Reframing the drone debate

John Hardy
National Security College
Australian National University

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Abstract:
America's use of Remotely Piloted Vehicles (RPV) to target terrorist and insurgent groups around the world has caused enormous controversy in recent years. Many commentators have criticised the ‘drone’ platform for being illegal, unethical or unfair. This paper argues that most of the debate is focused on issues which are not unique to drones and lacks specificity about the contexts and limits of debate. It presents three arguments about the use of RPVs to establish a common understanding which can inform further debate. The first is that RPVs are used in a variety of ways and by a variety of actors. Many commentators conflate these actors and uses, which distorts the debate. The second is that ethical arguments about RPVs need to be context-based, not platform-based, to be persuasive. Arguments about proportionality and risk must be context-based to have validity. The third is that RPVs do not provide unique capabilities and many arguments about their use as standoff weapons have already been settled. This paper does not advocate the use of drones, it seeks to reframe the issue to ensure that debate is conducted on shared concepts and assumptions about drones and their use.
The last decade has seen an enormous increase in the military use of Remotely Piloted Vehicles (RPVs) or, as some commentators has colourfully termed it, *drone warfare* (Bergen and Tiedemann 2010). The prospect of war by remote control has ignited widespread debate over the use of all kinds of remote and robotic systems. However, the drone debate is currently fixed on use of aerial RPVs by America and some of its allies for surveillance and strike missions against irregular enemies in Afghanistan and Pakistan and against alleged terrorists and militants around the world under the banner of an unnamed war against terrorism styled policy. This paper focuses on America’s use of RPVs, primarily the MQ-1 Predator and the MQ-9 Reaper, in its current counterterrorism policy and in Afghanistan and Pakistan (Schmitt and Shanker 2011; Gertler 2012; Coll 2009). This paper does not seek to make an argument for or against the use of RPVs. There is already a plethora of literature engaging in debate on that issue, much of it flawed (Taj 2012). Instead, this paper presents an argument for reframing the drone debate in order to ensure that debate is conducted on shared concepts and understandings about RPVs and their use.

Three key issues in the drone debate stand out as poorly understood. The first issue is the type of actors who use RPVs and the range of missions that RPVs perform. Many commentators distort the debate by conflating these actors and uses. It is important to differentiate between the operators and missions of various RPVs to examine the complexity of the issue. The second issue is persistent discussion of legal and ethical implications of RPVs as a military platform. The subject of controversy isn’t and ought not to be a particularly military platform that is not inherently inhumane. Any debate about proportionality and distinction must be framed in the context of specific uses of RPVs to be valid. The third issue is that the acclaimed uniqueness of RPVs is often greatly overstated and this approach abandons an entire body of literature and experience which relates directly to the use of standoff weapons and remote surveillance technologies. The paper concludes that a more nuanced approach to the drone debate is both possible and desirable.
RPV operators and roles

There are two primary operators of American RPVs outside of the United States: The US military and the Central Intelligence Agency (CIA). The US military is comprised mainly of US Air Force RPVs and a small number of US Army MQ-1C Grey Eagle RPVs (Gertler 2012). In addition, some reports from US Army officials indicating that its Special Operations Forces also field a small fleet of MQ-9 Reapers. The CIA is widely reported to operate a significant fleet of Predator and Reaper RPVs operated around the world and outside of the declared combat zones which limit the scope of US military operations (McCrisken 2013). The military and the CIA have different organizational roles and different operational aims which affect how they employ RPVs. Military personnel who operate RPVs are bound by the Law of Armed Conflict (LOAC) and by the Uniform Code of Military Justice (UCMJ), both of which place important limits on the use of force by the military (Solis 2010). The CIA is not a military agency and is not bound by either LOAC or the UCMJ. Moreover, the CIA has legal authority under American federal law to conduct secret operations overseas. These CIA operations have drawn by far the most attention and criticism in popular commentary (Plaw and Fricker 2012). However, they represent only a small portion of RPV use (Williams 2013).

