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RETHINKING THE CRITERION FOR ASSESSING CIA-TARGETED KILLINGS: DRONES, PROPORTIONALITY AND *JUS AD VIM*

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According to US government statements, drones succeed in killing terrorists while minimizing the risk to noncombatants, thus suggesting that they satisfy the jus in bello proportionality criterion. Scholars, however, are divided on whether drones are truly proportionate. What does it really mean to say drones are, or are not, proportionate? How are we to judge the proportionality of the CIA's drone program? We expose the fallacy of drone proponents who claim they are proportionate by repudiating what we call proportionality relativism – the use of impertinent comparisons to argue that drones are proportionate because they cause less collateral damage than other uses of force. We then analyze the existing data on drone strikes to expose problematic differences in how the US military and the CIA understand proportionality balancing. Finally, we employ what Walzer calls the category of jus ad vim – the just use of force short of war – to assess the ethics of drones. Jus ad vim demands a stricter relationship between the use of force short of war and the jus in bello principles of proportionality and discrimination, as well as human rights concerns of civilians not usually considered in the proportionality calculus, that severely restricts the scope of proportionality balancing. Assessing the CIA's use of drones in Pakistan according to this standard casts a dark shadow on claims that CIA drones are proportional.

KEY WORDS: Drones, proportionality, *jus ad vim*, *jus in bello*, just war

Introduction

In his 2012 speech on the morality, legality and prudence of the USA's use of drones to carry out lethal strikes against suspected terrorists, John Brennan (2012) (then White House counterterrorism adviser and now director of Central Intelligence Agency (CIA)) lauded the ability of drones to 'conform to the principle of proportionality, the notion that the anticipated collateral damage of an action cannot be excessive in relation to the anticipated military advantage'.¹ According to his reading of proportionality, drones succeed in killing terrorists while minimizing the risk to noncombatants, thus suggesting that the US government was taking all possible measures to fight al-Qaeda while protecting foreign civilians.

While Brennan's claim typifies the US government's stance on drones, scholars are divided on the extent to which drones are truly proportionate. Kenneth Anderson (2012) and Bradley Strawser (2010) focus on the technological advantages of drones compared to

other weapons, arguing that they are better able to satisfy the standard of proportionality. Amatai Etzioni (2013) proffers that the evidence shows that drones cause less collateral damage than other weapons; and Avery Plaw (2013: 150), who undertakes a critical analysis of available data on drone strikes in Pakistan, confirms the general view of government officials: 'All things considered, it looks like the proportionate alternative if one is committed to going after dangerous militants operating in the FATA [Federally Administered Tribal Areas] with military force.' These claims attempt to buttress the legitimacy of drone use by establishing their fidelity to proportionality, one of the core principles of *jus in bello*. In sharp contrast, Mary Ellen O'Connell (2010) claims that drone use is not legal outside of official armed conflict zones, meaning that drone strikes such as those in Pakistan cannot be proportionate because there are no legitimate military targets. Sarah Kreps and John Kaag (2012) suggest that an exaggerated belief in *jus in bello* proportionality leads to a problematic expansion of military objectives. Exploring the implication of drones on the just war tradition, we take issue with claims that drones make proportionality concerns easier to satisfy, arguing that this has resulted in a relaxed set of moral standards that paradoxically leads to their disproportionate use (Brunstetter & Braun 2011). The result is the concern, noted by Noel Sharkey (2010: 375) with regards to drone use in Pakistan but applicable elsewhere as well, that this technology allows statesmen to kill in places and ways that would not previously have been possible without major political and legal obstacles. These critical claims have important implications for proportionality because lowering the threshold for the use of force affects both proportionality of cause, traditionally associated with *jus ad bellum*, as well as the *jus in bello* principle of proportionality of means.

Assessing the proportionality of drones is further complicated by the need to differentiate between types of drone activity. Drones are operated by multiple entities in different contexts, with distinct operating protocols and standards of proportionality. The US military has used drones as part of counterinsurgency campaigns in the official war zones of Iraq and Afghanistan. It employs a collateral damage methodology designed to ensure that the probability of collateral damage from preplanned operations is below 10 per cent. The CIA uses drones as part of a counterterrorism campaign against al-Qaeda in regions outside the traditional battlefield, but with different standards compared to the military. According to one source familiar with CIA drone operations in Pakistan: 'We simply don't follow the NCV [Noncombatant Casualty Cut-Off Value] for Afghanistan COIN [Counterinsurgency] on the other side of the border, so while the process is similar, the substance of the proportionality analysis is different' (cited in McNeal, *forthcoming*).

Divergent scholarly claims and disparate combat practices beg the question: what does it really mean to say drones are, or are not, proportionate? More specifically, how are we to judge the proportionality of the CIA's drone program? This article explores the different understandings of proportionality with regards to drones. In the first section, we expose the fallacy of drone proponents who claim that they are proportionate by repudiating what we call *proportionality relativism* – the use of impertinent comparisons to argue that drones are proportionate because they cause less collateral damage than other uses of force. Such comparisons misrepresent the true meaning of proportionality as an independent assessment of the balance between the anticipated civilian harm and military gain associated with each act of force. We then analyze the existing data on drone strikes to expose problematic differences in how the US military and the CIA calculate proportionality. In the final section of the article, we distinguish between the use of

drones in zones of war and in what Michael Walzer (2007: 480) calls the in-between zones – such as failed states – where terrorists sometimes find safe haven. In the former, such as Afghanistan, Iraq or Libya, drone strikes can be evaluated according to *jus in bello* standards of proportionality inscribed in international law; however, we contend that this standard should not be used in the in-between zones, such as the tribal areas of Pakistan and the southern zones of Yemen. Expanding on the work of scholars who claim that in cases of asymmetrical conflict the use of force should be governed by standards that are more restrictive than those guiding interstate war, but more permissive than those of domestic law enforcement (Kahn 2002; Galliot 2012), we employ the category of *jus ad vim*, or the justice of force short of war, to assess the ethical use of CIA drones.

