

The costs and consequences of drone warfare

MICHAEL J. BOYLE*

On 21 June 2010, Pakistani American Faisal Shahzad told a judge in a Manhattan federal court that he placed a bomb at a busy intersection in Times Square as payback for the US occupations of Afghanistan and Iraq and for its worldwide use of drone strikes. When the judge asked how Shahzad could be comfortable killing innocent people, including women and children, he responded: ‘Well, the drone hits in Afghanistan and Iraq, they don’t see children, they don’t see anybody. They kill women, children, they kill everybody. It’s a war and in war, they kill people. They’re killing all Muslims.’¹ In a videotape released after his arrest, Shahzad revealed that among his motives for the attack on New York City was revenge for the death of Baitullah Mehsud, a Pakistani Taliban leader killed in a drone strike in August 2009.² While his comments were reported in the American press, the Obama administration never acknowledged that it was revulsion over drone strikes—which Shahzad was rumoured to have seen at first hand when training with militant groups in Pakistan—that prompted his attack.³ In his official statement on the attack, President Obama fell back on language reminiscent of his predecessor to describe Shahzad as just another of those ‘who would attack our citizens and who would slaughter innocent men, women and children in pursuit of their murderous agenda’ and ‘will stop at nothing to kill and disrupt our way of life’.⁴ That the Times Square attack was blowback from the growing use of drone strikes in Afghanistan, Pakistan and elsewhere was never admitted.

The failed Times Square bombing marked the first arrival of blowback from President Obama’s embrace of a drones-first counterterrorism policy on American

* The author is grateful to Michael Dillon, Miguel Glatzer, Emma Leonard and an anonymous reviewer for helpful comments on this article.

¹ Scott Shifrel, Alison Gendar and Jose Martinez, ‘Remorseless Times Square car bomber Faisal Shahzad warns “We will be attacking the US”’, *New York Daily News*, 22 June 2010, http://articles.nydailynews.com/2010-06-22/news/27067807_1_drone-strikes-muslim-soldier-bomb, accessed 16 Dec. 2012.

² Chris Dolmetsch, ‘Times Square bomber vows revenge in Al-Arabiya video’, *Washington Post*, 14 July 2010, <http://www.washingtonpost.com/wp-dyn/content/article/2010/07/14/AR2010071404860.html>, accessed 16 Dec. 2012.

³ It is important to stress that this has been rumoured, but not confirmed. See Bruce Golding, John Doyle and Dan Mangan, ‘Taliban lackey’s twisted mission’, *New York Post*, 5 May 2010, http://www.nypost.com/p/news/local/taliban_lackey_Su3wybDRpAYfahVx03zskI, accessed 16 Dec. 2012.

⁴ Jesse Lee, ‘President on Times Square: “But as Americans, and as a nation, we will not be terrorized”’, *White House Blog*, 4 May 2010, <http://www.whitehouse.gov/blog/2010/05/04/president-times-square-americans-and-a-nation-we-will-not-be-terrorized>, accessed 16 Dec. 2012.

soil. There is no reason to believe it will be the last. When President Obama came into office, he pledged to end the ‘war on terror’ and to restore respect for the rule of law to America’s counterterrorism policies. Instead, he has been just as ruthless and indifferent to the rule of law as his predecessor. The basic dimensions of American counterterrorism policy have barely changed between the two administrations, though there has been a shift in tone and emphasis.⁵ While President Bush issued a call to arms to defend ‘civilization’ against the threat of terrorism, President Obama has waged his war on terror in the shadows, using drone strikes, special operations and sophisticated surveillance to fight a brutal covert war against Al-Qaeda and other Islamist networks. The Obama approach, which emphasizes relatively few ‘boots on the ground’ and avoids nation-building missions, has been described by members of his administration as efficient, and even morally necessary, given the state of the US economy and the war-weariness of the American people.⁶ Among the most distinctive elements of the Obama approach has been an embrace of Unmanned Aerial Vehicles (UAVs) or drones. During his first term, President Obama launched more than six times as many drone strikes as President Bush did throughout his eight years in office, all the while keeping the CIA-run drone programme away from the scrutiny of Congress and the courts.⁷ The US is now using drone strikes to kill terrorist suspects in at least four states (Afghanistan, Pakistan, Yemen and Somalia), although drone strikes are rumoured to have been used in other places.⁸ The campaigns in Pakistan, Yemen and Somalia are run by the CIA, with little congressional oversight, and their existence has even been denied by the Obama administration in the courts.⁹ Most Americans remain unaware of the scale of the drone programme operating in these countries and of the destruction it has caused in their name.