RPVs are primarily used for three types of operations: surveillance, Close Air Support (CAS) and targeted strikes. Surveillance is the original and most prominent function of RPVs. Their persistence, the ability to loiter for greater duration than traditional aircraft, allows RPVs to gather imagery and signals intelligence, provide overwatch to ground units and to cover expansive patrol zones. RPVs are also used to provide CAS to ground units in contact with enemy forces. Some common examples are supporting troops in contact during ambushes, blocked convoys and during foot patrols. The third main use of RPVs is for targeted strikes. These usually involve the direct targeting of a high value individual, but can also target unknown persons. These so-called signature
strikes are often based on tracking equipment or GPS-enabled mobile phones or on direct observation of suspicious activity, such as individuals planting roadside bombs late at night.

The least controversial use of RPVs is intelligence, surveillance and reconnaissance. It is also the most ubiquitous RPV mission. Armed RPVs, multirole aircraft with the designator MQ, remain in the minority compared to the unarmed surveillance RPVs with the RQ designator (Singer 2009; Gertler 2012). The most dangerous use of RPVs is in close air support for ground forces. CAS has historically been very dangerous for friendly military personnel, the enemy and civilians. In contemporary conflicts, CAS is extremely dangerous for civilians, especially when combat occurs in urban areas. This is true of any form of indirect fire, including artillery, standoff munitions and traditional aircraft, including dedicated CAS aircraft such as the A-10 Warthog and AC-130 Spectre gunship, attack helicopters and fighter aircraft. RPVs have been used to provide CAS to troops in contact in Iraq and Afghanistan and bring some advantages to the role, most notably the ability to loiter for extended periods, particularly beyond ‘bingo’ – the point at which the aircraft has the minimum fuel necessary to return to its base. However, RPVs are generally undesirable for CAS from a ground unit’s perspective because they face much more rigorous targeting approval processes than other aircraft (Ricks 2002).

When RPVs are used to assist coalition forces on the ground, they are under the operational control of ground commanders and, like any other platforms, are more prone to causing civilian casualties due to the many unknown circumstances of the engagement. These civilian casualties are often conflated with targeted strikes which, by comparison, cause far fewer casualties. This conflation substantially inflates the numbers of civilian deaths attributed to RPVs in Afghanistan. When RPVs are used by the military to conduct deliberate strikes, they must meet a much higher threshold of intelligence requirements before an order will be given to fire (Department of the Army 2010). The
targeting process for deliberate strikes is much more exacting than popular commentary suggests. It is intelligence-driven and approved by high level commanders and legal officers prior to approval (Hardy and Lushenko 2012). US President Barrack Obama has reported that the CIA has a similarly rigorous targeting process, although no details have been publicly revealed to corroborate his assertion.

Signature strikes are less clear and can range from the targeting of mobile phone SIM cards, tracking devices planted on specific although unidentified individuals by intelligence officers and targeting of overtly suspicious activity to groups of men gathering at suspicious locations or large gathering of people at locations where a lot of signal intelligence has been gathered. Signature strikes can be highly legitimate. For example, the Liveleaks website has released numerous videos showing signature strikes in a range of seemingly legitimate circumstances, such as striking a groups of individuals planting roadside bombs where no ground forces where available interdict them. However, media reports have also suggested that signature strikes have been authorised in dubious circumstances, leading to the erroneous targeting of large groups of civilians. As signature strikes are quite vague in their methodology and effects, they are highly controversial and serve to inflame debate.

Finally, RPVs are responsible for only a small number of weapon releases from aircraft. Popular media sources and drone-specific journalist blogs tend to abuse RPV metrics to inflate their use as offensive weapons.¹ For example, in Afghanistan, where RPVs are used most, RPV-launched weapons accounted for 6.3 percent of weapon releases from coalition aircraft 2007-2012 (United States Air Force Central Command 2012). When compared to the figures sometimes reported in the media, which suggest that more than a quarter of armed sorties in Afghanistan are flown by RPVs

¹ For examples, see http://www.thebureauinvestigates.com/; http://dronewars.net/; http://www.livingunderdrones.org/
and which overstate RPV weapon releases (Wood and Ross 2012). It is important to distinguish between artificial metrics such as the number of sorties flown by armed RPVs and representative metrics, such as the number of weapons released from RPVs. This is especially significant as RPVs are increasingly lightly armed for surveillance missions. Many new RPV purchases are for armed variants as multirole aircraft are often more militarily and economically efficient than unarmed counterparts. Given that RPVs are most often used for surveillance, increasing sorties are not particularly telling when it comes to the use of RPVs for striking targets.

