
The ad bellum Challenge of Drones: Recalibrating Permissible Use of Force

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Abstract

Drones constitute an incremental advance in weapons systems. They are able to significantly reduce overall, as well as collateral, damage. These features seem to have important implications for the ad bellum permissibility of resorting to military force. In short, drones would seem to expand the right to resort to military force compared to alternative weapons systems by making resorting to force proportionate in a wider set of circumstances. This line of reasoning has significant relevance in many contemporary conflicts. This article challenges this conclusion. It argues that resorting to military force through drones in contemporary asymmetrical conflicts would usually be disproportionate. The reason for this is twofold. First, under conditions of radical asymmetry, drones may not be discriminatory enough, and, thereby, collateral damage would still be disproportionate. Second, their perceived advantages in terms of greater discrimination are counteracted by the lesser chance of success in achieving the just cause for war. As a result, resorting to military force through drones in contemporary asymmetrical conflicts would generally be disproportionate not because of the harm they would expectedly cause but, rather, because of the limited harm they are ultimately able to prevent. On the basis of normative argument and empirical data, this article ultimately shows that we need to revise our understanding of ad bellum proportionality not only at the level of moral argument but also in international law.

1 Introduction

Remotely piloted aircraft systems (RPAS), popularly referred to as drones, are increasingly employed in contemporary armed conflicts. It is somewhat commonplace to

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suggest that their presence, capabilities and influence are only expected to grow exponentially over the next few decades. Their use is usually considered mainly an *in bello* issue.¹ That is, it is usually discussed in terms of whether they are legitimate weapons or whether the tactics they facilitate – most notably, targeted killings – or that they trigger as a response – resort to terrorism or the use of human shields – can be legitimate forms of warfare. Yet it is widely accepted that these weapons systems also have implications from an *ad bellum* perspective.² This article provides a normative appraisal of RPAS on the permissibility of resorting to military force.³ In fact, it claims that the main challenge that this technology creates is in relation to the rules regulating the *ad bellum* permissibility of resorting to force in self-defence. Most arguments in the literature have examined whether certain attacks with RPAS are lawful or unlawful as a matter of international law or morally permissible or impermissible, but few have actually sought to determine how the use of RPAS modifies our normative assessment of the moral and legal permissibility of resorting to defensive force. This article focuses on this question.

In order to do this, I must first clarify the conditions under which a particular belligerent would be morally entitled to resort to military force – that is, what the basic principles that regulate morally permissible killing from an *ad bellum* perspective are. For simplicity, we may stipulate that any just war must meet the following requirements: (i) it has a just cause, where a just cause consists in the violation, backed by the threat of lethal force, of some party's fundamental human rights; (ii) it is a proportionate response to the injustice that the belligerent is suffering or is about to suffer; (iii) it is not fought and won through the deliberate and indiscriminate targeting of innocent non-combatants; (iv) it stands a reasonable chance of succeeding by military means that do not breach the *in bello* requirements of proportionality and discrimination and (v) there is no less harmful way to pursue the just cause (*ultima ratio*).⁴ This framework explicitly relies on self-defence or defence of others to justify resorting to force and does not explicitly tackle other institutional or procedural arrangements, such as the authorization of the United Nations (UN) Security

¹ For an exception, see Beauchamp and Savulescu, 'Robot Guardians: Teleoperated Combat Vehicles in Humanitarian Military Intervention', in B.J. Strawser, *Killing by Remote Control: The Ethics of an Unmanned Military* (2013) 106.

² For just two examples, see the International Court of Justice's (ICJ) opinion on the *Legality of Threat or Use of Nuclear Weapons (Nuclear Weapons)*, Advisory Opinion, 8 July 1996, ICJ Reports (1996) 226, para. 36; Tallinn Manual (2009), ch. 2 (concerning cyber-weapons). On remotely piloted aircraft systems (RPAS), see, e.g., Casey-Maslen, 'Pandora's Box? Drone Strikes under *Jus ad bellum*, *Jus in bello*, and International Human Rights Law', 94(886) *International Review of the Red Cross* (2012) 601. Casey-Malsen, however, seems particularly concerned with the question whether a drone strike constitutes an 'armed attack' for the purposes of the right to self-defence (at 603).

³ It brackets some of the more heavily explored *in bello* issues related to drones.

⁴ I follow here C. Fabre, *Cosmopolitan War* (2012). But see, similarly, T. Hurka, 'Proportionality in the Morality of War', 33(1) *Philosophy and Public Affairs* (2004) 34, s. 1; J. McMahan, *Killing in War* (2011); Augustine of Hippo, *City of God* (2003), among many others. I leave aside for present purposes the standard requirements that war must be declared by a legitimate authority and fought with the right intentions. As many proponents of the revisionist account of just war theory, I do not think the former is a necessary condition for a war to be just. The latter is not particularly apposite to the argument at hand.

Council.⁵ In this article, it will be used to inform and critically assess the legal principles applicable in this area.

One of the main features of RPAS, compared to ground operations or attacks with conventional planes or ballistic missiles, is that the combatants operating them are not subject to risk. Furthermore, it is also usually accepted that innocent non-combatants in the theatre of operations are threatened to a far lesser extent than with any alternative weapons system. That is, given their unprecedented precision, RPAS allow for greater *in bello* discrimination and, as a result, minimize collateral damage. This article acknowledges that these features seem to expand the scope of the right to resort to military force significantly. However, it argues that, despite these advantages, resort to force would be morally and legally impermissible in most contemporary asymmetrical contexts. Unlike what it is often argued, the reason for this is not that force (even through RPAS) would violate the principle of necessity, or *ultima ratio*, but, perhaps paradoxically, that they would violate the *ad bellum* principle of proportionality. This claim rests on a conceptual connection and a number of empirical assessments that have been standardly overlooked in the relevant literature.

The structure of the argument is as follows. The next section of this article presents the standard argument in favour of resorting to force through RPAS in contemporary asymmetrical conflicts. The third section shows that the standard objection against their use – that is, that such use is incompatible with the principle of necessity, fails. The fourth and fifth sections argue that the main reason why the resort to military force through RPAS in asymmetrical situations is impermissible is that it would violate the principle of proportionality. The sixth section, in turn, discusses the implications of these normative arguments for the regulation of the use of force under international law. The seventh section succinctly concludes.

2 The Case for Drones

RPAS are often presented as a military ‘game-changer’. This is because they concentrate a series of features that allegedly make them rather unique among weapons systems. Even if they vary considerably, RPAS have a series of standard features in terms of technology and equipment. The most salient of them is that the human operator is usually situated thousands of miles away from the battlefield. A second feature is that they are able to fly for extended periods of time, and, while they do so, they are able to gather intelligence information. They are often equipped with high-definition video cameras and hearing equipment, and they are connected to a powerful central computer that processes their information. Third, although they were initially (and often still) used for surveillance, they increasingly operate at the same time as strike platforms; they are usually equipped with very advanced weapons,

⁵ Yet see O. Schachter, ‘United Nations Law in the Gulf Conflict’, 85 *American Journal of International Law (AJIL)* (1991) 460, arguing that military operations authorized by the Security Council under Chapter VII of the UN Charter are also limited by necessity and proportionality.

which are often quite precise, such as hellfire missiles or the more recent small smart weapon.⁶

As a result of these features, RPAS provide important advantages over other weapons systems. From a tactical perspective, they allow armies to react quickly and reach otherwise inaccessible areas.⁷ Second, those who operate them are typically not at risk of being attacked.⁸ This allows states to risk no casualties, making resort to force safer for their own troops and politically less problematic.⁹ Third, RPAS provide conditions for choosing targets and choosing the time to engage them with far greater precision than most alternative weapons. This allegedly makes them particularly useful for fighting in populated areas. They increase existing capabilities and expand the options available by: (i) enhancing the ability to verify the nature of a target before striking (thereby reducing mistakes against civilian objectives); (ii) allowing for ‘more refined assessments of the likely collateral damage to civilians and civilian objects’ and (iii) limiting the need to restrike on the target.¹⁰ In short, they significantly outdo other means of ‘riskless’ warfare, such as missiles or even jets: ‘[They] provide [operators with] greater proximity to targets for a longer period of time, and as a result allow [them] to better understand what is happening in real time on the ground in ways that were previously impossible.’¹¹

These advantages seem to have direct implications for the *ad bellum* permissibility of resorting to military force. Insofar that they allow for the correct identification of enemy combatants and use increasingly discriminatory weapons, RPAS seem, *prima facie*, much more likely to meet the principle of military necessity or *ultima ratio*. Similarly, insofar that they reduce the overall harm they are expected to cause – and, in particular, the harm to innocent non-combatants – they would seem to satisfy the requirement of proportionality in a wider range of circumstances than less precise weapons. Accordingly, this technology seems to make resorting to military force morally permissible in asymmetrical conflicts and in counter-insurgency operations even against relatively minor threats.¹² These implications are particularly important in

⁶ See, e.g., P. Singer, *Wired for War: The Robotics Revolution and Conflict in the 21st Century* (2009); S. Coll, ‘The Unblinking Stare: The Drone War in Pakistan’, *The New Yorker* (24 November 2014).