Much of the existing debate on drones has focused on their legality under international and domestic law and their ethical use as a weapon of war.¹⁰ Setting

⁵ See esp. Jack Goldsmith, *Power and constraint: the accountable presidency after 9/11* (New York: Norton, 2012).

⁶ This approach has been defended by the administration as ‘leading from behind’, a phrase that has attracted ridicule from Republicans. The original defence was in Ryan Lizza, ‘The consequentialist: how the Arab Spring remade Obama’s foreign policy’, *New Yorker*, 2 May 2011, http://www.newyorker.com/reporting/2011/05/02/110502fa_fact_lizza, accessed 16 Dec. 2012.

⁷ According to data collected by the New America Foundation, the Obama administration launched 284 drone strikes between 2009 and September 2012. By comparison, the Bush administration launched 46 strikes between 2004 and 2008. For data, see <http://counterterrorism.newamerica.net/drones>, accessed 16 Sept. 2012.

⁸ There is significant evidence that drones have been used in these cases, and unconfirmed rumours that they have been used in other countries, including Libya and Mali.

⁹ Ari Melber, ‘Exposing Obama’s not-so-secret war’, *Politico*, 12 June 2012.

¹⁰ On the legality of drones, see the official administration position in transcript of remarks by John O. Brennan, Assistant to the President for Homeland Security and Counterterrorism, ‘The efficacy and ethics of US counterterrorism strategy’, Woodrow Wilson Center, Washington DC, 30 April 2012. For critiques, see UN Human Rights Council, ‘Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Philip Alston’, 28 May 2010, <http://www2.ohchr.org/english/bodies/hrcouncil/docs/14session/A.HRC.14.24.Add6.pdf>, accessed 16 Dec. 2012; Mary Ellen O’Connell, ‘Unlawful killing with combat drones: the case of Pakistan 2004–2009’, in Simon Bronitt, ed., *Shooting to kill: the law governing lethal force in context*, Legal Studies Research Paper 09-43 (Notre Dame, IN: Notre Dame Law School, July 2010), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1501144, accessed 16 Dec. 2012. On the moral use of drones, see Bradley Jay Strawser, ‘Moral predators: the duty to employ uninhabited aerial vehicles’, *Journal of Military Ethics* 9: 4, 2010, pp. 342–68; Robert Sparrow, ‘Killer robots’, *Journal of Applied Philosophy* 24: 1, 2007, pp. 62–77; Scott Shane, ‘The moral case for drones’, *New York Times*, 14 July 2012; Caroline Kennedy and Nicholas Rengger, ‘The new assassination bureau: on the “robotic turn” in contemporary war’, Carnegie Council for Ethics and

these issues largely aside, this article will make a different case: that the Obama administration's growing reliance on drone strikes has adverse strategic effects that have not been properly weighed against the tactical gains associated with killing terrorists. The article will focus primarily on the strategic costs of the CIA-run drone campaigns outside active theatres of war (specifically, Pakistan, Yemen and Somalia) and will not examine the benefits and costs of drones in active theatres of war such as Afghanistan.¹¹ It will challenge the conventional wisdom that drone strikes in the ungoverned spaces of these countries are highly effective by contrasting claims about their relative efficiency at killing 'bad guys' with their political effects in the states where they are used. It will argue that drone strikes corrode the stability and legitimacy of local governments, deepen anti-American sentiment and create new recruits for Islamist networks aiming to overthrow these governments. Despite the fact that drone strikes are often employed against local enemies of the governments in Pakistan and Yemen, they serve as powerful signals of these governments' helplessness and subservience to the United States and undermine the claim that these governments can be credible competitors for the loyalties of the population. This dynamic makes the establishment of a stable set of partnerships for counterterrorism cooperation difficult, if not impossible, because these partnerships depend upon the presence of capable and legitimate governments that can police their territory and efficiently cooperate with the United States. In this respect, American counterterrorism policy operates at cross-purposes: it provides a steady flow of arms and financial resources to governments whose legitimacy it systematically undermines by conducting unilateral drone strikes on their territory. This article will further argue that a drones-first counterterrorism policy is a losing strategic proposition over the long term. The Obama administration's embrace of drones is encouraging a new arms race for drones that will empower current and future rivals and lay the foundations for an international system that is increasingly violent, destabilized and polarized between those who have drones and those who are victims of them.