**The ethics of military platforms**

A significant problem with the existing drone debate is the persistent criticism of the RPV as source of ethical concern. It is important to note from the outset that military ethics are inherently relative. Calculations are based on relative costs and benefits rather than on absolutes. As such, many of the comparisons and metrics used to debate the ethics of RPVs are misleading. Arguments against drones often compare the use of RPVs to the absence of conflict. For example, absolute figures on civilian casualties and anecdotal stories about experiences of RPV overflight are comparing a situation of war to an absence of war, which is not a rational comparison to make in an anti-drone argument. If the argument is that war is undesirable, then there is surely little contest to be had. It is absolutely to be expected that most civilians would prefer peace to war in any society. However, if the argument is that drones are a bad way to prosecute war then the comparison has to be made with other methods of waging war.

Platform-specific criticisms on the basis of ethics are incomplete at best. RPVs are a standoff munition with a human operator. There is no specific law or ethical principle which requires an operator to make physical contact with the weapon system they employ (Solis, 2010). Similarly, any standoff munition released from a military platform must adhere to LOAC (Alston, 2010: p.24).
There is no legal black hole when it comes to RPVs because remote pilots are still pilots. They are combatants under International Humanitarian Law and are subject to the same laws and codes of conduct as any other combatant. The only exception is the CIA, which is not subject to LOAC and whose guidelines and procedures for using drones remain necessarily secretive.\(^2\) CIA operations are not subject to military ethical standards, so the ethics of RPVs are largely relegated to their military applications, which constitute the vast majority of missions given the enormous disparity in numbers of RPVs operated by the CIA vis-à-vis the US military.

Popular commentary on the ethics of the RPV platform is generally offered by activists who have made little attempt to seriously engage with the complexity of the topic. For example, Benjamin (2012) makes a broad range of claims regarding the accuracy of missiles fired by RPVs, the degree of situational awareness of RPV pilots and the proportionality of remotely fired weapons. None of these criticisms deal with ethical issues accurately. RPVs are capable of gathering sufficient intelligence to meet the requirements for situational awareness and target distinction at least to the same degree as traditional aircraft. In combat, remote systems are said to cause unnecessary and disproportionate harm, especially to civilians. This argument assumes that soldiers engaged in a video game mindset have less situational awareness and are generally less restrained because of their emotional detachment from the circumstances they observe (Barrett 2010).

However, in many ways, RPVs offer significant benefits to pilots, allowing them to see much larger and higher resolution camera feeds of the landscape below than pilots who are physically inside their aircraft. Moreover, distance from sources of threats reduces the ‘fog of war’ effect which can contribute significantly to tragic errors in combat. The removal of direct threat to the pilot enables more concentrated efforts to understand the situation and respond appropriately (Strawser 2010, 7).

\(^2\) The CIA’s mandate is covert operations which the US could legally deny. Therefore, their authority to conduct operations overseas is contingent on some degree of secrecy.
Access to improved sensor equipment increases the personalisation of individuals who are observed remotely, especially if pilots are conducting a pattern-of-life analysis on them. The lack of necessary or adrenalin-fuelled haste further often pilots in making deliberate decisions by removing pressures to act quickly unless other force elements are engaged. Finally, the requirement of conducting detailed damage assessments after strikes ensures that RPV pilots are intimately familiar with the human costs of their actions (Barrett 2010). This degree of familiarity may help to explain high levels of Post-Traumatic Stress Disorder and occupational burnout amongst RPV pilots, which indicate significant psychological risk (Ouma et al. 2011).