⁷ Schmitt, ‘Drone Attacks under the Jus ad Bellum and Jus in Bello: Clearing the “fog of Law”’, 13 *Yearbook of International Humanitarian Law* (2010) 317.

⁸ At least until the RPAS-using agent challenges an adversary with the range to threaten the operating centres. I will not pursue this issue here as it is not relevant to my argument.

⁹ In fact, serious concerns have been voiced that RPAS may make killing ‘too easy’ compared to other means of engaging enemy belligerents, particularly insofar that they favour some kind of ‘play-station’ mentality towards killing. See, e.g., D. Walsh, ‘Leading UN Official Criticizes CIA’s Role in Drone Strikes’, *The Guardian* (3 June 2010), available at www.theguardian.com/world/2010/jun/03/us-pakistan-drone-strikes (last visited 30 November 2016).

¹⁰ Schmitt, *supra* note 7, at 314.

¹¹ Remarks by J.O. Brennan, assistant to the president for Homeland Security and Terrorism, 30 April 2012, available at www.cfr.org/counterterrorism/brennans-speech-counterterrorism-april-2012/p28100 (last visited 30 November 2016).

¹² For a similar claim with regard to autonomous weapons systems, see Heather M. Roff, ‘Lethal Autonomous Weapons and Jus Ad Bellum Proportionality’, 47(1) *Case Western Reserve Journal of International Law* (2015) 42.

most contemporary contexts in which RPAS are currently being used, which entail engaging enemy combatants in densely populated areas. Finally, insofar that they keep their operators safe from being targeted, RPAS also significantly lower the total expected harm resulting from the military action. This is critical for revisionist just war theorists who specifically argue that insofar that they are on the just side these combatants are not liable to being killed and thereby central to any proportionality analysis.¹³

In sum, it seems that provided a state can convincingly claim a just cause for war RPAS would make resorting to military force permissible under a significantly larger number of circumstances than alternative weapons systems. Put differently, they would seem to expand the scope of the right to resort to military force under just war theory. This, in turn, would seem to make a strong *prima facie* case of expanding the scope of this right under international law. This article argues that, as applied to contemporary asymmetrical conflicts, this view is morally and legally unwarranted.

3 Radically Asymmetrical Conflicts, RPAS and the Principle of Necessity

Paul Kahn has argued that RPAS not only do not make resort to force permissible in a wider set of contexts compared to alternative weapons systems but also that, in fact, they have the exact opposite implication. RPAS, he suggests, are the best example so far of a situation of radical asymmetry between belligerents.¹⁴ In situations of radical asymmetry or of 'riskless warfare', he adds, we should not use the conceptual framework of war but, rather, that of police action. Resorting to military force in this type of circumstances would not only be conceptually inadequate but also normatively impermissible. This is because at the heart of the justification for war is the fact that it implies a situation of 'self-defense within conditions of reciprocal imposition of risk'.¹⁵ He illustrates this by reference to the North Atlantic Treaty Organization's incursion in Serbia over Kosovo, but it would also apply to the multi-state operation in Libya in 2011 as well as to other contemporary conflicts.

There are two aspects of Kahn's proposal that need disambiguation. The first one has to do with his notion of radical asymmetry. On the one hand, this could mean that, in a given situation, while combatantsA can target combatantsB, the latter cannot target combatantsA. On the other hand, radical asymmetry could also mean that while combatantsA can target combatantsB (and civiliansB), combatantsB can target neither combatantsA nor civiliansA. Both descriptions are compatible with the situation of US forces in Serbia. Let us call the former scenario 'radical asymmetry' and the latter 'total asymmetry'.

¹³ McMahan, 'Foreword', in Strawser, *supra* note 1, ix; Strawser, 'Moral Predators: The Duty to Employ Uninhabited Aerial Vehicles', 9(4) *Journal of Military Ethics* (2010) 342.

¹⁴ Kahn, 'The Paradox of Riskless Warfare', Faculty Scholarship Series Paper 326 (2002).

¹⁵ *Ibid.*, at 4.

Second, the police or law enforcement framework could make reference to two rather distinct ideas. It could mean that states should use their criminal law system. That is, instead of resorting to war, a state should strive to put individual wrongdoers on trial and abide by due process requirements, including the presumption of innocence, the right to be tried within a reasonable time, the right to legal counsel and so on.¹⁶ However, it could also mean that the international community, or one of its members on its behalf, should resort to war not on the grounds of self-defence or defence of others but, rather, in order to enforce the international rule of law.¹⁷ This idea was already present in Augustine and Thomas Aquinas, and it was also endorsed by Hugo Grotius.¹⁸ We could call the former ‘individual law enforcement’ and the latter ‘international law enforcement’. Kahn seems to suggest that RPAS standardly generate a situation of radical asymmetry as just defined, and he links this feature to the framework of individual law enforcement.¹⁹

In effect, he takes as his point of departure the orthodox account of the morality of war in which the moral equality between combatants is one of the central theoretical tenets.²⁰ Under this model, intuitions for a ‘fair fight’ carry weight independently of the purposes for which it is being used. This is because, he assumes, the morality of the battlefield is different from everyday morality. Combatants are merely in a tragic and dangerous situation. They are allowed to target each other on the grounds that ‘they stand in a relationship of mutual risk’.²¹ However, this orthodox account of just war theory has recently been challenged by the so-called neoclassical account. According to many contemporary just war theorists, situations of war are interpersonal situations writ large – the main difference is the numbers involved and the degree to which their action is coordinated. Furthermore, the *ad bellum* framework both in law and morality allows for the distinction between just and unjust instances of resort to military force. Accordingly, it would seem that for these purposes it does matter morally whether a particular belligerent is fighting a just war or not.²²

These considerations undermine Kahn’s main thesis. For insofar that the ‘riskless’ belligerent fights on the just side, it would not matter for the neoclassical account that its personnel does not stand in a relationship of mutual risk *vis-à-vis* the unjust party to a conflict. By contrast, if the ‘riskless’ belligerent fights on the unjust side, use of force by it would be *ad bellum* impermissible irrespective of whether it resorts to RPAS or not. Therefore, it seems clear that Kahn’s understanding of radical asymmetry – that

¹⁶ For a concise description of how certain states have gone from a law enforcement approach to a belligerent approach against terrorism, see S. Neff, *War and the Law of Nations* (2008), at 382–390.

¹⁷ See, e.g., Franck and Patel, ‘UN Police Action in Lieu of War: “The Old Order Changeth”’, 85 *AJIL* (1991) 63.

¹⁸ For interesting discussion, see D. Rodin, *War and Self-Defense* (2002), at 174ff.

¹⁹ Kahn, ‘Imagining Warfare’, 24(1) *European Journal of International Law (EJIL)* (2013) 205.

²⁰ For the standard exposition, see M. Walzer, *Just and Unjust Wars* (4th edn, 2006). For more recent restatements, see Benbaji, ‘A Defense of the Traditional War Convention’, 118(3) *Ethics* (2008) 464; Steinhoff, ‘Jeff McMahan on the Moral Inequality of Combatants’, 16(2) *Journal of Political Philosophy* (2008) 220, among others.

²¹ Kahn, *supra* note 14, at 3. See also G. Chamayou, *Drone Theory*, translated by Janet Lloyd (2015), at 17.

²² See, for all, McMahan, *supra* note 4.

is, the lack of mutual imposition of risk between combatants does not lead to its purported conclusion. Namely, it does not lead to the impermissibility of resorting to military force and the need to stay within the framework of individual law enforcement.

Nevertheless, Kahn's argument seems to contain an important insight for the purposes of assessing the *ad bellum* permissibility of resorting to military force. This insight is captured by those who compare the use of RPAS in contemporary conflicts with the situation of a 'manhunt' or 'pest control'.²³ Let me illustrate this by reference to an interpersonal situation.²⁴ Suppose A enters V's home to try to kill her. V, however, manages to get into her panic room. While in there, she is entirely safe from A, but she has a defence system that would allow her to kill A. Most people would agree that it is impermissible for V to kill A even if A is violating some of V's rights. V should call the police and wait for them to arrive. Moreover, when the police arrive, they must not shoot A. They should seek to detain her, and, ultimately, she should be prosecuted. The reason why this is so should be apparent: resorting to force in this type of situation would not meet the principle of *ultima ratio* – that is, the 'least harmful way to pursue the just cause' requirement identified at the outset as one of the necessary requirements for permissibly resorting to lethal force.