Jus ad vim is an ethical category that has gained increased prominence in recent years due to the ambiguity of the war on terror, where much of the military activity, such as drone strikes and special forces raids, fall short of the level of hostilities that would traditionally be associated with war, and yet are clearly beyond the bounds of law enforcement (Brunstetter & Braun 2013; Ford 2013). While some scholars are critical of *jus ad vim* because of its perceived permissiveness (Coady 2008: 3) and others contend that drones can be evaluated according to *jus ad bellum* and *jus in bello* standards (Enemark 2013), we believe that differentiating between war and these acts short of war by conceptualizing the moral requirements of limited force within the category of *jus ad vim* provides both analytical clarity and a more nuanced appreciation of the potential ethical pitfalls of drone strikes. In a previous article entitled 'From *Jus ad Bellum* to *Jus ad Vim*: Recalibrating our Understanding of the Moral Use of Force' (Brunstetter & Braun 2013), we argue that a theory of *jus ad vim* demands a stricter relationship between the use of force short of war and the *jus in bello* principles of proportionality and discrimination. In addition, we assert that human rights concerns of civilians not usually considered in the proportionality calculus need to be taken into account. Such ethical constraints severely restrict the scope of proportionality balancing – the conscious decision that anticipated military advantage outweighs collateral damage – that can be employed. In the present article, we assess the CIA's use of drones in Pakistan according to the standards of *jus ad vim* to raise concerns about the CIA's standards of proportionality balancing, and thus the ethical purchase of government claims that their use of drones is proportional.

Proportionality Relativism

It is common practice to hear the refrain from drone proponents that drone technology represents the epitome of proportionate weaponry. Take, for example, Brennan's speech quoted in the introduction. The statement – 'targeted strikes conform to the principle of proportionality – the notion that the anticipated collateral damage of an action cannot be excessive in relation to the anticipated military advantage' – correctly identifies the *jus in bello* notion of proportionality (Brennan 2012). However, Brennan and other government officials – including Obama, Koh and numerous individuals speaking on condition of anonymity – who claim that drones are proportionate misinterpret the meaning of this principle in problematic ways.² Their claim is substantiated by way of comparison – the view that because drone strikes are *more* proportionate than other historic eras of war, other weapons or other tactics, they are therefore proportionate. Yet, this line of reasoning fundamentally misunderstands the meaning of proportionality. To claim that drones are proportionate because they are more accurate and discriminating than other

weapons/tactics is to suffer from what we call *proportionality relativism* – the use of comparisons between drones and other historic eras, weapons or tactics as a basis for establishing proportionality. We contend that such comparisons are misleading.

Proportionality Is Different from Precision

The first and most recurrent form of proportionality relativism focuses on the weapon itself – namely, mistaking precision for proportionality. It is true that, relative to other types of munitions, the Hellfire missile (the standard weapon on armed drones) has a smaller payload and a more confined blast radius compared to other munitions. According to the ‘Collateral Damage Estimate Methodology’ recently released by the Pentagon, while the 500 lb bombs dropped during Vietnam had a blast radius of 400 ft, missiles such as the 100 lb Hellfire have a blast radius of approximately 40 ft.³ Henry Crumpton (2012: 220), former head of the CIA’s Counterterrorism Center/Special Command, which led the initial invasion of Afghanistan in 2001 and was the first to deploy armed drones in combat, insists that the Predator is so precise it can shoot a Hellfire missile straight through a window or take out a lone enemy combatant from miles away. The missiles can even be diverted at the last minute if a noncombatant steps into range, a trick that operators call ‘going cold’ (Klaidman 2012: 120).

The purported precision of drones holds an important place in claims of drone proportionality. In Brennan’s defense of drone policy as legal, ethical and wise, his remarks emphasized the link between the two:

By targeting an individual terrorist or small numbers of terrorists with ordnance that can be adapted to avoid harming others in the immediate vicinity, it is hard to imagine a tool that can better minimize the risk to civilians than remotely piloted aircraft. (Brennan 2012)

The assumption is that smaller, more precise bombs make for a more proportionate use of force because such a tool allows a state to target only the enemy, thus minimizing the difficult moral decisions that used to plague the deployment of bigger weapons that inevitably put more civilians in harm’s way. Anderson sums up the precision argument when he asserts that drone technology:

provides a *deus ex machina* and an escape from the *jus in bello* proportionality trap. After all, everything in the *jus in bello* category here works together, not against each other. The technology provides force protection to (one side’s) combatants; it provides greater protection to civilians through precision targeting. What’s not to like? No weighing up of perplexing values needs to take place, because everything is on the plus side, win-win. (Anderson 2012: 388)

The trap that Anderson alludes to is the claim that in order to minimize harm to civilians, soldiers may have to take what Walzer (2006: 156) calls ‘reasonable risks’ to their own well-being while still carrying out their mission.

However, contrary to Anderson’s claim, drones in fact deepen the proportionality dilemma. While drone pilots are immune from harm, civilians in the zones patrolled by drones most certainly are not. In an asymmetric struggle, it is not always easy to distinguish between combatants and noncombatants, and thus satisfy the *jus in bello* criterion of distinction.⁴ Moreover, once the precision of the weapons system is assumed to universally satisfy the requirements of proportionality, the door is opened for drones to be used

against a problematically wide range of targets while making the use of non-lethal measures, such as capture, appear unfeasible.

Assuming a more aggressive strategy may have negative consequences that affect the calculation of proportionality in ways that are subtler than simply calculating the blast radius and death tolls. As General James E. Cartwright, the former vice-chairman of the Joint Chiefs of Staff, said with regards to the aggressive US drone campaign: 'We're seeing that blowback. If you're trying to kill your way to a solution, no matter how precise you are, you're going to upset people even if they're not targeted' (cited in Mazzetti & Shane 2013). Such a fear echoes concerns raised by Walzer:

But here is the difficulty: the technology is so good that the criteria for using it are likely to be steadily relaxed. That's what seems to have happened with the US Army or with the CIA in Pakistan and Yemen. (Walzer 2013)

Referencing the Stanford/New York University Clinics' report 'Living under Drones' (2012), Walzer goes on to warn against the overuse of drones and highlight the costs, beyond casualty figures, that they impose upon the civilian population. These concerns are technically not part of *jus in bello* proportionality, although there is reason to suggest that they should be (a point to which we return below).

