one's *decision to go to war*. My responses to these criticisms will center on the claim that in the case of RPA operations, the battlespace has been redrawn to include RPA crews, wherever they may be. Additionally, this perspective on the battlespace demonstrates that just war theory is still effective when applied to RPA operations.

In order to engage these criticisms properly, three precursory notes on ethical philosophy are required. First, it is important to recognize the distinction between what is legal and what is just. From a legal perspective, the most important question on this topic might be whether or not RPAs conform to the legal norms which govern war. This is a question of fact. The moral or ethical philosopher asks a more open ended question: Are those legal norms just?⁴ Both questions are important, but the following discussion regards the latter.

Second, Criticism 1 below demands a basic understanding of two ethical theories, or theories of justice. The two traditional ethical theories referenced below are deontology and consequentialism. Put plainly, deontology is concerned with what is right, while consequentialism is concerned with what is good. As such, these two theories stand in opposition to one another.

Deontology is etymologically rooted in the Greek word for duty (*deon*). As one might expect, then, "for deontologists, what makes a choice right is its conformity with a moral norm."⁵ If one's deontological view of things is such that life is in some way noble or sacred, then he would likely take the deontological position that he has a duty to protect or preserve life.

Consequentialists, on the other hand, hold that choices "are to be morally assessed solely by the states of affairs they bring about."⁶ Under this ethical system, the end must justify the means. John Stuart Mill's Utilitarianism, perhaps the most prominent form of consequentialism, suggests that "actions are right in proportion as they tend to promote happiness; wrong as they tend to produce the reverse of happiness."⁷

While in most circumstances, the deontologists and consequentialist might agree on the appropriate action, there are some areas of contention. Consider a practical scenario. A combat pilot is told that the individual under her crosshairs is the high-value target for whom the friendlylies had been searching. The ground forces commander (GFC) via the joint terminal attack controller (JTAC) advises the RPA pilot that they intend to target the individual with a hellfire missile. Suppose the pilot sees children in the field of view, and alerts the ground party to their presence. Following just war theory's proportionality clause, the GFC decides that the military significance of the target is such that the collateral damage to the children is acceptable. The first question the pilot must ask is a legal one. Does this situation conform to all appropriate guidance in the Air Operations Directive (AOD), Special Instructions (SPINs), Law of Armed Conflict (LOAC) and any other authoritative guidance. Suppose in this notional scenario it does. Now, in the space of a moment, she needs to decide if she is a consequentialist or a deontologist. The consequences of her actions may yield the death of the target and the death of the children. Does one outweigh the other? Or, if she is a deontologists, does she have a duty to preserve the lives of those children? Does that duty outweigh her duty to accomplish the mission? While the

terms “consequentialist” and “deontologist” may appear abstract, as concepts, they are essential to the warfighter.

The third philosophy note regards the just war theory tradition. For a thorough treatment of just war theory, one should consider Walzer’s *Just and Unjust Wars*. What is necessary for the following discussion is the observation that just war theory is a standard by which moral theorists often judge combat operations. There are, for the purposes of this discussion, two major sets of principles included in the tradition.

The first is concerned with one’s just conduct in war. For brevity, this is typically referred to by the Latin “*jus in bello*.” Here, the tradition demands that a soldier’s actions within the context of war be proportional and discriminate.⁸

Likewise, just war theory is also interested in the justice of a state’s resort to war in the first place, or *jus ad bellum*. These principles demand that for a state to be justified in entering into war it must maintain all of the following; a just cause, right intention, proper authority, proportionality, a high probability of success, and the war must be a last resort.⁹ Notice that just war theory demands that a state has a just cause. It does not offer a definition of a just cause. Put another way, just war theory demands that the state which decides to engage in war determine, by whatever consequentialist or deontological means it chooses, whether its cause is just. If its cause is just and the other criteria are met, then the state has satisfied just war theory’s *jus ad bellum* principles.