There is, of course, a first objection to the analogy just proposed. In contemporary asymmetrical conflicts, although terrorist or insurgent groups are incapable of harming RPAS operators, they do have the possibility of attacking targets of the victim state (V). Put differently, the panic room situation is a scenario of 'total asymmetry', not of 'radical asymmetry', and the latter situations may well warrant a different conclusion. Indeed, even though powerful states may have radical asymmetries with non-state armed groups in terms of military capabilities, they are also under certain disadvantages: assetsV and citizensV are usually more easily identifiable than members of insurgent groups. Accordingly, members of these groups can kidnap or kill civiliansV, attack diplomatic or consular facilitiesV and so on. Going back to our panic room example, if a neighbour were about to enter V's home, and V were unable to warn her about the threat of A, most people would accept that it is permissible for V to kill A. This would entail that, after all, it would be permissible for state V to attack armed group A through RPAS without violating the *ultima ratio* principle.

However, this revised version of the panic room scenario still fails to capture two fundamental aspects of many contemporary asymmetrical conflicts. First, radical asymmetry should not be construed merely in terms of the relationship between combatants, as Kahn does. A more accurate conception of radical asymmetry in contemporary wars would, as a matter of course, involve asymmetries in terms of the harm each belligerent is able to cause to both combatants and non-combatants on the

²³ See Chamayou, *supra* note 21, at 69; Strawser, 'Moral Predators', *supra* note 13, at 358, respectively.

²⁴ This does not mean that *ad bellum* rules necessarily reflect individual self-defence situations but, rather, that under certain conditions they can work as a useful heuristic device. This is mainly because our intuitions concerning interpersonal situations are usually clearer, sharper and stronger than those regarding complex situations involving often several thousand individuals. This objection was influentially raised by D. Rodin, *War and Self-Defense* (2004).

other side.²⁵ In this respect, whereas states characteristically can target combatants of non-state armed groups, these groups are usually in a position to target mostly, if not exclusively, non-combatants (and virtually never RPAS pilots). Second, the neighbour variant of the panic room scenario is disanalogous to the situation of insurgents in contemporary conflicts in that, in the latter, there are almost never any victims at the time of the attack imminently threatened by the specific attackers that are being targeted through the RPAS. Namely, this type of attack is not conducted against threats that are actual or imminent but only against latent ones.

Accordingly, a more accurate characterization of conflicts in which RPAS are currently deployed would lean closer to what I have termed ‘total asymmetry’ than to Kahn’s idea of ‘radical asymmetry’. Let us call this notion ‘(revised) radical asymmetry’ (RRA). RRA entails, in short, a situation in which combatantsA characteristically threaten only a very small number of non-combatantsV, and this threat is only latent (not actual and not even imminent). By contrast, in RRA, combatantsV are in a position to harm combatantsA (but also non-combatantsA). I suggest RRA is a more accurate conceptualization of most contemporary conflicts in which RPAS are currently being deployed than either ‘radical’ or ‘total’ asymmetry. To illustrate, RRA may involve terrorist organization A, which has 1,000 active members who act extraterritorially in small cells and hide among the civilian population, threatening state V, whose population is around 100 million inhabitants and which can resort to RPAS to defend itself by attacking terrorist organization A extraterritorially.

It may be still argued that in situations of RRA it is not clear that resort to force through RPAS by state V would meet the *ultima ratio* principle. For even if it were true that combatantsA are in a position of targeting non-combatantsV, it is not obviously the case that state V has no other sufficiently effective means to counteract these attacks. A useful comparison may be with organized crime at home. There is significant consensus that military force is not a permissible way of engaging local criminal organizations, even if they constitute a serious threat to individualsV. Most people would also agree that the main reason for this is that such a resort to lethal force would not satisfy the principle of *ultima ratio*.

Admittedly, it will be readily objected that terrorists groups against which military force is used operate extraterritorially, where states have no police forces of their own that could arrest and detain them. Furthermore, often the territorial states are unwilling or unable to perform the relevant arrests and extraditions. Nevertheless, we may retort that it is precisely because they operate extraterritorially that the amount of harm combatantsA can actually do to individualsV is potentially more limited than

²⁵ Admittedly, under the revisionist position in just war theory (which I endorse), the critical distinction is not between combatants and non-combatants but, rather, between those individuals who are liable to being attacked and those who are not. It is often acknowledged that the majority of unjust combatants are liable to being attacked, while the majority of just combatants are not liable. Generally, non-combatants of either side are considered non-liable to being attacked, although some of those in the unjust side may be so liable, provided they fulfil certain conditions. In this article, and for expository reasons, I shall use the term non-combatants or civilians to mean innocent or non-liable non-combatants. I am grateful to an anonymous reviewer for raising this issue.

the harm organized criminal bands that are territorially situated can inflict upon them. Thus, whatever traction is gained from the lack of extraterritorial police powers is arguably lost by the benefits of having these groups operating from a position in which they cannot directly harm individuals. In short, neither the threat they pose is fundamentally dissimilar in quantitative terms, nor is the capacity of states to protect their nationals from harm. But then, in the same way, we would consider it to be impermissible to resort to 'surgical' RPAS strikes to deal with organized crime at home; we would have to reject resorting to them against extraterritorial insurgent or terrorist groups.²⁶

Although I find this particular rebuttal convincing, I believe that it is of the wrong kind. Arguably, the reason we would consider it impermissible to use military – that is, lethal force against organized crime groups has to do with considerations of institutionalization rather than of deep morality. If the only possible way to save innocent lives is by launching a policy of executions against the members of a drug cartel or a criminal gang instead of seeking to detain and punish them, it seems that killing them would, per force, not be inconsistent with the principle of *ultima ratio*. Nevertheless, there would clearly be strong prudential reasons to prohibit state authorities to resort to extrajudicial executions as the standard response against dangerous criminal gangs. What I merely suggest here is that these reasons do not function at the level of 'deep moral principles' but, rather, at the level of the morally optimal way of institutionalizing these principles. As a result, we may conclude that at the level of the deep morality of war the *ultima ratio* principle is not a decisive reason against resorting to military force through RPAS in RRA situations.

4 Drones, Proportionality and RRA Situations

Resorting to force through RPAS under conditions of RRA, however, may violate another of the *ad bellum* cardinal principles, namely the principle of proportionality. This proposition would seem paradoxical since I have suggested in the second section of this article that, if anything, RPAS seem to make resort to military force *ad bellum* proportionate in a broader set of circumstances than alternative weapons systems. On the basis of the empirical data available in the literature and also that I have generated myself, I will argue that even if we concede that RPAS are more discriminatory *in bello* than alternative weapons systems, they are not discriminatory enough. As a result, resorting to them in RRA contexts would be *ad bellum* disproportionate.

Before going any further, it is necessary to provide a definition of *ad bellum* proportionality for the purposes of the present analysis. I hereby assume that proportionality requires that 'the destructiveness of war ... not be out of proportion to the relevant

²⁶ The trial of Mohanad Mahmoud Al Farekh – an American citizen who had become a top Al Qaida operations officer in Pakistan – in Brooklyn illustrates the feasibility of this strategy when there is enough political will. See, e.g., M. Mazzetti and E. Schmitt, 'Terrorism Case Renews Debate over Drone Hits', available at www.nytimes.com/2015/04/13/us/terrorism-case-renews-debate-over-drone-hits.html (last visited 30 November 2016).

good the war will do'.²⁷ This requires, in short, comparing the harm that would be expectedly prevented by the military campaign against the harm expectedly caused by it. Two caveats are in order, though. First, to assess proportionality, I will only concentrate on the number of deaths involved by each of these threats. Admittedly, this is seriously reductive. Under most circumstances, proportionality would need to consider many other elements, such as the way in which terrorism affects the lives of those who are not directly harmed by it or how RPAS affect the lives of the populations in which the strikes take place, to mention just two of the most salient ones.²⁸ This proxy, however, will significantly help with the clarity and workability of the argument, and I suggest the normative conclusions I reach do not depend on it.

Second, I assume that not all deaths count the same for the purposes of the *ad bellum* proportionality analysis. As Jeff McMahan illustrates, the literature on proportionality in war usually concentrates on the harm that war would inflict on innocent non-combatants. By contrast, the proportionality in individual self-defence is standardly construed in terms of harm against an aggressor, who is potentially liable to suffer it.²⁹ This suggests that both these dimensions seem relevant in a conceptually sound and normatively persuasive philosophical analysis of proportionate defensive harm. Accordingly, McMahan has usefully distinguished between narrow proportionality, which considers the harms to those who are liable to be harmed, and wide proportionality, which examines the harms to those who are not liable to suffer them.³⁰ Although both dimensions are relevant to our analysis, it is usually the latter that plays a more prominent role.

As stated in the previous section, we may construe a situation of RRA along the following lines: a particular terrorist organization A has 1,000 active members who act extraterritorially in small cells and hide among the civilian population A. They threaten state V, whose population is around 100 million inhabitants. This RRA situation would normally entail, first, that individuals V who would be in need of protection are a tiny fraction of the totality of individuals V. Second, precisely because this type of organization usually uses civilians to protect itself, it would be expected that the protection of such a fraction of individuals V would be at a significant cost of non-combatants A. Third, it is only a small fraction of combatants A that would actually be in a position to harm individuals V. Would it be proportionate for state V to resort to defensive lethal force against the 1,000 combatants A?