Proportionality Is Not Comparable across Historical Eras

The second type of proportionality relativism is the claim that drones are more proportionate as compared to the weapons and means of war prevalent in other eras of warfare. This view follows from the perspective that warfare is becoming more ethical as technology becomes increasingly precise. Gwyn Prins (2007: 245) claims that in Afghanistan and Iraq 'repugnant regimes were evicted with levels of casualties on both sides that were inconceivably lower, relative to the scale of the political outcome achieved, than could have occurred in the twentieth-century exercise of mass industrial military power.' Speaking directly to proportionality, Thomas Hurka (2005) implies that advances in technology make the use of force more predictable, and thus less deadly for noncombatants, than in the past. Speaking directly about drones, Anderson's claim that even the most extreme estimates of civilian casualties caused by drones when 'compared to the history of civilian deaths in war, represent a very considerable improvement', follows in this vein. Anderson then takes the comparison argument one step further by condemning those who would challenge the relative proportionality of drones:

The point, rather, is that these technologies are making targeting in war more precise on any historical measure, and criticizing them on a snapshot basis – your technology killed civilians, it's another war crime – rather than on their historical trend line, [with] the horrors of urban battle in the Second World War as a baseline, seems to me morally indefensible. (Anderson 2012: 383–384)

These assessments assume that proportionality should be assessed based on historic antecedents. However, there is good reason to reject such comparisons. In an incisive criticism of the technology argument, Henry Shue (2008: 187) notes the danger of pegging proportionality to casualty levels observed during the Second World War, when, it should be remembered, the Allies intentionally targeted civilian populations in the hopes of weakening German morale. Such an arbitrary benchmark is an unconscionably low bar

based on what may well be a historic nadir for warfare. To say that drones are more precise or cause less collateral damage than Second World War bombers is thus no great praise and offers little ethical purchase. In the context of drones, Brunstetter and Braun (2011: 346) read the technology argument – what they call the ‘drone myth’ – as a problematic assumption that relaxes the *jus ad bellum* notions of just cause and last resort, thereby justifying gratuitous uses of force.

In short, the technological advancements of recent decades and improvement over previous levels cannot serve as evidence of proportionality, because this determination must be made on factors that are specific to each use of force.

Proportionality Is Not Comparable across Tactics

The third example of proportionality relativism is the claim that drones are proportionate compared to other modern tactics in war. In one of the most comprehensive studies to date, Plaw (2013) compares CIA drone strikes to ‘illuminating parallel cases’. Recognizing the difficulty of analyzing proportionality as it should be done – on an operation-by-operation assessment of each strike – he goes on to assert that ‘while not technically decisive in regards to proportionality... such comparisons may prove instructive’ (Plaw 2013: 144). More specifically, they can ‘help to frame broad standards that can supplant the difficult comparison on which proportionality is exclusively based’ (Plaw 2013: 147). The cases that he uses include non-drone US operations (precision strikes and special forces raids), the Pakistani Army Operations in FATA from 2002 to 2007, Israeli targeted killings from 2000 to 2009, and the estimated world combat average for the 1990s.

According to the data, the proportion of civilian casualties compared to total fatalities – Plaw’s key measure of comparison – was approximately 37.5 per cent for non-drone US operations, 31.3 per cent for the Pakistani army operations in FATA, 41 per cent for Israeli targeted killings and 89 per cent for the world combat average. These numbers fail to approach the estimated percentages from drone strikes, which Plaw puts between 3.86 and 23.85, depending on which drone database one uses. Based on these comparisons, Plaw (2013: 150) concludes that ‘the civilian casualty rate of the drone strikes looks significantly better than alternative actions’.

That said, these comparisons are problematic because they are based on non-equivalent alternatives, and lack the necessary contextualization to make decisive proportionality judgments. For example, the 2002–07 Pakistani Army Operations in FATA was a Pakistani counterinsurgency operation, with a strategic objective – ousting a Taliban government and reclaiming the province – that is distinct from that of US drone strikes. The two options are not equivalent because the military objectives pursued by each, and thus the proportionality calculus employed, are widely divergent. The comparison with Israeli-targeted killings seems more appropriate, but here again more contextualization is needed. One would need to know the specifics of each operation, and only compare similar operations – for example, ones that targeted leaders (which may justify higher collateral damage) – as opposed to aggregate strikes. The comparison with non-drone operations also suffers from a lack of context to weigh the foreseeable military advantage of the three instances Plaw cites, which may have warranted higher risk to civilians under the proportionality criterion. Finally, the estimated world combat average suffers from the same concerns as comparing drones to the historical examples discussed above.

In short, while certain operations may share notable commonalities, without a deeper understanding of the unique contexts of each, such comparisons offer limited insight into the threshold of harm that might be acceptable in one situation but excessive in another. Although Plaw is very careful to recognize the limitations of his study and couch his conclusions as speculative, putting stock in such comparisons can lead others to misunderstand what proportionality means, or potentially manipulate the concept to legitimize drone usage where it may not be just to use force at all.

Assessing *Jus in Bello* Proportionality for Drones

Brennan's definition of proportionality in his defense of drones is largely consistent with the formal standard of proportionality outlined in Protocol I Additional to the Geneva Conventions Article 51(5)(b), which proscribes 'an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated' (ICRC 1977). What is at issue in the debate about drone proportionality is not the meaning of the principle, but how it is to be assessed.

Despite challenges in defining and measuring key terms such as 'civilian', 'military advantage' and 'excessive', it remains imperative to attempt to assess the proportionality of drone strikes.⁵ In this section we try to gain new insights by examining two different contexts in which drones are used: by the military in a declared zone of war and by the CIA in the global struggle against al-Qaeda that often occurs outside the legally defined battlefield. Unlike the proportionality relativism described above, this comparison is not meant to serve as the basis for the proportionality assessment. Rather, we independently assess the proportionality of each context, and then compare them to understand how disparate policies have facilitated divergent outcomes.

US Military Drones in Afghanistan

The US military has been using drones as part of ongoing combat operations in Afghanistan since 2001 for surveillance, combat air support, and eventually targeted killings. The military maintains a long list of 'no strike' targets that limits the chance that civilians will be put in harm's way, in addition to a strong preference for acquiring reliable on-the-ground information to contextualize strike decisions. Moreover, the military adheres to a sophisticated set of collateral damage methodology protocols in order to determine whether a particular action satisfies the requirements of proportionality. In most situations, this methodology is designed to ensure that the probability of collateral damage from preplanned operations is below 10 per cent. In other words, this means that prior to a strike, the military operators must believe that there is a less than 10 per cent chance that the attack will kill civilians.⁶ This estimate can be compared to empirically observable data of recorded strikes to gauge the proportionality of US military-operated drones.