Another criticism levelled at RPVs is that they are inherently indiscriminate and/or disproportionate. This is partially a misnomer of military ethics as weapons cannot themselves be disproportionate and few can truly be indiscriminate in nature, although anti-personnel mines are a notable exception. The issue of proportionality in war can only be considered in the context of the use of force, not the existence of a weapon. Although some weapons are banned for being inhumane, it is implausible to suggest that a hellfire missile in operation across numerous platforms somehow becomes inhumane when fired from an RPV instead of an attack helicopter. Similarly, the precision guidance technologies common to other platforms cannot be plausibly argued to become indiscriminate when used via an RPV. Finally, the fixation of many commentators on absolute numbers of civilian casualties is concerning. Although it is impossible to give an accurate number of casualties (Bergen and Tiedemann 2009; Enemark 2011), it is beyond debate that civilian casualties are an undesirable cost of combat. However, according to the Geneva Conventions, civilian casualties must be weighed against the military necessity of the intended target being attacked (Solis 2010). In the context of RPVs, there must be some attempt to reconcile costs with benefits. Admittedly, both sides of that equation are particularly vague when it comes to RPVs.
However, only talking about the costs and not acknowledging any possible benefit significantly distorts the situation.

The uniqueness of RPVs

A common theme in the drone debate is the notion that RPVs are unique military platforms because they remove the human operator from the field of battle. Enemark (2014, 9) argues that to deny that drones are new is to ‘miss the point’ somehow. He argues that it is not the remoteness but the speed of remote action which is revolutionary. However, when compared with the use of satellite or high-altitude surveillance plane imagery in combination with traditional strike aircraft, RPVs do not appear to be that much quicker. RPVs may be more efficient, but they are not unique. This is a long-standing debate in military transformation. Johnson (1986) grappled with these very same issues when discussing cruise and ballistic missile technology and nuclear weapons in the 1980s. The dispute can be settled in three comparisons. The first is between RPVs and other forms of surveillance technologies. The second is between RPVs and other standoff or remotely operated weapons. The third is between RPVs and other weapons in terms of distance and risk.

The first comparison is between RPVs and other intelligence, surveillance and reconnaissance technologies. The ability to observe from a distance is not particularly new. Even the volume of spatial and imagery data is not particularly new. One area of rapid growth is signals intelligence. However RPVs have matched pace with other surveillance technologies in this respect. The increasing sophistication and availability of communications technology is a much more significant driver of signals intelligence collection than the RPV platform. A key argument which links surveillance with uniqueness is based on the persistence of RPVs. The ability to loiter for extended periods to gather intelligence is seen as unfair and likely to cause increased bellicosity. This argument stems from an assumption that the capacity to act is likely to lead to increased action. This
isn’t particularly convincing given the extensive advancement in other areas of weapons technologies in recent decades and no concomitant rise in bellicosity amongst the states which developed and acquired them. A second argument is that RPVs are problematic because they can create ‘data overload’ and become an obstacle to effective function (Wallestad and Karasik 2011). This seems like an unlikely problem given that excessive data can easily be ignored or reduced if it somehow impaired RPV pilots. Of course, many other criticisms of RPVs make the opposite point, arguing that greater intelligence and situational awareness are required to ensure that RPVs targets are subjected to extensive scrutiny before orders are given to engage them.

The second comparison is between RPVs and other standoff weapons. There have been many other kinds of standoff weapons used in recent years, many of which are operated in an equally remote fashion to Predator or Reaper RPVs. One example is artillery, which is commonly used in war. US ground forces currently employ 155mm Howitzer guns with an effective range of 30 kilometres. Gun numbers (operators) have no chance of seeing the targets they fire upon and can only use the grid coordinates given to them by forward observers. Another type of common standoff weapon is the missile. There is an enormous variety of missiles in use by militaries around the world. Many can be launched from hundreds or thousands of kilometres away from a target by strike aircraft, navy surface combatants, submarines or land-based launchers. Many countries also have cruise and ballistic missile technology. With standoff weapons which can be launched from the ground, from on or beneath the surface of the ocean and from the sky, RPVs are entering a busy marketplace.

Conversely, one could argue that it is not the standoff distance but the remote operation of the weapons which is truly new. However, many standoff weapons have been operated from similar, although less technologically sophisticated, remote stations. For example, cruise missile fire control systems on ships and submarines are operated under remarkably similar basic conditions as RPVs,
at least to the extent that the operator is not physically near the weapon or the target and relies exclusively on sensor information to release weapons. Given the distance that naval vessels can engage targets from, they are surprisingly similar to RPVs. It is unclear that a distance of one thousand kilometres is pragmatically or ethically different from two or three thousand kilometres. Once an operator is beyond visual range and relying only on sensor data the effect is the same. This raises the question of whether visual range is even an obstacle. Many ground vehicles now have remote firing platforms which allow their crew to operate the weapons via a camera feed and remote controls. If these operators are relying solely on sensor data, then there is no substantive distinction between them and more distant remote operators.