In order to answer this question, we need to have a clearer picture of the two relevant considerations on which our proportionality analysis rests. First, we need to determine the size of the threat this particular group poses. If we consider US incursions

²⁷ See, e.g., Hurka, *supra* note 4, at 35. See also Fabre, *supra* note 4, at 78.

²⁸ In the *Nuclear Weapons* opinion, *supra* note 2, the ICJ further noted that respect for the environment must also be taken into consideration for these purposes (at para. 30). Put differently, the list of relevant harms is not only broader but also controversial. Yet I still suggest that for the purposes of the present analysis these two considerations would suffice.

²⁹ McMahan, 'Proportionate Defense', 23 *Journal of Transnational Law and Policy* (2014) 6.

³⁰ McMahan, *supra* note 4, at 20–24.

in Somalia against Al-Shabbaab, for instance, it is interesting to note that, according to the US State Department, only one US national was killed in Somalia and Kenya between 2009 and 2013 by this group (while seven more were injured and three were kidnapped).³¹ Accordingly, and going back to our example, we may plausibly assume that out of a population of 100 million this organization is able to threaten a total of 1,000 nationals, of which we may assume they will be able to effectively kill 10.³²

The second relevant information that we need to assess proportionality is the harm that would be expectedly caused by the defensive response. Here, RPAS seem critical. Yet, in order to determine this value, we must establish how discriminating RPAS ultimately are. There is significant disagreement regarding how far states that currently resort to RPAS have succeeded in making them more discriminating than alternative means or weapons. Due to the secrecy surrounding these programmes and operations, it is very difficult to obtain accurate and reliable information on this matter. For this reason, the focus of the controversy on this issue has been centred on US counter-insurgency policies, particularly in Pakistan. According to one estimate, for every liable target killed by a US drone strike, 50 innocent people are also killed.³³ By contrast, it has also been argued that the ‘incidence of civilian casualties appears to be trending downward; during 2009, only 8.5 per cent of the reported casualties were identified as civilians’.³⁴ According to the *Long War Journal*, this rate decreased to 3 per cent from 2010 to 2012.³⁵ In the context of Israel’s policy of targeted killings, the B’tselem data indicates that two civilians have been killed for every three suspected terrorists’ deaths.³⁶

Admittedly, all of these figures have important shortcomings. The first problem is that because operations are covert and in remote areas, information is at best partial and tentative. A second, more serious problem is also the result of the lack

³¹ Data extracted from ‘Country Reports on Terrorism’, available at www.state.gov/j/ct/rls/crt/index.htm (last visited 30 November 2016). Admittedly, someone may claim that this is precisely due to the fact that the USA has been carrying strikes against these two groups. But that would hardly be a convincing response. During the same period, Al-Shabbaab killed 2,291 ‘local’ individuals and Al Qaida in the Arabian Peninsula killed 1,969. I calculated these figures from the information in the Global Terrorism Database, available at www.start.umd.edu/gtd/ (last visited 30 November 2016).

³² I am grateful to Cecile Fabre for pressing me on this point.

³³ See the influential op-ed piece by D. Kilcullen and A. McDonald Exum, ‘Death from Above, Outrage from Below’, *New York Times* (16 May 2009), available at http://www.nytimes.com/2009/05/17/opinion/17exum.html?pagewanted=all&_r=0 (last visited 30 November 2016). See also Hall and Coyne, ‘The Political Economy of Drones’, 25(5) *Defence and Peace Economics* (2013) 2.

³⁴ B. Roggio and A. Meyer, ‘Analysis: US Air Campaign in Pakistan Heats Up’, *Long War Journal* (5 January 2010), available at www.longwarjournal.org/archives/2010/01/analysis_us_air_camp.php (last visited 30 November 2016). There are four main databases that compile details of casualties in RPAS strikes – that is, the New America Foundation, the *Long War Journal*, the University of Massachusetts and the Bureau of Investigative Journalism. For a fair appraisal and comparative analysis, see Plaw, ‘Counting the Dead: The Proportionality of Predation in Pakistan’, in Strawser, *supra* note 1, at 126–153.

³⁵ Jang, ‘The Lawfulness of and Case for Combat Drones in the Fight against Terrorism’, 2 *National Security Law Journal* (2013) 34.

³⁶ Cited in Kaplan *et al.*, ‘What Happened to Suicide Bombings in Israel? Insights from a Terror Stock Model’, 28 *Studies in Conflict and Terrorism* (2005) 232.

of transparency concerning this type of operation: ‘[T]he criteria used to determine who might be considered targetable remain unknown.’³⁷ This means that even if we know how many people die in these attacks, we do not know what criteria are being used to determine who is considered liable and who is not. Some commentators have indicated that the US government may be defending a particularly broad notion of combatant.³⁸

Notwithstanding some level of uncertainty, I submit that on the basis of the empirical data available it follows that resorting to military force in my proposed RRA situation would be *ad bellum* disproportionate. First, it may be argued that it would be disproportionate in the narrow sense insofar that killing 1,000 individuals in order to save 10 lives might seem excessive, even if the 1,000 are members of a terrorist organization. This seems true, in particular, insofar that the contribution that the large majority of those members would make to the actual killing of the 10 is negligible or non-existent. If we plausibly assume that only 100 of the members of that organization would actually participate in the killing of the 10, then it would seem that belonging to that organization would have to be a sufficient reason for considering 900 individuals liable to being killed. As indicated, this would seem excessive.

Many would find this conclusion deeply counter-intuitive. Accordingly, I want to suggest that the main problem with resorting to military force through RPAS in this context is that it would be disproportionate in the wide sense. That is, even in the best possible scenario (that is, no abuses, strict adherence to the precautionary principle under international humanitarian law),³⁹ the capacity of RPAS to identify targets is still far from perfect, the weapons they deploy often harm individuals next to the target, and, perhaps most importantly, attacks with RPAS heavily rely on fallible intelligence, to a far greater extent than often acknowledged. That is, if we take the most favourable calculation available in the literature of a 3 per cent rate of civilian deaths, it would mean that killing the 1,000 members of the terrorist group through RPAS would cause the death of 30 civilians.⁴⁰ If we acknowledge a further 3 per cent of civilians that may have been wrongly identified as combatants, this would mean that a further 30 non-labile individuals would be killed by this resort to military force. Most people would agree that it is disproportionate to kill 60 non-labile civilians to save 10.

³⁷ Stimson Center, Recommendations and Report of The Task Force on US Drone Policy, June 2014, at 12, available at www.stimson.org/content/recommendations-and-report-stimson-task-force-us-drone-policy-0 (last visited 30 November 2016).

³⁸ See, e.g., International Human Rights and Conflict Resolution Clinic and Global Justice Clinic, Living under Drones: Death, Injury, and Trauma to Civilians from US Drone Practices in Pakistan, September 2012, at 32ff.

³⁹ On the principle of precaution, see Art. 57(2) of Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Additional Protocol I) 1977, 1125 UNTS 3. For commentary, see Y. Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (2009), at 125ff.

⁴⁰ See text corresponding to note 35 above. But also recall that the alleged average ratio of civilian deaths to enemy combatant deaths from RPAS during this time period is approximately 15 per cent.

Furthermore, I submit this conclusion holds even if we acknowledge that the bond of nationality has significant moral worth. To put it starkly, suppose a terrorist hijacks a bus with six foreign tourists and heads towards a single individual who is a member of our political community, threatening to kill her. I suspect most people will agree that it would be impermissible to blow up the bus, killing the six innocent foreigners, even if this is the only way to save our co-national. This would remain true, I suggest, even if the person in charge of making the call is a public official of the victim's state, such as a police officer, who has a special responsibility, it could be argued, to look after the well-being of citizens^V. Accordingly, we may conclude that even if RPAS are far more discriminating than any other type of weapon system available, and even if we assess them under their best possible light, it is clear that they are not discriminating enough to make resort to force permissible in RRA situations.⁴¹

5 RPAS Outside of RRA Contexts: Proportionality and the Reasonable Chance of Success Condition

In the previous section, I submitted that in RRA situations it would be morally impermissible for state *V* to launch a military action against combatants^A even if it was through the use of RPAS. I argued that given the existing capacities of these weapon systems, such resort to force would be disproportionate. However, this conclusion would not necessarily apply to situations in which the threat to combatants^V and non-combatants^V is more serious. When the threat is serious enough, given RPAS' potential for protecting non-liable individuals on both sides, the principle of proportionality would not seem to be a serious restriction to resorting to military force. Let me illustrate this. Suppose organization *A* poses a threat level of five to state *V*. Against this threat, *V* could respond by using ground troops, conventional jets or RPAS. We may plausibly assume that the use of force through ground troops would cause a (collateral) harm level of 25 to non-liable individuals^A, the use of jets may cause a collateral harm level of five and the use of RPAS may cause a harm level of one.⁴² It would seem to follow that of the three possible calculations of expected benefit/harm – (5, 25), (5, 5) and (5, 1) respectively – the use of RPAS is the most proportionate one and, under the circumstances, the only permissible one.