Although the military's threshold is set at a 10 per cent probability of collateral damage, in actuality, the data from the years in which the military disaggregated drones strikes from other air strikes show that less than 1 per cent of missiles fired from military drones have killed civilians (McNeal, forthcoming). According to a report released by the United Nations (UN) in February 2013, of the 294 weapons released by US military drones in Afghanistan in 2011, only one caused civilian casualties. In 2012, weapon releases rose to

506, five of which killed civilians, resulting in 16 civilian deaths (UNAMA 2013). In both years, less than 1 per cent of strikes killed civilians. More evidence would be necessary in order to make definitive statements about whether these strikes satisfied the requirements of proportionality; however, the low percentage of strikes that killed civilians combined with the relatively low ratio of civilian deaths (about three per strike) supports the tentative conclusion that drones can be very accurate in targeting militants, and that it is possible to greatly minimize civilian casualties if the policy governing their use – in this case the counterinsurgency policy of COIN – restricts the targets against which they are employed.

While this comparison is not a surrogate for assessing the threshold of collateral damage required by the principle of proportionality, the ratio of strikes that cause collateral damage is an important, but often overlooked, indicator of the proportionality of drone operations in the aggregate. Admittedly, it does not allow us insight into the actual calculation process, and adhering to such a benchmark in other contexts would depend on perceptions of military advantage defined by policy objectives. However, the US military data do provide an empirical benchmark to gauge drone accuracy, one that compares drones to drones (as opposed to other weapons or different eras), albeit in different contexts. This can be a useful starting point to think about the CIA's use of drones by setting a standard to which drones can adhere, given certain strategic conditions, although this does not mean that it should be the standard to which CIA drones must be held.

CIA Drones in Pakistan

Measuring the proportionality of the CIA's use of drones in Pakistan would require an independent analysis of each individual strike that weighs the harm incurred by civilians against the military advantage gained by each strike. As Plaw's study indicates, delineating the threshold of harm associated with particular strikes is difficult because of the uncertainty surrounding the CIA's activities. Thus, it is necessary to provide an approximate measure of overall proportionality. While Plaw (2013) chooses the proportion of civilian casualties to total fatalities as his proxy, and then compares drones to other weapons to conclude that they are, generally speaking, proportional, we offer an alternative approximation that leads to a more skeptical claim – namely that some drone strikes are proportional while others are not.

As a proxy for proportionality, we look at the collateral damage ratio – the strikes that produced collateral damage compared to total strikes – to determine the percentage of strikes that caused collateral damage. This focus more closely captures the individualized calculation required by the principle of *jus in bello* proportionality compared to the average used by Plaw. It allows us to gain an understanding of the scope of expected collateral damage – what we call proportionality balancing – that the CIA deems as acceptable when contemplating any particular strike.

According to data collected by the New America Foundation, the USA conducted 343 drone strikes in Pakistan from 2004 and 2012.⁷ Of these, 263 strikes killed only militants, while 80 killed civilians and/or unknowns. The military necessity of the 263 strikes that killed only militants could be debated. Given that the notion of threat and imminence in an asymmetric conflict is opaque, the killing of certain combatants is potentially unnecessary.⁸ However, because of space limitations, we focus on the strikes where victims were labeled as non-militants (civilians or those whose identity is unknown). The data are reported in Table 1.

TABLE 1
Proportion of Strikes that Produced Collateral Damage

Year	Total strikes	Strikes killing non-militants	% of strikes killing non-militants	Number of non-militants	Average number of non-militants killed in strikes with non-militant deaths
2012	48	10	21	28–44	3.6
2011	73	12	16	89–102	8.0
2010	122	20	16	60–102	4.1
2009	54	16	30	110–215	10.2
2008	36	15	41	64–88	5.1
2004–07	10	7	70	111–125	16.9
Total	343	80	23	462–676	7.1

What can the data tell us about the proportionality of CIA drones? First, 80 strikes, or 23 per cent of the total strikes conducted in Pakistan from 2004 to 2012, killed non-militants. Of the 10 strikes from 2004 to 2007, 70 per cent killed civilians. This percentage dropped to 41 per cent in 2008, then to 30 per cent in 2009, 16 per cent in 2010 and in 2011, but then rose to 21 per cent in 2012. The initial decline was likely the result of better intelligence, more oversight and greater caution that led to fewer civilians being killed per year. The interesting point of this trend is that the decrease levels off towards 2010, fluctuating between 16 and 21 per cent in subsequent years. Taken together, the data are notable because nearly one in four strikes seems remarkably high considering remarks by Brennan and others who praised the proportionality of drones.

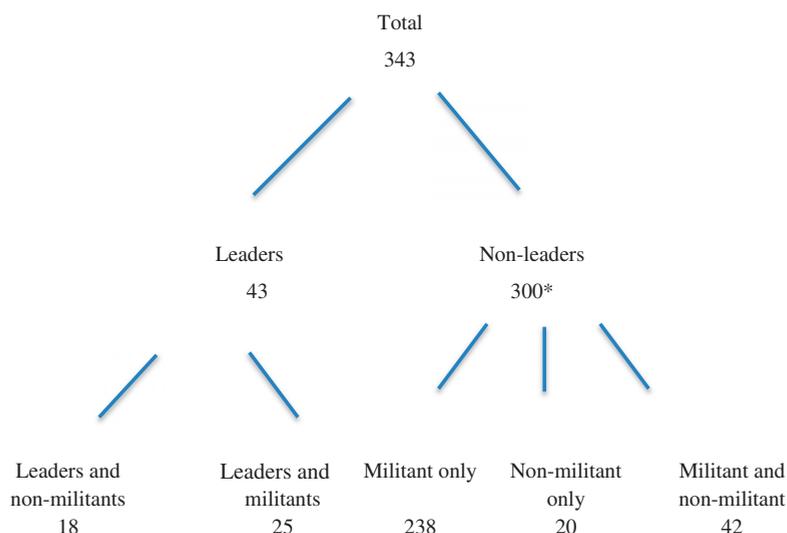
Numbers, of course, do not tell the whole story, as there may be reasons why such strikes could be considered proportional even though they killed civilians/unknowns. We therefore need to consider the military advantage associated with these strikes, which requires trying to infer what the CIA's calculation of proportionality is.

Proportionality Balancing

The objectives of the CIA drone operations in Pakistan are to decimate the al-Qaeda and Taliban leadership core, and to deny safe haven to members of these groups in order to disrupt the planning and execution of terrorist attacks. Such goals open the path for different types of proportionality balancing – ‘the conscious decision that anticipated military advantage outweigh[s] collateral damage’ (McNeal 2012: 331). In what follows, we consider proportionality balancing in two contexts – strikes targeting leaders and strikes targeting low-level militants. The data are presented in [Figure 1](#) and [Table 2](#).