These two sets of principles are said to be logically independent. Though some disagree,¹⁰ a traditional view of just war theory supposes that even if a state’s cause for entering into war is unjust, a soldier’s actions might still satisfactorily meet the *jus in bello* requirements.¹¹ The logical independence of the two sets of principles is the cause for Walzer’s claim that soldiers on both sides share the same moral status, regardless of their leaders’ *jus ad bellum* cause.¹² This not only conforms to the tradition but also stands to reason. To claim anything other than logical independence for *jus ad bellum* and *jus in bello* is to claim that each soldier should be held accountable, not merely for his conduct, but also for participating in a war that ought not to have started. This demand goes beyond what can be expected of the soldier given what Dr. Jai C. Galliot calls the “known epistemic difficulties individuals face when determining (in the ‘fog of war’) whether their cause is objectively just.”¹³ This logical independence is important at present in that it allows, and even requires, that responses to each of the two criticisms (one regarding *jus in bello* and the other *jus ad bellum*) be dealt with independently.¹⁴

Criticism Ia

This criticism is typically formulated like this: RPAs create an extreme asymmetry such that their employment crosses a threshold resulting in inherent *jus in bello* violations of fairness.¹⁵ This critique is represented by Scenario 2 in the opening paragraph above: Technologically dominant State X employs RPAs against technologically limited State Y. In the deontological formulation of this argument the technological asymmetry, and therefore, unfairness to which State Y is exposed reaches a threshold that renders State X’s actions inherently unjust.

The most immediate response to this argument is offered by the military strategist, who suggests that any military, but especially the one with technological means, ought to try to make its fights unfair in favor of its own troops. Former Secretary of the US Army Pete Geren made this claim when he said “we do not ever want to send our Soldiers into a fair fight.”¹⁶ While this may be true, and perhaps even admirable, it fails to deal with the nature of the threshold issue. The use of “threshold” in the criticism suggests that its proponents know and agree that some unfairness might be good or right, but that unfairness can reach such an extreme as to violate *jus in bello* requirements. If such an unfairness extreme, for example, violates *jus in bello*’s proportio-

nality clause, then just war theory would find it unjust. So a statement like “unfairness is good,” though it may be true under certain circumstances, is insufficient. The Geren response fails to deal with extremes, and is, therefore, insufficient in dealing with Criticism 1a.

Another response to this criticism is to suggest that RPAs represent an evolutionary change, rather than a revolutionary one, with regard to the unfairness problem. Consider Scenario 1 above. The State Y tribal warrior is as likely to engage the fighter pilot in the cockpit successfully as he is to engage the predator pilot 7,500 miles from the aircraft. Dr. B. J. Strawser¹⁷ and Dr. Jai C. Galliot¹⁸ agree that if a charge of unfairness is to be brought against RPAs it must also be brought against any aerial weapons system that operates outside the engagement envelope of State Y’s weapons. As a result, either the F-22 or some other chronologically prior weapon crossed the *jus in bello* asymmetry threshold first, but it was not the RPA.

Even as he argues this point, however, Dr. Strawser suggests that the impetus for Criticism 1a is found in that State X’s “warfighters are not even present in the primary theater of combat.”¹⁹ Dr. Galliot similarly says in his response to Strawser that the fighter pilot “remains in the air; therefore the tribal warrior still has a human to target, regardless of how futile his efforts may be.”²⁰ These references to absentee warfighters fail to appreciate the perspective of State Y’s tribal warrior. With respect to asymmetry, in the tribal warrior’s eyes, and more specifically, through the targeting optics of his RPG, there is no difference between the F-22 and the RPA. Engaging the pilot of the latter is as futile as engaging the pilot of the former.

Consider a notional scenario: Imagine that the US Air Force rebuilds its fitness assessment (FA) program such that, in order to pass, Airmen must complete 200 pushups in sixty seconds. For the average Airman this is an impossible task. As time passes under this new system, each Airman takes and fails his or her FA. One day, a bright, young Headquarters Air Force (HAF) staffer suggests that the fitness assessment requirement be raised to 400 pushups in sixty seconds. One can see how absurd it would be for the senior leadership to respond by saying that to demand 400 pushups would be unfair; or, rather, that it would be *too* unfair. If one can look beyond the contrived nature of the scenario, the analogous relationship to the F-22 and RPA is apparent.