However, I suggest this conclusion has been made too quickly. This simple calculation overrides an important, though often neglected, requirement for a just war –

⁴¹ It must be mentioned, however, that calculations here are based on the situation in Pakistan, where the USA has both important experience and agents on the ground and the support of local intelligence. This may not be the case in other regions where RPAS are currently being deployed, such as Yemen or Somalia.

⁴² These figures are largely consistent with the available empirical data. Whereas we may assume a 1-to-19 ratio of civilians/combatants killed in RPAS strikes in Pakistan (though others suggest a 1-to-3 ratio), the ratio of civilians/combatants killed by jets in the North Atlantic Treaty Organization's intervention in Serbia was allegedly roughly 1 to 1, while the world armed combat average ratio is 1 to 0.125 civilians per combatant. See, e.g., Jang, *supra* note 35, at 16 and references therein.

that is, the condition of a reasonable chance of success. This is important because in most contemporary conflicts the use of RPAS would, as a matter of fact, diminish the chances of neutralizing a threat compared to, for example, ground operations.⁴³ Consider a standard situation of a non-international armed conflict: group A launches missiles to the civilian population of state V from civilian constructions, such as houses, schools and so on. Group A has underground arsenals and tunnels, which help them escape undetected by the military of state V. This situation would not be entirely dissimilar, many people would argue, to that which obtained in Gaza during 2014 between Israel and Hamas (had Israel no Iron Dome). It could also be assimilated to US attacks on Al Qaida in the Arabian Peninsula if we considered its attacks against Yemeni nationals and not just US citizens⁴⁴ or to the use of RPAS by the USA against Al Qaida in Pakistan. In this type of scenario, I submit that it would still be impermissible for state V to launch an attack even through RPAS alone. Let me explain.

There is significant empirical evidence that supports my claim regarding the relative (in)effectiveness of RPAS strikes in reducing the capacity of the targeted groups. For example, simple comparisons between the number of RPAS strikes and the number of terrorist attacks over time (or the number of strikes with the number of victims of terrorist violence) do not suggest that an increase in RPAS strikes diminish the number of terrorist attacks. Often the correlation is of a negative sign, namely an increase in RPAS strikes comes *after* an increase in terrorist violence and not the other way round.⁴⁵ Furthermore, a similar conclusion follows from more sophisticated studies that use regression analysis to better account for the lengths of any lagged relationship between RPAS attacks and terrorist activity as well as to make room for other relevant factors.⁴⁶ The most positive study by Patrick Johnston and Anoop Sarbahi, which focuses on Pakistan, acknowledges that RPAS attacks may reduce to some extent the capacity of these groups to undertake attacks, but their effects are ‘rather small’.⁴⁷ In short, the authors caution that they are unlikely to be successful as the primary strategy for defeating these groups.

A second study by David Jaeger and Zahra Siddique concludes that there is no consistent relationship between attacks by RPAS and terrorist violence in Afghanistan, and it confirms that, both when the correlation is positive and when it is negative, its

⁴³ For anecdotal evidence, see, e.g., N. Watt, ‘Defeat of Isis Cannot Be Achieved without Ground Troops, Says Tony Blair’, *The Guardian* (22 September 2014), available at www.theguardian.com/politics/2014/sep/22/blair-defeat-isis-ground-troops (last visited 30 November 2016). See, similarly, K. Shaheen, ‘Yemen’s Exiled Government Asks UN for Ground Troops to Halt Houthi Advance’, *The Guardian* (7 May 2015), available at www.theguardian.com/world/2015/may/07/yemen-president-un-ground-intervention-halt-houthi-rebel-aden-hadi (last visited 30 November 2016).

⁴⁴ See note 31 above and corresponding text. This would entail, admittedly, that the just cause would not only be self-defence but also some version of other defence, such as humanitarian intervention.

⁴⁵ See, e.g., J.I. Walsh, *The Effectiveness of Drone Strikes in Counterinsurgency and Counterterrorism Campaigns* (2013), at 32. See also Kilcullen and McDonald Exum, *supra* note 33.

⁴⁶ Walsh, *supra* note 45, at 34.

⁴⁷ P.B. Johnston and A. Sarbahi, *The Impact of U.S. Drone Strikes on Terrorism in Pakistan* (2011).

effects are minor.⁴⁸ For example, it suggests that an attack may diminish the capacity to respond violently the first week, but this may lead to more attacks in the second week after the attack.⁴⁹ A third study by James Walsh and John Szmer suggests that the effect of RPAS strikes is different on different groups.⁵⁰ Yet, by this admission, the authors mean that in the case of more cohesive groups such as the Taliban in Afghanistan their impact is negligible, whereas in cases of more fragmented groups, such as those operating in Pakistan, these attacks would work as a cohesive force ultimately triggering more violence instead of reducing it. Finally, a fourth study by Walsh takes propaganda instead of terrorist violence as a proxy to measure the capacity of the relevant organization. This study also indicates that RPAS strikes have not been effective in reducing the output of propaganda by al Qaeda.⁵¹

Very similar conclusions are derived from the policy of targeted killings of the Israel Defense Forces against Palestinian militants. At least two studies claim that the type of attacks characterized by drones against insurgent groups are unlikely to be effective in significantly reducing the threat this type of organization represents.⁵² More recently, Edward Kaplan and colleagues have shown that the reduction in suicide bombings inside Israel since March 2002 has been the result of preventive arrests and not of targeted killings. In fact, they suggest that '[a]lthough on target-hits might remove an immediate terrorist threat, [their] analysis suggests that such actions actually increase the terror stock via hit-dependent recruitment'.⁵³ Similarly, David Jaeger and Daniele Paserman find that although targeted killings may have a short-term incapacitation or deterrent effect in terms of realized violence, there is little evidence that this is the result of a decrease in the level of terrorist activity. In fact, they suggest that the available evidence concerning the Palestinian context is that, if anything, targeted killings increase efforts to respond with suicide attacks.⁵⁴

In sum, then, the empirical literature strongly endorses the key assumption upon which my argument rests. If this point is correct, then, the situation might be such that if state V were to resort to ground troops, the use of force would be grossly

⁴⁸ D.A. Jaeger and Z. Siddique, *Are Drone Strikes Effective in Afghanistan and Pakistan? On the Dynamics of Violence between the United States and the Taliban* (2011).

⁴⁹ Interestingly, they suggest that both 'successful' and 'unsuccessful' attacks have substantively similar outcomes. *Ibid.*

⁵⁰ J.I. Walsh and J. Szmer, 'They Must All Be Militants: Targeted Killings, Drone Strikes, and Insurgent Violence in Afghanistan and Pakistan', Annual Meeting of the International Studies Association, San Diego, CA, April 2012.

⁵¹ Smith and Igoe Walsh, 'Do Drone Strikes Degrade al Qaeda? Evidence from Propaganda Output', 25 *Terrorism and Political Violence* (2013) 311.

⁵² Atran, 'Genesis of Suicide Terrorism', 299 *Science* (2003) 1534; Pape, 'The Strategic Logic of Suicide Terrorism', 97 *American Political Science Review* (2003) 343.

⁵³ Kaplan *et al.*, *supra* note 36, at 232.

⁵⁴ Jaeger and Paserman, 'The Shape of Things to Come? On the Dynamics of Suicide Attacks and Targeted Killings', 4 *Quarterly Journal of Political Science* (2009) 339. This might also affect the chances of achieving a peace settlement, something that may also need to be included in a plausible proportionality analysis (see Roff, *supra* note 12, at 48 and references therein). This further implication, although in line with my argument, is beyond the scope of this analysis.

disproportionate since it will no longer benefit from the greater precision of RPAS. By contrast, if state V resorted to a RPAS campaign, its actions would seem proportionate, but they would fail to satisfy the reasonable chance of success condition traditionally advocated in just war theory. Further, since the *ad bellum* permissibility of the use of force is a function of these variables, we may assume that no combination of RPAS and ground troops would meet both the requirements of proportionality and the reasonable chance of success at the same time. This conclusion would be counter-intuitive to many people. Individuals V, for instance, may reasonably ask why they must bear all the costs of this unfortunate situation. Or, as Thomas Hurka would put it, group A would obtain important benefits at no cost.⁵⁵ For our purposes, this difficulty would seem to leave us in the uncomfortable situation of biting this bullet or revising some of the basic tenets of the existing normative framework.

The first, perhaps too obvious, way out of this problem would simply be to try to circumscribe what success means in this context. A detailed examination of this issue is beyond the scope of this article. However, it is largely uncontroversial that success cannot be measured exclusively in terms of total military defeat. In fact, it is hardly ever permissible to seek such a type of outcome in war.⁵⁶ Yet it would not do either to say that success would simply be ‘killing combatants’. If one accepts that success must be defined in terms of what constitutes a just cause for war – that is, eliminating or substantially reducing the threat – then, by definition, this condition would not be met in the case under examination.