Targeting the Leadership Core

It is plausible that the government would accept more civilian casualties in exchange for killing high-value targets, especially the leadership core of al-Qaeda and the Taliban. These individuals are generally people whose identity is well known, and whose whereabouts could be in the presence of civilians. The military advantage gained from killing a militant leader lies in eliminating their experience and expertise. It is plausible that a leader's death represents a greater military value than low-level militants who are easily replaced,



* Some of these strikes may have intended to kill a leader.

FIGURE 1
Types of Strikes by Observed Deaths

meaning some collateral damage could be warranted. From 2004 to 2012, US drone strikes have killed at least 51 militant leaders including Abu Haris, the al-Qaeda chief in Pakistan; Saleh al-Somali, the external operations chief; and Atiyah Abd al Rahman, al-Qaeda’s number two. However, strikes that killed leaders constitute just 13 per cent of total strikes (43 out of 343). And of these 43 strikes, 18 also killed a non-militant (e.g. 45 per cent of strikes on leaders). However, as depicted in Table 2, leaders represent only 2 per cent of total deaths.

When a strike on a leader caused collateral damage, it killed an average of eight non-militants (compared to two non-militants for all strikes). These data, and the anecdotal evidence that can be garnered from news reports that we do not have the space to detail, show that the CIA proportionality balancing calculus is willing to accept foreseen civilian casualties when targeting leaders. Whether an average of eight non-militant deaths is excessive depends on who the leader is and the threshold of harm that one adopts. This is a value judgment about which people can disagree (a point to which we turn below). It is worth noting, however, that the 18 strikes on leaders that killed non-militants account for only 23 per cent of the 80 strikes that killed non-militants. What, then, of the other strikes?

TABLE 2
Types of Casualties

Type of death	<i>n</i>	% ^a
Leaders	51	2
Other militants	1437–2519	76
Non-militants	462–676	22
Total	1950–3246	100

^a Calculated by taking the average of the casualty range for each category divided by the total average.

Targeting Suspected Militants and Denying Safe Havens for Terrorism

In addition to targeting the leadership core, the CIA drone program has also targeted suspected militants – those who are believed to belong to al-Qaeda or affiliated groups that pose some level of threat to the USA or its interests. The primary military advantage from targeting suspected militants is killing those in the process of planning, or having the intent and capability, to carry out lethal attacks. While the USA claims not to target all members of al-Qaeda, it reserves the right, according to Brennan (2012), to aim its drones at anyone seen as a significant threat: 'The purpose of a strike against a particular individual is to stop him before he can carry out his attack and kill innocents. The purpose is to disrupt his plans and his plots before they come to fruition.' A secondary advantage comes from the combination of drones' persistent stare and imminent attack capability. The constant hum of drones circling above the FATA region is a source of fear for suspected militants (and civilians, too) that alters their behavior, arguably making them more cautious and diminishing their ability to carry out terrorist attacks. Used in this way, drones are purported to deny safe havens – places where terrorists meet, plan and set in motion terrorist activities – by posing a ubiquitous threat to those who can be observed undertaking alleged suspicious behavior.

The data from Figure 1 suggest that the vast majority of strikes target low-level militants, albeit with some level of collateral damage. Of the 343 drone strikes in Pakistan from 2004 to 2012, 300 strikes or 87 per cent did not kill leaders.⁹ Of these, 238 killed only suspected militants (69 per cent of total strikes), 42 killed suspected low-level militants and civilians (12 per cent), while 20 killed only civilians (6 per cent). According to Table 2, 2 per cent of strikes killed leaders, while other militant deaths comprise 76 per cent of total deaths, and non-militant deaths make up 22 per cent. These numbers point to several ethical challenges that affect the proportionality of any particular drone strike.

The primary challenge is the ability to properly identify targets. As noted by Sparrow (2011), there are significant concerns as to whether CIA drones are as good as the US government suggests at satisfying the principle of distinction. Twenty of the strikes that caused collateral damage produced no confirmed militant deaths; yet, some of these caused significant loss of civilian life. These represent 6 per cent of total strikes, and 25 per cent of the 80 strikes that killed non-militants. Clearly, none of these strikes is proportionate when viewed in isolation (even if they were targeting a leader but missed). Even assuming some level of civilian casualties is justified when targeting leaders, can one say that CIA drone policy is proportional when 6 per cent of total drone strikes cause *only* civilian/unknown deaths, while an additional 12 per cent targeting low-level militants cause some civilian/unknown deaths?

A secondary challenge is whether a policy of targeting suspected militants brings a substantial military advantage. On the one hand, the combination of persistent stare and imminent attack capability has arguably diminished the capabilities of al-Qaeda and its affiliates. On the other hand, the ubiquitous presence of drones in Pakistani airspace, coupled with nearly one in four strikes that kill civilians, has reportedly had serious social and political repercussions that tangentially affect the proportionality calculus. As Sauer and Schörnig (2012) warn, drone strikes may create negative conditions on the ground that have a boomerang effect that actually protracts the conflict rather than bringing it closer to termination. This means that the mere threat of a lethal drone strike is altering the strategic conditions, which raises questions about whether the rhetoric of drone proportionality is

leading to problematic strategies, or whether proportionality is an effective standard by which to gauge drone use.

Comparing Drone Use by the US Military and the CIA

Both the US military and the CIA use drones, albeit for different purposes, with different proportionality balancing standards and with divergent thresholds for civilian casualties that are empirically observable. What can a comparison between them tell us about the fundamental question of whether CIA drone strikes are proportional?

Admittedly, for a majority of strikes, there is insufficient evidence regarding the anticipated military advantage/civilian casualties to draw definitive conclusions about the threshold for harm used by the CIA. However, by highlighting those that caused collateral damage, we are able to draw four instructive observations.

First, a popular refrain from critics is that drones are not as precise and discriminate as the government has claimed because they kill (some) civilians (Benjamin 2013). Yet, the low rate of collateral damage achieved by drone strikes in Afghanistan suggests that the technology is not the issue as drones can be very accurate. Moreover, the decreasing rate of CIA strikes that lead to collateral damage implies that the policies guiding them can be amended to reduce risk to civilians.