While Criticism 1a’s concern for unjust extremes is noteworthy, it cannot be applied to Scenarios 1 and 2 above. Though there is, perhaps, a difference of degree between the F-22 and the RPA, this difference is imperceptible to the State Y tribal warrior. The question as to whether a thing is impossible is a binary question. There can be no spectrum of more possible or less possible. If it is physically impossible for an RPG to engage the F-22 pilot at 50,000 feet and it is physically impossible for a human being to do 200 pushups in a minute, then there has been no change in fairness asymmetry. The tribal warrior’s concern is not that the RPA pilot presents a more impossible target than does that of the F-22, but that his efforts are futile in either case.²¹ Proponents of this criticism, however, seem to suggest that in the two scenarios above, only the RPA pilot, 7,500 miles away, represents a target that is physically impossible to attack. But to claim, in the case of RPAs, that the warfighter is “not even present”²² or that the tribal warrior has no human to target²³ is to misrepresent the reality of Scenario 2 and to misunderstand the modern battlespace.

The term battlespace is chosen here to avoid the etymological limits of the classical term “battlefield”. That region containing the elements used in battle is no longer simply represented by lateral boundaries drawn on a map. This development has been of such significance that in the 1990s, the U.S. military began using the term *battlespace* universally.²⁴

To return to Scenario 1, dominant State X has redrawn the boundaries of the battlespace such that it includes the F-22’s nominal 50,000 foot altitude. The tribal warrior with his RPG probably would have preferred to limit the battlespace to the earth thereby limiting his adversary to an engagement envelope commensurate with his capabilities (namely, the RPG). But a state may choose to re-draw the battlespace while maintaining the requirements imposed by *jus in bello*. In

this particular case it was the technological advantage that provided the dominant state such prerogative.

In this case, Dr. Strawser is right to say that RPAs represent “only a difference in degree,”²⁵ when compared to the asymmetry imposed by the F-22, and not a difference in ethical category. But the change is not simply, as he supposes, in the distance between the combatant and his foe,²⁶ but instead in the size and scope of the battlespace. The F-22 pilot is not 50,000 feet above the battlespace. The battlespace has expanded to meet him. The RPA pilot is not 7,500 miles removed from the battlespace. The battlespace has been redrawn to include him. It is in the context of this scenario that the distinction between RPAs, and autonomous weapons systems is of great importance. The autonomous weapons system has no pilot, and thus, redrawing the battlespace to accommodate the change in asymmetry is problematic to say the least.²⁷ The RPA, though, has a pilot and State X has redrawn the battlespace such that it includes him, even if that pilot is within the dominant state’s homeland.²⁸ If this is true, the RPA pilot represents a valid military target. As such, the RPA pilot is exposed to attack by State Y.

Someone will respond by arguing that though the RPA pilot represents a valid military target, the limited state cannot feasibly attack that target, and as such, the asymmetry threshold is still reached. But against this feasibility argument, the F-22 comparison stands. The RPG-toting tribal warrior is as likely to successfully engage the RPA pilot thousands of miles away with his weapon as he is to engage the F-22 pilot at 50,000 feet. Furthermore, just because the RPA pilot is thousands of miles away does not mean that he is invincible. It is here that the scenarios expose an unstated premise. If the RPG is the only weapon available to the tribal warrior, then both targets are impossible to engage, and the asymmetry threshold, as Strawser suggests, was reached long ago.²⁹ But this premise probably limits the application of Scenarios 1 and 2 artificially.

To temporarily break from the objective world of States X and Y, consider the U.S.’s war against Al Qaeda. Though a non-State Actor, the terrorist network can suitably represent an organization with limited technological capability in that they do not employ RPAs. Similarly, the U.S. represents a technologically dominant state. Al Qaeda has proven its ability to strike U.S. soil. If Al Qaeda serves as a representative for the notional technologically limited state, then based upon the redrawn battlespace, the RPA pilot is subject to attack, and therefore, the technologically dominant state satisfies the requirements imposed by *jus in bello*.³⁰

The ability to redraw the battlespace, though, is not unique to the dominant state. Consider this notional scenario. Technologically dominant State A and technologically limited State B are at war under presumably justified *jus ad bellum* conditions. The war takes place entirely in State B’s coastal regions. One entrepreneurial State B soldier believes that his anti-aircraft weapon will see better success if he employs it from the water. The soldier boards a State B military vessel by himself and pilots it more than 12 miles from his home country and into international waters. From there, he attempts to engage State A’s aircraft with his weapon. Until this time, State A has limited its aerial attacks to State B’s land. Are State A aircraft justified in engaging the State B soldier in international waters?³¹ They are indeed because the State B soldier, in this case, has chosen to redraw the battlespace such that it includes some portion of international waters. Perhaps State A would have preferred that the battlespace not include international waters. In this case, State B has executed its prerogative to redraw the battlespace.