The only distinction is the physical separation of the operator from the battlespace. Thus, a final point of contention is the distance between the weapon and the user. Enemark (2014, 4) suggests that at some point the distance is so great that the situation is no longer consistent with the definition of war and must be called something else. Wallestad and Karasik (2011) liken RPVs to torture, reasoning that RPV pilots inflict harm on people who are incapable of defending themselves or retaliating. The assumption of RPVs providing a risk-free method of conducting war is a popular one, but it is erroneous. RPV pilots are at risk. They are combatants who can be legitimately targeted anywhere they can be found and targeted. The issue at hand is that today’s enemies do not have the capability to strike RPV pilots in Nevada. Similarly, these enemies do not have the means to attack naval fire control officers who are able to launch cruise missiles from the Indian Ocean. Similarly, one could argue that coalition snipers armed with large calibre anti-material rifles are able to engage enemy ground forces in Afghanistan from well beyond the effective range of enemy fire. However, there is no call to move friendly forces into harm’s way unnecessarily to ensure that they are targetable. There is no clear distinction between these weapon operators. The issue is capability, not risk. Other enemies do have the capability to attack conventional targets overseas and would not
be so restricted. Therefore, RPVs are only risk-free to the extent that the enemy cannot target at the same standoff range, which makes them essentially similar to all other standoff weapons in current use.

**Conclusion**

The drone debate is fraught with misnomers about RPVs. Commentators frequently criticize RPVs for being illegal, unethical or unfair. This paper has argued that much of this debate is focused on issues which are not unique to RPVs and often relies on faulty assumptions to support untenable arguments. For example, it is logically and pragmatically inconsistent with the ethics of war to characterize a weapon as inherently illegal in one context and perfectly legal in another, depending on where its operator sits. Similarly, arguments that RPVs are fundamentally unique platforms overlooks the clear comparisons between remotely controlled aircraft, traditional aircraft and other remote systems. Even the term drone is misleading as it implies a lack of human input. RPVs have pilots, they are just not inside the aircraft. They have a comparable degree of control over the vehicle as traditional pilots and generally have better situational awareness and fewer distractions than traditional pilots.

Moreover, the trend of removing weapons, especially large ones, from the hands of operators to delivery platforms is hardly new. The supposed ethical dilemma of risk-free combat borders the absurd given that traditional fixed-wing combat aircraft are not at significant risk of being targeted with air defence weapons by Afghan insurgents. The notion of risk-free war is not logical because the means certainly exist to target Nevada or Langley, Virginia. The problem is strictly asymmetry and on this occasion conventional militaries are on the winning side of it. It is odd that in the instance that asymmetry provides benefits to Western militaries, it is mischaracterized as inherently unfair, unethical or ‘post-heroic’ (Enemark 2014, 9-11). By this logic weapons which have greater
range than enemy weapons create injustice, which suggests a sharp break from tradition, where having more powerful and more effective weapons was seen as a rational desire in warfare.

The drone debate lacks a common vocabulary and shared understandings of the contexts in which arguments about RPVs are made. The different legal and political contexts of agencies which operate RPVs, particularly between the US military and the CIA, are an important threshold concept for debate. Meanwhile, the primacy of surveillance missions over strike missions and the distinction between CAS and targeted strikes are important qualifiers for debate about contemporary uses of RPVs. The pitfall of conflating different metrics or trying to use raw figures out of context is also important. It is necessary to understand RPVs as one tool of many which the military and government agencies have at their disposal. They are not used independently of other assets and resources. Even in the case of highly secretive CIA operations, RPVs do not replace time honoured approaches to covert action. RPVs conveniently combine a sensor package, a small standoff weapon and a means to move the platform around. Removing the emotional debate about counterterrorism policies and the horrors of war from discussion about RPVs is an important step towards creating a meaningful dialogue over a highly contentious international security issue. A more nuanced approach to the drone debate is not just possible, it is essential.
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