Second, the data indicate that 23 per cent of CIA strikes caused collateral damage, which is a far higher percentage than what the US military tolerates. The observed outcome of collateral damage from CIA drone operations is more than twice as high as the US military's accepted threshold of 10 per cent and orders of magnitude higher than the military's actual collateral damage rate of 1 per cent. If based on a comparison with other tactics, this may be seen as reason for optimism; however, we argue that 23 per cent should be considered excessive. While the military's operations are arguably in compliance with the proportionality criterion, the CIA drone program, if held to the same standard, would be disproportionate on the whole.

Third, less than 13 per cent of all CIA drones strikes killed a leader. Even if there were some strikes that targeted leaders but missed, the data show that the majority of strikes – 81 per cent – killed low-level militants. This suggests that the anticipated military advantage of the average strike is found more in denying safe haven to suspected militants than in targeting the leadership. A proportionality balancing calculus that permits civilian deaths for such goals raises serious concerns about the effects of such a long-term campaign on civilian human rights, the US global image, and on the probability of success in the struggle against al-Qaeda. While these concerns are not directly related to the issue of proportionality, they point to the danger of viewing proportionality in isolation. Even if drones were on the whole proportionate, this does not discount the potentially negative effects that a particular disproportionate strike, or even too many proportionate strikes, might have on the other just war criteria.

Finally, the question of proportionality has been said to hinge on the policies that govern drone use, and the strategic considerations that undergird these policies. It could be argued that the higher rate of collateral damage in Pakistan compared to Afghanistan is explained by virtue of the fact that the CIA strikes are part of a counterterrorism rather than a counterinsurgency operation (McNeal 2012). In Afghanistan, winning the support of the local populations is at a premium. According to the military's rules of engagement in Afghanistan as of 2011, a single expected noncombatant casualty required approval from

the National Command Authority, namely the President or the Secretary of Defense. This reflects a strong commitment to minimizing collateral damage, and as a result, civilian deaths have been the exception rather than the rule. In Pakistan, there is less concern for 'hearts and minds' and greater emphasis placed on disrupting presumed terrorist activity. While there have been reports that the CIA program is 'kept under a tight leash', which suggests that CIA operations are subject to scrutiny by some body of elected officials that serve as a check on the decision to kill, the data we have examined indicate that this decision-making group does not share the same restraint as the military (BBC News 2012). This suggests that the CIA's proportionality balancing is, on the whole, arguably more tolerant of civilian casualties and less concerned with on-the-ground human rights issues in pursuit of its strategic objectives than the US military.

The disparity between CIA and military drones points to what one might call *the proportionality spectrum*: at the one end, the ability of drones to be very accurate (the less than 1 per cent of military strikes that caused collateral damage); in the middle, the 10 per cent military threshold; at the other end, the CIA strike rate that government officials claim are proportionate, but represent 23 per cent of strikes that caused collateral damage as well as other on-the-ground concerns. The range on this spectrum points to one of the inherent challenges of *jus in bello* proportionality, namely that proportionality can mean one thing here and another thing there, all under the umbrella of the same term, thus not really helping those not privy to classified information to adequately assess the morality of the strikes themselves.

We contend that while it is unreasonable that CIA drones attain the 1 per cent level met by the military because of different strategic concerns, the actual 23 per cent level is too high for drones to be considered, as proponents claim, proportional. To articulate this, we need to step outside the criterion of proportionality, and assess CIA drones according to a moral category calibrated to limited levels of force, what scholars are referring to as *jus ad vim*.¹⁰

Jus ad Vim and Drones

Traditionally, theorists have identified a sharp dichotomy between peace and war (Teson 2012). However, modern conflicts are occurring in regions where law enforcement mechanisms applicable to the former are not a viable option, while the level of hostilities deployed in the latter are not justifiable. More often than not, the threat does not emanate from a state, but from non-state actors operating from within a state that cannot, or does not, attempt to address this threat. As Walzer (2007: 480) has argued, the struggle against terrorism has created in-between spaces where lethal force is used on a consistent and limited scale, but war is not declared. As acts of limited force, drone strikes are a key tactic in the struggle against non-state actors who populate these areas, such as al-Qaeda and its affiliates. Their frequency, the unilateral character of their use (i.e. without the explicit consent of the Pakistani government), and public concerns centered on the extent to which capture, or other nonviolent measures, is really infeasible suggest that drone strikes are not acts of law enforcement. But nor should they be considered under the rubric of *jus ad bellum*. Although *jus ad bellum* is commonly understood to include any use of force, the distinction between limited force and war that arose in the nineteenth century when lawyers distinguished between formal acts of war and force short of war, such as reprisals

and emergency acts in times of necessity, has renewed importance in current armed conflicts (Neff 2005: 225–231, 239–241).

International law has evolved since the nineteenth century to severely restrict the use of force by one state against another, although anticipatory self-defense linked to weapons of mass destruction and humanitarian intervention poses significant challenges to the legalistic paradigm. In light of these challenges, Davis Brown (2011: 216) has recently argued for a torts-based approach that posits proportionality of cause as the ethical centerpiece. The level of force one state can use against another, he argues, is limited to countermeasures that induce the wrongdoing state to comply with its international legal obligations. However, the rise of non-state actors complicates matters significantly insofar as their status under international law is ambiguous, as is the manner in which states can act against the threat that they are perceived to pose. In this context, Eric Heinze observes that international law has been interpreted – by the USA in particular, albeit amid considerable controversy – as permitting strong states to intervene in weak states who cannot control what occurs within their borders. The consequence, as Heinze illustrates, is ‘the expansion of the right of self-defense under international law’ in a ‘limited and targeted fashion’ against non-state actors within another state. Heinze (2011: 1080–1082) references a 2002 drone strike against al-Qaeda that government officials – again not without controversy – cited as a legal precedent that legitimated the rationale guiding drone strikes in Pakistan.

Proponents of drone strikes have viewed their use in Pakistan as part of an ongoing war against the Taliban, or as countermeasures against the imminent threat of al-Qaeda. In the case of an ongoing war, the criteria of *jus ad bellum* would presumably have already been satisfied, with only the *jus in bello* rules applying. In the case of the latter, drone advocates argue that the threat is actually quite severe, that threshold of last resort has been crossed because capture is infeasible, or that the threat is uncertain enough but with sufficiently dire consequences that it is necessary to use drones preventively against a broad target range.¹¹ However, both the rationale that drone strikes in Pakistan are part of an ongoing war and the argument that security threats require controversially preventive measures may fail to offer a satisfying justification. If one accepts the premise in such strikes, the real level of threat is diminished because of severe conditions of asymmetry, then, as Galliot (2012: 64) has specifically argued in the context of drones, ‘the solution is for the application of military force to be very restrained’ – something more than international policing but less than war.