State X’s decision to operate RPAs from its homeland is no different. Actions, though, have consequences. The State B soldier has induced some additional collateral damage risk into his circumstance. Not only the State B boat, which may have otherwise been left alone, but any surrounding international boats may be at risk due to the State B soldier’s decision. Similarly, State X has assumed some additional risk.

Consider three scenarios in which a State X fighter pilot can be engaged during a war with State Y. (1) She might be engaged while flying her aircraft. (2) She might be engaged while conducting official business on the ground; writing post-mission reports, conducting an inspection

of her aircraft or planning the following day's mission. (3) Or she might be engaged while doing something not directly related to her combat mission; perhaps she is sleeping, or eating. State Y is justified in engaging the fighter pilot in any of these scenarios, and each scenario carries with it some collateral damage concerns. The other military or support personnel at the dining hall or sleeping quarters, for example, may be at risk in situation (3). However, if State X's war is carried out in the way dominant states typically carry them out, and the fighter pilot is operating from a forward deployed location, then the military and support personnel knew they were exposed to some level of risk just by being at the forward deployed location.

It is here that the collateral damage concerns change drastically with RPA operations. The RPA pilot might similarly be engaged in any of the three situations above. But if he is, for example, engaged while sleeping or eating, then it is not just military and support personnel or base infrastructure that is at risk. His home and his wife and his family are at risk. Just as the State B impromptu boat captain induced collateral damage risk when he redrew the battlespace, so too has State X induced risk to some of its civilian citizens and resources when it decided to conduct RPA operations from within its homeland.

Criticism 1b

This criticism is normally formulated as follows: RPAs create an extreme asymmetry such that their employment crosses a threshold resulting in *jus in bello* violations that may have unacceptable consequences.³² The consequentialist position presents the problem this way: If State X's otherwise justifiable actions result in State Y acting unjustly, State X's actions may, after all, be unjust. If this is true, then any potential State X action would be judged based upon State Y's response, or at least its anticipated response. Recall from the introduction that under the consequentialist ethical system, an action is judged solely on its consequences. An RPA war may make it possible for State X to leave State Y with only these options: (1) Surrender or (2) retaliate. Proponents of this argument, say that "if the right to self-defense is a legitimate one, surrender cannot be coercively imposed."³³ One cannot, then, blame State Y for retaliating. Furthermore, if there are no troops or pilots against which to fight, then State Y may retaliate against noncombatants. As such, the extreme asymmetry presented by the use of RPAs may result in the limited state taking actions that are not justified under *jus in bello*. These actions may include striking the dominant state's military and civilian leadership, its commercial defense industry, the media that influences the war,³⁴ or even to terrorist actions.³⁵ One is left with the consequentialist conclusion that State X ought not to put State Y in such a position, or the *jus in bello* violations committed by State Y may outweigh any potential *jus ad bellum* good which State X intended in the first place.

One immediate response to this criticism is to pragmatically refer to State X's epistemic difficulties. How can State X evaluate the consequences of State Y's reaction without knowing what that reaction will be? Proponents of this criticism preempt this argument by saying that while practicality must be entertained in the discussion of morality, "it is still necessary to establish a prior moral truth before tampering it with pragmatic considerations."³⁶ If, therefore, one can survive the epistemic difficulties inherent in this kind of action-reaction utility, then Critique 1b survives this defense.

A second defense against the criticism is similar to the one used against Criticism 1a. It states that the asymmetry threshold was met by some other weapon prior to RPAs. If F-22 pilots, like RPA pilots, represent impossible targets, then the proponent of Criticism 1a does not have an issue with RPAs, as such, but with airpower in general when it is applied against a state that does not have a means to defend itself against such weapons. If the element of State X's campaign that will result in unjust State Y actions is fairness asymmetry, then State Y's actions and their

consequences are unaffected by RPAs as such. This response, though, may represent a vacuous victory in that it concedes the ethical failures of State X by merely assigning blame to a State X weapon other than RPAs.