A second possibility would be to let go, or relax, the reasonable chance of success condition. Daniel Statman has argued that this requirement is neither necessarily part of the morality of individual self-defence nor always part of collective self-defence in war. He argues that under certain circumstances defensive war could be permissibly waged in the absence of a reasonable chance of success.⁵⁷ I cannot address Statman’s argument in full here; nevertheless, even if he is right that we can do away with the reasonable chance of success condition as an autonomous requirement for permissibly resorting to lethal force, his reasoning would not undermine the key thesis advanced here. In effect, Statman illustrates his position by reference to the counter-factual example of Luxemburg deciding to defend itself against Nazi Germany during World War II or the Jews in the Warsaw Ghetto attacking the Nazi guards.⁵⁸ Even if they did not have any chance of succeeding, we would still recognize that they have the right to defend themselves. But these examples show that his argument is concerned with whether the reasonable chance of success condition is a necessary condition for the justification of harm inflicted on those who are liable to being harmed. The situation we face, by contrast, is one in which innocent bystanders will be harmed as collateral damage. So the issue is whether, or, more precisely, how, the relative ineffectiveness of

⁵⁵ Hurka, *supra* note 4, at 55.

⁵⁶ See, e.g., Walzer, *supra* note 20, at 120–122; Fabre, ‘War Exit’, 125(3) *Ethics* (2015) 631.

⁵⁷ Statman, ‘On the Success Condition for Legitimate Self-Defence’, 118 *Ethics* (2008) 659.

⁵⁸ *Ibid.*, at 684.

RPAS must be factored in for the purposes of assessing whether it is morally permissible to resort to military force.

Hurka and others have pointed out that if the reasonable chance of success condition fails in any particular situation, then the proportionality requirement can never be met.⁵⁹ A war that cannot protect a state from the threat that justifies it resorting to war and which will necessarily kill innocent civilians cannot be proportionate. This implies, correctly in my view, that the chances of success of any defensive force are internal to its proportionality. This insight has important implications for us, which it is worth spelling out more fully. In the previous example, I stipulated that the use of ground troops in the conflict between state V and terrorist group A would entail a risk of harm level of 25 to non-liable civilians A, whereas the use of RPAS in this situation creates a risk of collateral harm level of only one. By contrast, in both situations, the risk level posed by A to non-liable individuals V amounts to five.⁶⁰ We may now assume that, although the attack using ground troops has an 80 per cent chance of achieving the just cause, an attack based on RPAS alone would only have 4 per cent chance of success (that is, of stopping the threat). These figures seem plausible in light of the empirical data reviewed above. I have suggested so far that, whereas the former would clearly be considered disproportionate, the latter would not. After all, it seems clearly disproportionate to harm 25 non-liable individuals to save five, whereas harming one to save five would most likely seem proportionate. But this is misleading. And it is misleading precisely because of the conceptual relation between the chances of success and the proportionality of a given action.

Simply put, the chances of success of any given recourse to force tell us the percentage of times it would succeed in stopping the threat. This means that they modify the probability that a particular harm would actually contribute to reducing a particular unjust threat. As indicated above, proportionality in this context entails comparing the amount of harm expectedly caused by a military action *vis-à-vis* the amount of harm expectedly prevented. In our case, the use of ground troops entails a relationship of 25 to five between the two variables, whereas a campaign with RPAS would involve a ratio of one to five. In the first case, the expected harm prevented is five and would be reached 80 per cent of the time, whereas, in the latter, the harm prevented of five would be reached only 4 per cent of the time. This would mean that, whereas in the former case, the actual benefit would be four, in the latter case the actual benefit would be 0.2. This has important implications for our overall calculation since the relevant ratios for the proportionality calculation are (25, 4) if using ground troops, against (1, 0.2) for the use of RPAS. This not only means that use of force would be

⁵⁹ Hurka, 'Proportionality and Necessity', in L. May and E. Crookston (eds), *War: Essays in Political Philosophy* (2008) 128. See also McMahan, 'What Rights May Be Defended by Means of War?', in C. Fabre and S. Lazar (eds), *The Morality of Defensive War* (2014) 130.

⁶⁰ The way in which this would be calculated differs between conflicting approaches to just war theory, yet this is immaterial for present purposes. Let us simply assume here that the harm at issue is that to non-liable individuals.

disproportionate in both cases but also that resorting to RPAS in this scenario would be almost as disproportionate as using ground troops.⁶¹

Whether this reasoning is sound depends on the conceptual claims and the empirical assumptions I am making. I have suggested that these assumptions are strongly supported by the main findings in the empirical literature on the effectiveness of RPAS strikes in counter-insurgency campaigns. However, let me clarify my position further. I do not mean to suggest that resorting to force through RPAS would usually be as disproportionate as employing ground troops. The proposition I am defending here is that resort to military force through RPAS alone would be disproportionate in most contexts in which it is currently being employed because of their relatively low chance of success in containing the threat.⁶² Thus, in such situations, resorting to military force would not simply be a controversial or bad policy decision but also morally impermissible since it would entail inflicting a disproportionate amount of harm on innocent, non-liaible individuals. Furthermore, I am also arguing that, unlike what was initially thought, RPAS do not significantly modify the scope of permissible resort to military force. Although RPAS in a large number of contexts would reduce the risk of harm to non-liaible individuals, their comparative ineffectiveness in dealing with threats would pull in the opposite direction. This is important because it highlights a particular way in which the standard analysis of the moral difference that contemporary RPAS make to the *ad bellum* permissibility of force is seriously misleading.

6 Implications for the International Law on the Use of Force

So far I have argued that, at the bar of justice, RPAS require recalibrating the principle of proportionality in assessing the *ad bellum* permissibility of resorting to military force but that they do not meaningfully expand the right to resort to military force. The conceptual and normative claims hereby defended would normally serve the purpose of morally assessing specific instances of the use of force through RPAS. However, we should also expect them to provide us with insights to critically appraise the existing legal framework. This section examines the main implications of the arguments made so far for the international law on self-defence. It is significant to note that the relevant question for us is not what the law is but, rather, what the morally best law should look like. I will argue that the claims hereby advocated allow me to defend

⁶¹ This would also have important implications for (revised) radical asymmetry contexts. In our example above, it would mean that we would have to kill 60 innocent foreign bystanders in order to save just 0.4 nationals (the benefit of saving 10 would have a success rate of 4%).

⁶² Note that under specific circumstances, the empirical assumptions on which this argument is based may not hold. For example, a stateV may have reliable information that a particular resort to military force has a very high chance of success if conducted through RPAS against targetT. Similarly, it may be that a particular non-state group poses a critical threat that puts stateV in a situation of facing a supreme emergency, in which case force may be ultimately proportionate even if the chances of success are very low (suppose targetT seeks to detonate a nuclear weapon against stateV). Neither of these two options seems particularly apposite to existing circumstances. I am grateful to an anonymous reviewer for pressing me on this issue.

against rival accounts a particular understanding of *jus ad bellum* proportionality as the most attuned with our basic moral commitments.

At the same time, they suggest that even this more plausible analysis of proportionality is fundamentally incomplete. Namely, by failing to consider the chances of success of a particular decision to use force, it misrepresents what is at stake when assessing whether it satisfies the principle of proportionality. This issue is particularly pressing in the context of resorting to force via RPAS in asymmetrical contexts. Ultimately, I will argue that the reasonable chances of success are logically connected with any plausible legal analysis of *ad bellum* proportionality in a way that is largely underappreciated. I will defend this thesis not merely by suggesting that this is what justice or morality require but also by explaining how institutional considerations must be factored in the analysis.

Under the law of individual and collective self-defence, it is widely accepted that permissible resort to military force must comply with the requirements of necessity and proportionality.⁶³ *Ad bellum* necessity refers both to the *ultima ratio* principle as identified in the second section of this article – that is, there being no less harmful means to achieve the legitimate aims of the use of force – and there being a rational connection between the means and the ends of the attack.⁶⁴ By contrast, the precise meaning of proportionality in this context is more contested.⁶⁵ A popular view among international lawyers seems to be that proportionality requires that force be tailored and not go beyond what is necessary to halt or repeal the threat to which it is responding.⁶⁶ I will challenge the soundness of this interpretation below. For the present purposes, I will assume that proportionality involves assessing the relationship between the expected harm that will be caused by the military campaign (as a whole) *vis-à-vis* the threat that is being faced (as a whole). This understanding is not only compatible with the definition adopted in the fourth section of this article, but it is also supported by a significant number of authoritative sources.⁶⁷ In this context, the scale of the response

⁶³ See, e.g., *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America) (Nicaragua)*, Judgment, 27 June 1986, ICJ Reports 14, para. 176; *Nuclear Weapons*, *supra* note 2, para. 41.

⁶⁴ Kretzmer, 'The Inherent Right to Self-Defence and Proportionality in *Jus Ad Bellum*', 24(1) *EJIL* (2013) 239. On the need to develop a more sophisticated understanding of *ad bellum* proportionality, see Sloane, 'The Cost of Conflation: Preserving the Dualism of *Jus a Bellum* and *Jus in Bello* in Contemporary Law of War', 34 *Yale Journal of International Law* (2009) 93.