In light of the shortcomings of both the war and preventive response arguments, a theory of *jus ad vim* would be particularly helpful. This approach provides justification for the use of force that would be unacceptable in a law enforcement context, without invoking the permissive authorities of actual war. Whereas in war, principles such as just cause and last resort need only be satisfied at the outset of a conflict, *jus ad vim* requires that they be continually reassessed in advance of each use of force. Additionally, by moving beyond the persistent and broad nature of a general threat that one assumes in warfare, and examining individual operations geared towards a particular threat, a theory of *jus ad vim* makes it possible to assess whether the response is calibrated to the gravity of that threat. This nuanced approach proves essential when examining the proportionality of drone strikes.

In our previous article on *jus ad vim*, we explored how the traditional *jus ad bellum* principles would differ in a *jus ad vim* context, while also adding an additional

criterion – the probability of escalation. The initial phase of our argument demonstrates that ‘the ability to act on just cause is expanded in the sense that a more favorable proportionality calculus makes it more likely that ethical restraints will be satisfied’. On the surface, this would appear to provide justification for the CIA’s use of drones and actualize the fears cited by Coady (2008) that a theory of *jus ad vim* would lead to an abuse of the use of force.¹² However, we see *jus ad vim* as necessarily less destructive and more attentive to noncombatant rights than war, and therefore inherently more restricted in the violence that can be legitimated. We thus go on to argue that the use of limited force must satisfy the probability of escalation criterion, which means that limited force should not run the risk of increased violence. Moreover, we argue that there must be ‘a strict relationship between *jus ad vim* and the *jus in bello* principles of proportionality and discrimination’ (Brunstetter & Braun 2013: 100–101). As we explain below, this would severely restrict the scope of proportionality balancing that could be employed when using force short of war, compared to what is permissible in war, and thus serve to allay the fears expressed by Coady.¹³

How would a theory of *jus ad vim* constrict the way in which states use limited force? On the one hand, it means that there is ‘less moral latitude for inflicting unintended harm on noncombatants’ (101). In addition, moving beyond the paradigm of proportionality that tends to be applied to drone strikes, ‘harm’ is not simply measured in deaths, but also in human rights concerns that deeply and negatively affect civilian lives. This means that the security of one’s own civilians from a vague threat does not justify transferring the risk of harm to the civilians in a distant land. Thus:

a state undertaking *jus ad vim* actions... cannot forego the rights of the Other for the sake of a state’s security (or the rights of its own civilians or combatants), which can (arguably) be legitimate in *jus ad bellum*. While some form of force might be legitimate because just cause is satisfied, the limited nature of the threat means that the scope of force applied must also be limited in ways that uphold human rights. (Brunstetter & Braun 2013: 101)

The theory of *jus ad vim* so described has two important implications for the CIA’s use of drones in counterterrorism campaigns. First, the threshold of harm that can be committed against civilians should be lower than in zones of war. Why? Because the threat that justifies the use of limited force is less grave than the threat in war, meaning that the military advantage of neutralizing that threat is smaller. Insofar as the military advantage is smaller, collateral damage is less justifiable, which means that the threshold of acceptable excess destruction – the killing of civilians – is lower than what is allowed in war. When viewed through the lens of *jus ad vim*, the CIA’s proportionality balancing in Pakistan described above is thus highly problematic. As we have shown, the CIA’s view of proportionality incorporated the killing of a percentage of civilians that is higher than what is acceptable in war, in pursuit of a military advantage broadly understood in terms of denying safe havens for suspected terrorists (as opposed to thwarting an attack about to occur). Recall that the data show that the majority of strikes killed suspected militants, while the notion of imminence used by the US government is highly opaque (Brunstetter 2012). However, in the context of limited force, such a view of proportionality is distorted. Killing individual terrorists who are still many thousands of miles away from the USA and several steps away from any potential attack would be a violation of the more restrictive *jus ad vim* logic. Because the connection between these actors and future harm to Americans is usually highly attenuated – that is, the threat they pose is necessarily more removed – a stricter standard regarding permissible civilian casualties compared to war should be

imposed. Under this restrictive logic, *jus ad vim* does not permit targeting unidentified individuals based on patterns of suspicious behavior – signature strikes – because the threat is necessarily uncertain, while the probability that non-militants will be targeted inadvertently is unacceptably high.¹⁴

Second, the human rights of civilians living under drones cannot be violated in order to protect the rights of US citizens. The attenuated threat produces a much more restrictive principle of proportionality, one that needs to be concerned not only with the loss of civilian life but also the more subtle harms including property destruction, post-traumatic stress disorder and social disruption caused by the persistent threat of drones. As a recent report by New York University and Stanford made clear, the US government needs to factor in the full spectrum of social and political effects resulting from drones' persistent and ominous presence over Pakistani communities.

If we judge the CIA's use of drones in Pakistan according to the standards of *jus ad vim*, then it falters on both counts. As we saw in the previous section, the collateral damage rate of CIA drones was considerably higher than that permitted by the US military in war, meaning that the CIA's proportionality calculus would fail to uphold the strict relationship between the use of force short of war and the *jus in bello* principles that *jus ad vim* requires. In addition, there is considerable evidence that suggests that risk is being transferred to Pakistani civilians, whose human rights are negatively affected due to both civilian casualties and the perpetual threat of drone strikes. Such an assessment casts a dark shadow on claims that CIA drones are proportional.

This does not mean that drones are never permitted to protect American lives from terrorists operating in these regions, but rather, that the protection of American lives from the potentially non-imminent threats targeted in signature strikes and other drone attacks does not warrant the proportionality balancing currently practiced by the CIA or the punishing toll on civilians that result from a perpetual drone campaign. If strikes are to be justified they will need to conform to a highly restrictive standard of proportionality and exhibit strong respect for human rights. Such strikes would need to target a known individual who poses a significant threat or whose death would produce a significant military advantage, while collateral damage would only be justified on rare occasions, at low levels and in response to an extreme threat.