A more thorough response employs the redrawn battlespace introduced above. Dr. Suzy Killmister, the most notable champion of Criticism 1b, supposes that the original battle takes place within the lateral confines of State Y. It is for this reason that she suggests that by reducing State Y's options to surrender and retaliation against noncombatants, State X is "bringing warfare into the domestic setting."³⁷ She likewise presupposes, then, that State Y, though unable to attack the State X military assets within its borders, does have some means to carry out attacks within State X's borders. If State X willfully admits that it has redrawn the battlespace to include the operating locations of its RPA pilots, then it has subsequently introduced an additional option to State Y. State Y can now choose to (1) surrender, (2) retaliate against noncombatants, or (3) strike military targets, (specifically RPA crews) within State X's borders. State Y's decision, then, is no longer a binary one, and if State Y should choose to kill noncombatants under option (2), State X could not be held accountable for it.

If the above presupposition is false, and State Y does not have the means to conduct attacks against the State X homeland, then it likewise does not have the means to attack State X civilians. In this case, the consequential calculus has changed, and State X need not fear unjust State Y responses against noncombatants. The consequentialist problem, then, is resolved by recognizing that State X, by choosing to employ RPAs, has redrawn the battlespace such that it includes the RPA pilots' operating locations.

The Killmister argument, while it fails to recognize the redrawn battlespace, does emphasize the consequences of State X's decision to conduct RPA operations from its homeland. It has invited "warfare into the domestic setting." The collateral effects against noncombatants in State X's homeland discussed above are still to be expected, then, and viewed as just under *jus in bello* principles.³⁸

Criticism 2

The final criticism to be addressed claims that the degree of asymmetry caused by RPAs between the technologically dominant state and the limited one violates a *jus ad bellum* threshold, rendering any cause for war unethical.³⁹ Dr. Gallioth suggests that "when the technological imbalance reaches a certain level, it may actually override any justification for war."⁴⁰ But it cannot be, as he claims, the *technological* imbalance that is the issue. In the case of RPAs, a technological imbalance will probably lead to an imbalance in war fighting capabilities, precision engagement, global reach, and other things. The disconcerting element, though, is the *risk* imbalance introduced by RPAs. Dr. Strawser is right to point out that the issue is not an asymmetry of technology, but an asymmetry *created* by technology, "and in particular, by the massive reduction of risk to the [RPA] pilot."⁴¹

If one begins with the false premise, then, that the RPA pilot is nowhere to be found within the battlespace, and is therefore exposed to no risk, a significant increase in risk asymmetry is to be expected. Once the battlespace is redrawn, however, to include the RPA pilot, he again faces risk. It is not the same risk faced by the tribal warrior, but it need not be. It is commensurate with the risk faced by the fighter pilot, and so at the very least, just war theory's application to aerial warfare is returned to the status quo.

There is an additional question involved in Criticism 2 that asks whether the *jus ad bellum* threshold is affected by *having* RPAs or by *using* RPAs. Because Criticism 2 regards the decision to go to war, at first glance, it seems that having RPAs would be the significant element. Consider three different heads of state faced with the *jus ad bellum* threshold problem. One leader might

say “*we have* RPAs, and therefore, we face little risk in this potential war.” A second might say “*we intend to use* RPAs, and therefore, we face little risk in this potential war.” A third and philosophically trained leader might say “*we have* RPAs, but based upon the *jus ad bellum* threshold problem, *we do not intend* to use them in this particular war.”

The first leader includes an unstated premise. It is not her *having* RPAs that limits risk to her pilots. Since she admits limited risk to her pilots she likewise admits that she intends to use RPAs. The first leader, then, is saying the same thing as the second.

The moral value of the second leader’s intent to use RPAs, according to Criticism 2, is dependent upon the capabilities of his enemy. Criticism 2 claims that State X’s intent to use RPAs against limited State Y that has no RPAs is unethical due to *jus ad bellum* threshold issues.

Now consider the same scenario. In this case, however, dominant State X considers a suspected conflict with peer threat state Z. Peer threat Z has similar scientific and economic means to produce a similar RPA capability to that of State X. Under these conditions, State X’s *jus ad bellum* threshold remains high, and the option for a war involving RPA operations against state Z remains ethically viable. This comparison demonstrates the limitations of Criticism 2. Under this criticism, the moral value of RPAs is dependent upon when and against whom they are employed. These questions of ‘when’ and ‘against whom’ are not questions about whether to go to war, but about how to go to war. We have subtly and quietly slid, then, from a discussion of *jus ad bellum* to one of *jus in bello*. As a result, Criticism 2 is simply a reformulation of Criticism 1a.