⁶⁵ There seems to be wide disagreement among international lawyers about how to define the notion of *ad bellum* proportionality. *Ibid.*, at 237. But see Gardam, 'Proportionality and Force in International Law', 87 *AJIL* (1993) 391.

⁶⁶ J. Gardam, *Necessity, Proportionality and the Use of Force by States* (2004), at 156–157.

⁶⁷ See, e.g., I. Brownlie, *International Law and the Use of Force by States* (1963), at 261; R. Ago, Special Rapporteur to the International Law Commission, Eighth Report on State Responsibility (1980), para. 121; Gardam, *supra* note 66, at 403; Bethelhem's, 'Principles Relevant to the Scope of a State's Right of Self-Defense against an Imminent or Actual Armed Attack by Nonstate Actors', 106 *AJIL* (2012) 6, Principle 3; Chatham House Principles of International Law on the Use of Force by States in Self-Defence, available at <https://www.chathamhouse.org/publications/papers/view/108106> (last visited 8 January 2017), Principle 5. There is also some dicta of the ICJ in this respect. *Nuclear Weapons*, *supra* note 2, paras 41–44 (majority opinion); *Armed Activities on the Territory of the Congo (Democratic Republic*

must in turn take into consideration the choice of weapons, as they affect the number of casualties and the extent of the collateral harm that will be expectedly caused.⁶⁸

A standard way of defending this particular interpretation of proportionality is by referring to the internal logic of international law. But, more often than not, international lawyers resort to conceptual and normative points that can ultimately be traced to considerations of justice and the conceptual framework of defensive force. This is precisely what just war theory is about: developing a coherent normative and conceptual framework that is most consistent with our core ideas about what justice or morality require. Accordingly, even if it is not the only framework that should inform legal reasoning on these issues, it is plausible to suggest that just war theory has a significant deal to contribute to the critical assessment of this legal framework. If this is correct, then the argument provided in the previous section makes a strong *prima facie* case for the need to incorporate the chances of success to a plausible analysis of *ad bellum* proportionality under international law.

However, assuming such a conclusion would be a rush to judgment, at least without further argument. As generally agreed by lawyers and philosophers alike, mirroring morality does not always make for the morally best law. There may be principled, prudential and practical grounds to create laws that ensure greater compliance with moral principles overall by distancing themselves from these principles.⁶⁹ This may be particularly important in international law with its far less sophisticated framework of primary rules and far weaker enforcement machinery. Accordingly, there are several reasons to institutionalize our deep moral principles using legal thresholds that depart from what morality requires. I will mention four of them here.⁷⁰ First, we should be wary of institutionalizing certain moral principles when making them into law would create the wrong incentives. For instance, McMahan has plausibly defended the legal equality between belligerents on the grounds that ‘most combatants believe that their cause is just’. Accordingly, he concludes that ‘the laws of war must be neutral between just combatants and unjust combatants’ if we are to avoid a carnage.⁷¹ Second, we may want

of the Congo v. Uganda (Armed Activities), Judgment, 19 December 2005, ICJ Reports (2005) 165, para. 34, Separate Opinion of Judge Kooijmans. Admittedly, in the *Nicaragua* case, *supra* note 63, the ICJ considered that the resort to force should be proportionate to the armed attack. However, as Tams has argued, this may be explained by some of the specific factual circumstances of these cases, rather than by an argument of principle. See Tams, ‘Necessity and Proportionality’, in L. van den Herik and N. Schrijver (eds), *Counter-Terrorism Strategies in a Fragmented International Legal Order* (2013) 373, at n. 76 and accompanying text. For alternative understandings, see, *inter alia*, A.C. Arend and R.J. Beck, *International Law and the Use of Force: Beyond the UN Charter paradigm* (1993), at 165–166.

⁶⁸ Tams, *supra* note 67.

⁶⁹ Grotius distinguished between moral and legal principles in this context. H. Grotius, *De Jure Belli ac Pacis Libri Tres* (1625), bk II, ch. XXIV, pts V–VI. But see, more recently, McMahan, ‘The Morality of War and the Law of War’, in D. Rodin and H. Shue (eds), *Just and Unjust Warriors* (2008) 19; Lazar, ‘The Morality and the Law of War’, in A. Marmor (ed.), *The Routledge Companion to Philosophy of Law* (2012) 364.

⁷⁰ I do not consider here the need to facilitate legal reasoning under severe time constraints, which is arguably an important consideration when considering the laws of armed conflict. Unlike international humanitarian rules, the rules regulating the use of force normally allow for sophisticated calculations.

⁷¹ McMahan, ‘The Ethics of Killing in War’, 114 *Ethics* (2004) 730.

to consider institutionalizing certain substantive moral rules with a view to existing epistemic limitations. Indeed, it would make sense to prohibit certain courses of action when it would be unlikely that the relevant agent would have sufficient information at the time of acting (even if, at the end of the day, her actions may end up having an overall justifiable outcome). Third, we may consider regulating a specific area of the law with a view to reducing its potential for abuse. One such argument against so-called anticipatory self-defence is that 'the actual occurrence of an armed attack is usually evident and leaves little room for abuse by states, whereas the fear of an imminent attack rests by its very nature on subjective assessments of likely developments in the future'.⁷² Finally, there is the mirror image of this argument – namely, by establishing certain 'unrealistic' requirements, we risk undermining the authority and influence of the law itself.

With these considerations in mind, we are now in a better position to assess the need to accommodate the chances of success as an element in the analysis of the legal permissibility of resorting to military force in self-defence. This consideration, in turn, will have deep implications when examining the legality of using RPAS in contemporary contexts. As indicated above, international law does not usually factor in the chances of success of a potential resort to military force. In Dapo Akande and Thomas Lieffländer's words, 'even when a state's use of force in self-defense would be futile, or when it has a more realistic chance of achieving a cessation of the attack by other means, practice does not deny that the state has an 'inherent' right to defend itself'.⁷³

Although I readily concede that the traditional just war theory requirement of a reasonable chance of success need not be a separate requirement for permissible self-defence under international law, I have argued in the previous section that the chances of success are logically connected to any sound analysis of proportionality, irrespective of whether it is in morality or law.⁷⁴ This is also implied by the explicit comparison between the expected harms required by the legal requirement of proportionality, as advocated in this article. Adopting this analysis would make resorting to military force through RPAS disproportionate and, as a result, unlawful in many contemporary asymmetrical conflicts, even considering their far greater capacity for discrimination and the lower overall harm they would expectedly cause.⁷⁵

⁷² Kretzmer, *supra* note 64, at 248. For a similar concern in the context of the war on terror, see Lobel, 'The Use of Force to Respond to Terrorist Bombings: The Bombing of Sudan and Afghanistan', 24 *Yale Journal of International Law* (1999) 543.

⁷³ Akande and Lieffländer, 'Clarifying Necessity, Imminence, and Proportionality in the Law of Self-Defense', 107 *AJIL* (2013) 564.

⁷⁴ Interestingly, Tams considers relevant for the purposes of the proportionality analysis the likelihood of success of the armed attack in order to assess the injury expected from the attack, but not the likelihood of success of the defensive response. Tams, *supra* note 67.

⁷⁵ Admittedly, there will be particular situations in which the factual information available would be uncertain to a point in which it would be extremely difficult, if not impossible, to make accurate calculations. This raises the complex issue about whether permissibility (moral or legal) should be belief relative, evidence relative or fact relative. Unfortunately, addressing this issue in any detail is beyond the scope of this article. Nevertheless, the available empirical research, together with the increasingly complex calculations developed belligerents are capable of carrying out, suggests that this need not be a critical practical problem. The degree of certainty could be mathematically included in the relevant calculations. I am grateful to an anonymous reviewer for pressing me on this issue.

A first objection to this claim would be that this work in international law is already performed by the requirement of an armed attack, provided for under Article 51 of the UN Charter and customary international law. The notion of an armed attack is different from an infringement of the prohibition to use force under Article 2(4) of the UN Charter and, arguably, has additional requirements. At the very least, it includes as a general standard a certain level of scale and intensity. Accordingly, this requirement would make it unlawful to resort to military force in RRA contexts that, by definition, do not meet the relevant threshold of scale and intensity. Yet it may be argued that this requirement merely functions as a useful proxy for proportionality considerations. To that extent, it is not an objection to the argument hereby advocated but, rather, suggests that the normative argument defended in the fourth section of this article supports maintaining this relatively high threshold in the face of more discriminatory and less destructive weapons systems.⁷⁶

Admittedly, the traditional understanding of the notion of an armed attack requires that the attack be conducted by a state or by a non-state organization acting under the effective control of the state.⁷⁷ Attacks by non-state armed groups lacking this type of relationship to a state were traditionally not considered to trigger the right to self-defence. Similarly, international law seemed to preclude resorting to military force in the absence of one single attack that reached the required level of scale and intensity. If any of these propositions is correct, then it seems that the notion of an armed attack would preclude resorting to defensive force as a matter of law in many contemporary asymmetrical armed conflicts. Nevertheless, the International Court of Justice and several commentators have begun to accept that a significant number of low intensity incidents can be ‘accumulated’ so as to constitute an armed attack. Furthermore, the majoritarian opinion under international law would currently seem to be that non-state armed groups can conduct armed attacks for the purposes of triggering the right to self-defence even if they are not under the control of a state.⁷⁸ Accordingly, it would be plausible to suggest that the requirement of an armed attack outside RRA contexts does not preclude *per se* resort to military force in the type of conflict envisaged here between states and non-state armed groups and that RPAS would constitute a critical element determining the proportionality, and, as a result, the lawfulness, of any military response.