Conclusion

This article has explored several fallacies of proportionality with regards to drones that permeate US government discourse and scholarly work, namely the use of comparisons between drones and other historic eras, weapons or tactics as a basis for establishing their proportionality. To contextualize government claims that drones are proportional, we highlight the disparity between the CIA's performance in Pakistan and the US military's standards of proportionality, marked by a 10 per cent collateral damage threshold (and 1 per cent actual rate of collateral damage for drone strikes in Afghanistan). We argue that the 23 per cent of CIA drone strikes that killed non-militants revealed by our analysis of relevant data raises serious concerns about the CIA's proportionality balancing calculus and understanding of the principle of proportionality. This part of our analysis suggests that the rhetoric of proportionality utilized by the government is masking something important, namely a proportionality threshold that permits higher civilian collateral damage employed by the CIA that what the US military would accept.

This observation points to two ways to refocus the drone debate. First, the juxtaposition of US military and CIA drone programs highlights the importance of the strategic decisions made about how to conduct counterinsurgency versus counterterrorism operations, gauge the rules of engagement, and calculate collateral damage thresholds. Regardless of whether one thinks an average of 23 per cent of strikes causing collateral damage is too high, it is clear that drones are capable of far greater proportionality than has been exercised in Pakistan. If targeted killing is going to continue to be an integral part of the US's ongoing fight against al-Qaeda, as all indications suggest, refining these policies will take on increasing importance.

Thus secondly, the government needs to update its moral vocabulary to take into account the particularities of using drones in an asymmetric struggle against non-state actors outside an official zone of war. Recent reports indicate that the Obama administration is planning to shift CIA drone operations to the Pentagon in the future (Klaidman 2013). These operations would likely be placed under the Joint Special Operations Command. As this transition happens, there are likely to be important revisions to the operating policies. If drones' capacity for proportionality is to be fully actualized, this will require synthesizing disparate proportionality standards to form a coherent policy. We have suggested employing an ethical framework calibrated to the use of force short of war – *jus ad vim*. The ambiguity of international law in light of the rising threat of non-state actors, combined with the dramatic increase in the use of limited force facilitated by drone technology, points to the need of a recalibrated ethical framework to evaluate acts of limited force, such as drone strikes in Pakistan. Such a framework would place greater scrutiny on the current proportionality balancing calculus of the CIA, while also bringing to the fore additional factors, such as human rights concerns, that are beyond the scope of traditional *jus in bello* proportionality. Creating an ethical framework for drone use based on *jus ad vim* would require working through a host of challenging questions that are beyond the scope of this argument, but we hope our initial analysis shows that the common refrain that drone use is proportionate leaves much to be desired, and that achieving ethical drone operations requires a more calibrated moral framework.

NOTES

1. 'Drones' is a colloquial term for what other academic literature refers to as unmanned aerial vehicles (UAVs) and remotely piloted vehicles (RPAs). The military originally introduced the term UAVs to distinguish drones from traditional aircraft with a pilot in the cockpit. The term RPA was subsequently introduced to indicate that the aircraft are still controlled by human operators. For the sake of clarity and readability, we have decided to employ the generic term 'drone'.
2. For a discussion of this and other rhetoric on drones, see Plaw (2013: 130–131).
3. Details can be found at: http://www.aclu.org/files/dronefoia/dod/drone_dod_aclu_drones_joint_staff_slides_1-47.pdf; <http://www.lockheedmartin.com/content/dam/lockheed/data/mfc/pc/hellfire-ii-missile/mfc-hellfire-ii-pc.pdf>
4. The Obama administration controversially identified all males over the age of 18 as combatants, which raises a host of concerns about the CIA's proportionality balancing. The New America Foundation data we use, however, attempt to compensate for this gross abnormality through its cautious approach in defining categories of individuals, and in providing a category of unknowns.

5. For a discussion of some of the challenges, see Plaw (2013: 135–136).
6. For details, see Chairman, Joint Chiefs of Staff (2009).
7. For a discussion of the pros and cons of additional sources for data on drone strikes, see Plaw (2013: 136–137). The three leading databases for tracking casualties related to US drone strikes are maintained by the New America Foundation, *The Long War Journal* and the Bureau of Investigative Journalism. *The Long War Journal* consistently reports the lowest number of civilian casualties, while the Bureau of Investigative Journalism represents the highest. The New America Foundation's estimates are somewhere in between. The New America Foundation maintain a most rigorous and explicit methodology, which requires double confirmation to report either a militant or a civilian casualty. Moreover, they utilize a category of 'unknowns' in instances where there is only a single report of civilian casualties or the evidence is ambiguous. For these reasons, we chose to use New America's data as the basis for our analysis. The period 2004–12 covers the initial turn to using CIA drones in fighting terrorism under the Bush administration, Obama's acceleration of their use under the cloak of plausible deniability, and the period of considerable public outcry regarding their legal and ethical stature. At the time of writing – early 2013 – the US government is working to reel in the use of CIA drones and design an ethical code to govern their use, with the concept of proportionality playing an important, albeit problematic, role. As a result, the number of strikes has decreased significantly, along with the number of civilian casualties, although few concrete details are known about what ethical rules are governing drone use. We hope that the present study can clarify how certain ethical terminology is being (mis) used and provide insight into the way in which drone use is ethically understood and discussed.
8. For example, if the military advantage gained from these strikes were negligible and there were significant injuries to civilians or deterioration in their quality of life, one could make the case that the harm was in fact excessive. We thank Robert Sparrow for bringing this to our attention.
9. It may be the case that some of the strikes were aimed at leaders, but killed other people instead. Such precise data, unfortunately, are not available. If this were the case, it would suggest problems with on-the-ground intelligence and/or with the proportionality calculus being used that would permit such risky strikes.
10. Ronald Arkin (2010) also identifies the dangers of drone use on the battlefield, insofar as humans remain in the loop. As a way forward, he argues for the development of autonomous unmanned systems that would be significantly better than error-prone humans in following *jus in bello* principles under conditions of duress and uncertainty. This, however, misses a step in the process, namely the need to first discern a clear set of standards – what we call *jus ad vim* – to govern the particular contexts in which drones have come to be used.
11. On the rhetoric of preventive drone use, see Fisk and Ramos (2013).
12. For an excellent critique of Coady's reservations regarding *jus ad vim*, see Ford (2013: 67–70).
13. A similar argument is made by Ford (2013: 67), who argues that the moral purchase of *jus ad vim* in helping statesmen and soldiers evaluate contexts where lethal force short of war is a viable option is found in the ethical claim 'that the actual use of lethal force should be more constrained than we permit in war'.
14. Here our understanding of threat should be understood as distinct from the US government's rather opaque interpretation. The standard we use maintains that a threat

is imminent, and thereby justifies the use of force, in cases of 'a person literally in the process of using deadly force' (Ramsden 2011: 403).

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