While Criticism 2 and the resulting scenarios fail to levy a *jus ad bellum* charge against RPAs, they do illustrate an interesting phenomenon. Suppose the State X statesman commits his state to war against State Y, but recognizes the technological and resulting risk asymmetry. The State X leader is unwilling to forego RPAs altogether, as he recognizes his duty to keep his pilots safe. Instead, he chooses to mitigate this risk asymmetry by employing the RPAs differently. Perhaps the statesman recognizes the increased importance of the proportionality and discrimination demanded by *jus in bello*. State X, then, chooses to hold itself to a higher standard of “epistemic certainty” when waging war.⁴² The result might be fewer RPA strikes due to higher standards of positive identification (PID), collateral damage mitigation or actionable intelligence, to name a few.

Again, to return to reality, this concept which regards including RPAs in a conflict against an enemy with no RPAs while at the same time self-imposing more rigorous *jus in bello* requirements is not merely theoretical. In January, 2012, leaders of the Afghanistan International Security Assistance Force (ISAF) met to discuss methods of eliminating civilian casualties in Afghanistan. Lieutenant General Adrian Bradshaw, ISAF’s Deputy Commander, told attendees that “eliminating Afghan civilian casualties is a high priority.” More importantly, he claimed that eliminating civilian casualty events is a “*moral obligation*.”⁴³ While one cannot conclude that ISAF has met the intent that this argument suggests, at the very least, it serves as an example of what a dominant State might do when it recognizes the technological and resulting risk asymmetry afforded by RPAs.

Conclusion.

I have identified here two common and distinct criticisms of RPA technology as it is applied in the military context. The first suggested that the risk asymmetry introduced by removing soldiers from the battlefield violates a *jus in bello* threshold. The second cited a *jus ad bellum* threshold by which any justification for going to war might be insufficient compared to the low risk to the state’s combatants. In each of these cases I have shown that the arguments only hold when the battlefield is pictured as a unitary, three dimensional space above a piece of land on which the conflict takes place. When the battlespace is redrawn to include the technologically domi-

nant state's operators within its borders the risk asymmetry is relieved and the threshold restored to its pre-RPA status.

Though this understanding of the redrawn battlespace is of the utmost importance to the RPA discussion, it is not unique to RPAs. The redrawn battlespace can be equally applied to intercontinental ballistic missile (ICBM) operators as well as to cyberwarfare operators. Any ethical discussion of ICBMs, though, will be dominated by the ethics of nuclear weapons as such. Similarly, cyberwarfare carries its own set of ethical issues. So while in each case the battlespace has been redrawn to include the operator, only in the case of RPAs does this redrawn battlespace represent the crux of the ethical issue.

While this argument satisfactorily deals with *jus ad bellum* and *jus in bello* problems, it also carries with it some significant implications for the dominant state. As mentioned above, while the redrawn battlespace does solve some ethical issues for the employment of RPAs, it by no means suggests that using RPAs in this way is a good idea. Put another way, the preceding argument only shows that the dominant state is justified in using RPAs, what it does not show is whether that justified use of RPAs is in the best interest of the dominant state. The technologically dominant state ought to consider the impacts on collateral damage and inviting war to its homeland before employing such a weapon. □

Notes

1. This scenario is a modified version of that presented by B. J. Strawser in "Moral Predators: The Duty to Employ Uninhabited Aerial Vehicles," *Journal of Military Ethics* 9, no. 4 (16 Dec 2010): 356.

2. I use the term "RPA" to refer specifically to US Air Force MQ-1B Predator and MQ-9 Reaper aircraft. This subset is chosen intentionally in that it represents not only the most predominant US Air Force RPAs but also those carrying precision-guided munitions; while the majority of U.S. remotely piloted systems do not; P. W. Singer, *Wired for War: the Robotics Revolution and Conflict in the 21st Century*, Reprint ed. (Mechanicsburg: Penguin Books, 2009), 37.

3. I do not intend to provide a comprehensive list of ethical objections to RPA operations. There are, however, a few categories that warrant attention. These include criticism on *jus ad bellum* grounds, those that claim RPAs make war too easy, those that find fault with the psychological effect of removing the pilot from risk and those regarding targeted killings. For a more formal list, see the introduction to B.J. Strawser's aforementioned "Moral Predators" article in the *Journal of Military Ethics*, page 342.