A second objection to the proposal hereby defended would suggest that the best legal understanding of proportionality would require that force be tailored, and not go beyond what is necessary, to halt or repeal the threat to which it is responding. As indicated above, this is a popular view among international lawyers. One implication

⁷⁶ This argument does not preclude defending this threshold also on other grounds, such as avoiding escalation of conflicts, creating incentives for states and armed groups to seek non-violent means of conflict resolution and so on. For a similar view, see Casey-Maslen, *supra* note 2, at 605.

⁷⁷ See ICJ in *Nicaragua*, *supra* note 63, *Armed Activities*, *supra* note 67, and *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory (Israeli Wall)*, Advisory Opinion, 9 July 2004, ICJ Reports (2004) 136.

⁷⁸ See, however, the criticized recent positions of the ICJ in *Israeli Wall*, *supra* note 77, and *Armed Activities*, *supra* note 67.

of this alternative understanding of proportionality is that it gives states greater leeway in defending themselves. However, I find this standard normatively objectionable. To illustrate, if group A were on the verge of launching an attack against state V, which would kill 1,000 individuals V, and the only way for state V to stop it is by using a type of missile that would kill 100,000 civilians A, I submit it should be legally impermissible to do it. And the reason for this must be that resort to force in this type of situation would be blatantly disproportionate.

International lawyers could play the fragmentation 'card' in response or at least resort to the principle of separation between *ad bellum* and *in bello* considerations. They may argue that the fact that this attack would not violate the principle of proportionality under the *jus ad bellum* hardly means it would be lawful, for it would clearly violate the principle of proportionality under the *jus in bello*.⁷⁹ This move, however, hardly suffices to dispel my concern. On the one hand, there may still be good reasons to make this type of resort to force also unlawful under the *jus ad bellum*, such as that it may provide further forums in which to challenge its legality and greater diplomatic and political means to criticize and hopefully contain this type of morally indefensible action. On the other hand, and perhaps more importantly for our purposes, such a move would fail to adequately address the cases involving RPAS. Put simply, precisely because of their capacity for greater discrimination, it may be the case that many individual RPAS strikes, in themselves, would not be *in bello* disproportionate.

In fact, given the innumerable restrictions on information about RPAS strikes, it may be extremely difficult to prove that any particular attack would itself violate *in bello* proportionality.⁸⁰ By contrast, this type of analysis may be far more easy to conduct when one considers the campaign as a whole. Thus, there would be strong prudential reasons for adopting an *ad bellum* understanding of proportionality that would not only be conceptually sounder and normatively more appealing but also curtail possibilities of abuse and create incentives for resorting to non-military means of dispute resolution, such as diplomatic and law enforcement mechanisms, thereby avoiding the escalation of violence.⁸¹

The final and perhaps most damaging objection against my proposal is that introducing such a demanding threshold would end up undermining the authority of law and its already limited capacity to influence decision making. Indeed, in order to make a morally positive difference, law needs to be complied with, which is why it has to take into account not only bottom-line feasibility but also military imperatives.⁸² This is particularly urgent in international law with its weak enforcement machinery.

⁷⁹ For the principle of proportionality in the laws of armed conflict, see Additional Protocol I, *supra* note 39, Art. 51(5)(b).

⁸⁰ I am assuming here attacks against legitimate targets that allegedly cause disproportionate collateral harm on the grounds that this harm is excessive *vis-à-vis* the harm they would expectedly be able to actually prevent.

⁸¹ For a recent defence of the need to subject RPAS strikes to judicial scrutiny, albeit within the *in bello* context, see Andersen, 'Due Process of War in the Age of Drones', available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2574914 (last visited 30 November 2016).

⁸² I am grateful to Janina Dill for pressing me on this point.

Accordingly, requiring states not to resort to RPAS strikes against non-state armed groups on the grounds that the collateral damage that they will cause, albeit relatively small, is still disproportionate would be a legal rule that authorities in states having RPAS would have every incentive to disobey even if ultimately morally just.

There are two arguments that allow me to resist this objection. First, and according to the empirical research examined above, it is far from clear that military necessity supports resorting to RPAS strikes against extraterritorially based non-state armed groups as strongly as this objection seems to assume. Certain governments may make political use of these attacks and take the opportunity to show ‘strength’ and ‘leadership’ *vis-à-vis* their local constituencies in the face of external threats. However, it is not clear the extent to which this can be plausibly defended as necessary in strictly military terms. In fact, it is hardly disputed that the overwhelming majority of terrorist attacks against states deploying RPAS are prevented by more traditional law enforcement than by ‘surgical’ RPAS strikes.⁸³

This seems particularly true when we consider the issue from a historical, comparative perspective. In a detailed study of the responses to anarchist terrorism during the late 19th and early 20th centuries, Richard Jensen argues that ‘[h]eavy-handed repression during the 1890s ... frequently led to anarchist acts of revenge, setting off chain reactions of violence that had often seemed impervious to police repression’.⁸⁴ By contrast, he shows that measures such as the modernization of national police forces, the enhancement of cooperation and information exchange between them, limiting or reconfiguring its publicity as well as allowing for the political expression to some of these groups within institutionalized channels (for example, trade unions) significantly reduced resort to ‘propaganda of the deed’. Similarly useful were alleged refusals to give terrorist violence ‘special treatment outside of established law’.⁸⁵ Admittedly, this is not the place to examine both the similarities and differences between this international wave of terrorism and contemporary threats. However, these considerations reinforce the argument that states that deploy RPAS are not under a genuine and pressing dilemma between resorting to targeted killings and allowing many of their nationals to be killed.

Second, and perhaps decisively, it is far from clear that a majority of states would be against limiting resort to disproportionate force in this type of scenario. Insofar as we think that the regulation of the use of force should not be determined in accordance with the interests of those states who are most likely to resort to force, I think introducing the chance of success test as part of the proportionality calculation does

⁸³ See studies cited in note 52–53 above.

⁸⁴ R. Bach Jensen, *The Battle against Anarchist Terrorism: An International History, 1878–1914* (2014), ch. 10.

⁸⁵ *Ibid.*, ch. 10, citing Italian Prime Minister Giolitti, responsible for a successful policy for containing anarchist violence in Italy, who claimed that ‘[e]xceptional measures render popular whoever is affected ... by them; they create martyrs and converts; they are a cause of discredit to the country that resorts to them; putting in doubt the solidity of the social order, they increase the audacity of the extremist parties, and, making go away the outward appearance of danger, they distance the government from truly serious measures’. G. Giolitti, *Discorsi extraparlamentari* (1952), at 52.

not seriously risk undermining the authority of international law. By contrast, to reiterate, it may provide states, intergovernmental organizations and other relevant stakeholders with a further plausible basis to legally criticize and challenge some of the existing policies that I have suggested are generally disproportionate. On these grounds, it may be plausibly concluded that the central tenet advocated in this article regarding a more sophisticated analysis of proportionality is not only based on moral reasons but also supported by institutional (policy) considerations.

7 Conclusion

RPAS represent an incremental advance in weapons systems. Unlike other forms of remote weaponry, they are able to minimize collateral damage and keep their operators out of harm's way. These features would seem to have important implications for the *ad bellum* permissibility of the use of force, given that any use of force via RPAS would threaten far less collateral damage than alternative weapons systems. This article argues that in most contemporary asymmetrical contexts resort to military force is morally impermissible notwithstanding the advantages offered by RPAS. The reason for this is not, as it has been suggested, that they would violate the principle of necessity or *ultima ratio* but, rather, that they would violate the principle of proportionality. Furthermore, and perhaps more centrally, I also have argued that RPAS may not even allow for greater leeway than alternative weapons systems outside of RRA contexts. The reason for this is that their perceived advantages in terms of greater discrimination would be counteracted by the lesser chance of success in achieving the just cause for war. As a result, in such circumstances, use of force through RPAS may be disproportionate not because of the total harm it would cause but, rather, because of the limited harm they are ultimately able to prevent. Finally, I have argued that these insights must be incorporated into the standard analysis of proportionality in the international law on self-defence. This additional proposition does not rest on the simple suggestion that law should mirror morality. By contrast, it takes seriously the claim defended by most international lawyers and just war theorists that there are institutional issues that must be taken into consideration while regulating human conduct through law. In this respect, the article suggests that there are also epistemic, prudential and practical reasons for advocating a more refined and stringent reading of the principle of *jus ad bellum* proportionality.