4. Michael J. Sandel, *Justice: What's the Right Thing to Do?* 1st pbk. ed. (New York: Farrar, Straus and Giroux, 2010), 6; Will Durant, *The Story of Philosophy*, 36th ptg. ed. (New York: Washington Square Press, 1953), 3.

5. Alexander, Larry and Moore, Michael, "Deontological Ethics", *The Stanford Encyclopedia of Philosophy* (Fall 2008 Edition), Edward N. Zalta (ed.), URL = <<http://plato.stanford.edu/archives/fall2008/entries/ethics-deontological/>>.

6. *Ibid.*

7. John Stuart Mill, *Utilitarianism*, 2nd ed. (Indianapolis: Hackett Pub Co, 2002), 7.

8. Galliot, "Uninhabited Aerial Vehicles," 61.

9. *Ibid.*

10. Namely B. J. Strawser and Jeff McMahan. For further analysis, see Galliot, "Uninhabited Aerial Vehicles," 61.

11. Walzer, *Just and Unjust Wars*, 36.

12. *Ibid.*, 127.

13. Galliot, "Uninhabited Aerial Vehicles," 62.

14. This is a contentious issue. While I do not argue for it here, the analysis below has the logical independence of *jus ad bellum* and *jus in bello* as a premise.

15. Strawser, "Moral Predators" 342, 355.

16. Leahy, "Keeping up with the Drones," 17.

17. Strawser, "Moral Predators" 356.

18. Galliot, "Uninhabited Aerial Vehicles," 60.

19. Strawser, "Moral Predators" 356.

20. Galliot, "Uninhabited Aerial Vehicles," 60.

21. Both Criticism I and my response to it thus far have as a premise that the RPG is the only weapon available to the tribal warrior. This is problematic and will be addressed further below.

22. Strawser, "Moral Predators" 356.

23. Galliot, "Uninhabited Aerial Vehicles," 60.

24. Milan N. Vejo, *Joint Operational Warfare Theory and Practice and V. 2, Historical Companion*, Reissue, First edition, 2009 reissue ed. (Dept. of the Navy, 2009), IV-9; As per Vejo, it was not merely airpower that required the updated

term battlespace, but the application of cyberspace to the combat operations. This is of interest here in that the RPA is not just an airplane operating over the battlefield and in the battlespace, but it is operated via datalinks. As a result, the battlespace is inclusive of the pilot, the ground control station, the satellites and the bands of the electromagnetic spectrum occupied by the datalinks.

25. Strawser, "Moral Predators" 343.

26. Ibid.

27. Suzy Killmister has dealt with this contingency well by offering valid "civilian combatant" targets in spite of pilot-less aggressors. Suzy Killmister, "Remote Weaponry: The Ethical Implications," *Journal of Applied Philosophy* 25, no. 2 (2008)

28. Leahy, "Keeping up with the Drones," 4.

29. Strawser, "Moral Predators" 356.

30. Though I have admittedly limited my argument to only those technologically limited states which have some method of striking the technologically dominant state on its own soil, I see this as a limitation in principle only and not in application. While dominant states may be the ones developing technology, technological developments in general affect world-wide affairs. Though dominant states may have developed air travel, for example, Al Qaeda used this air travel technology to target the U.S. To suppose, then, that State X will continue to develop advanced technology without any beneficial impact on State Y seems to be an artificial supposition.

31. This question is concerned with the ethical and moral issues associated with the scenario rather than the legal ones.

32. Strawser, "Moral Predators" 342, 355.

33. Killmister, "Remote Weaponry," 123.

34. Ibid.

35. Paul W. Kahn, "The Paradox of Riskless Warfare," *Yale Law School Legal Scholarship Repository* 1, no. 1 (2002): 6.

36. Killmister, "Remote Weaponry," 127.

37. Ibid., 130.

38. This is true as long as the collateral damage inflicted by State Y within State X's borders meets the proportionality and discrimination requirements of *jus in bello*.

39. Strawser, "Moral Predators" 343.

40. Galliot, "Uninhabited Aerial Vehicles," 62.

41. Strawser, "Moral Predators" 358.

42. Galliot, "Uninhabited Aerial Vehicles," 64.

43. LtCol David Olson, "ISAF conducts Aviation Civilian Casualty Conference," ISAF – International Security Assistance Force, <http://www.isaf.nato.int/article/new/isaf-conducts-aviation-civilian-casualty-conference.html> (accessed Sept 18, 2012).



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