The myth of drone effectiveness

The chief argument in favour of the use of drones is that they are highly effective at killing terrorist operatives in inaccessible regions without causing significant civilian casualties. This argument has recently become the near-consensus position among leaders of the major government agencies involved in counterterrorism policy in Washington.¹² Defense Secretary Leon Panetta has argued that drones are

International Affairs, 6 Nov. 2012, http://www.carnegiecouncil.org/publications/ethics_online/0075.html, accessed 16 Dec. 2012.

¹¹ This article makes a distinction between the CIA-run programme that is 'kept off the books' and strikes targets in Pakistan, Yemen and Somalia, and the Pentagon-run programme which operates in tandem with normal military operations in Afghanistan and is subject to the existing rules for targeting and oversight that other military operations employ. There is an argument that the Pentagon drone programmes operating in Afghanistan may also be strategically unwise, but for the sake of clarity the focus here is on the CIA-run programmes in countries where the US is not engaged in active armed conflict.

¹² This was not always the consensus position. In 2002, CIA director George Tenet was quoted as saying that it

remarkably precise and limited in terms of collateral damage, and were ‘the only game in town in terms of trying to disrupt the al Qaeda leadership’.¹³ Similarly, former CIA Director Michael Hayden has said that drone strikes have made regions like Pakistan’s Federally Administered Tribal Areas (FATA) ‘neither safe nor a haven’ for Al-Qaeda and its affiliated networks.¹⁴ The chief counterterrorism advisers for both the Bush and Obama administrations have endorsed drones. Former Bush counterterrorism adviser Juan Zarate said that drone strikes had knocked Al-Qaeda ‘on its heels’ because of the death of so many leading operatives.¹⁵ John Brennan, the chief counterterrorism adviser to President Obama, has insisted that targeted strikes are wise, ethical and necessary given the realities of attacking terrorist operatives in remote or inaccessible regions.¹⁶ Outside the administration, there appears to be little substantial opposition to this policy of killing by drone, even among the President’s fiercest opponents in the Republican Party.

Arguments for the effectiveness of drones can be subdivided into four separate claims: (1) that drones are effective at killing terrorists with minimal civilian casualties; (2) that drones have been successful at killing so-called ‘high value targets’ (HVTs); (3) that the use of drones puts such pressure on terrorist organizations that it degrades their organizational capacity and ability to strike; and (4) that a cost–benefit analysis of their use relative to other options—such as the deployment of ground troops—provides a compelling argument in their favour. None of these claims should be taken at face value. The evidence behind each is often less compelling than is assumed, in part because reliable data on the drone strikes and their effects are difficult to obtain. Some of these arguments are based on dubious counterfactuals that try to measure the costs of drone strikes against the effects of prevented, and entirely hypothetical, enemy attacks.¹⁷ Others conflate efficiency—that is, an advantageous ratio of inputs to outputs in executing an activity—with the effectiveness of a particular action in achieving a wider goal. Still others operate with an attenuated notion of effectiveness which focuses exclusively at the tactical level without considering the wider strategic costs of drone warfare. The position of the American foreign policy establishment on drones—that they are an effective tool which minimizes civilian casualties—is based on a highly selective and partial reading of the evidence.

First, the claim that drones are effective at killing terrorist operatives without causing civilian casualties is based on data of questionable reliability and validity.

would be a ‘terrible mistake’ to allow anyone in his position to fire a weapon like this (cited in Jane Mayer, ‘The predator war’, *New Yorker*, 29 Oct. 2009). According to the 9/11 Commission report, Tenet believed that the CIA had no authority to pull the trigger (cited in Tom Junod, ‘The lethal presidency of Barack Obama’, *Esquire*, Aug. 2012).

¹³ Quoted in ‘US airstrikes called “very effective”’, CNN.com, 18 May 2009, http://articles.cnn.com/2009-05-18/politics/cia.pakistan.airstrikes_1_qaeda-pakistani-airstrikes?_s=PM:POLITICS, accessed 16 Dec. 2012.

¹⁴ Quoted in CNN.com, ‘US airstrikes called “very effective”’.

¹⁵ Quoted in Mayer, ‘The predator war’.

¹⁶ Brennan, ‘The efficacy and ethics of US counterterrorism strategy’.

¹⁷ It is possible to track the correlation between the onset or escalation of drone strikes and a reduction of the tempo of enemy attacks, but this does not prove causation. Many factors, not just drone strikes, will determine the tempo of enemy operations. Moreover, it is impossible to know how many attacks were prevented by drone strikes because this is measuring a non-event.

The US government has classified almost all the details of the drones programmes and has never provided definitive tallies of the number of strikes or the casualties from these strikes.¹⁸ No one—among either advocates or critics—really knows the number of deaths caused by drones in these distant, sometimes ungoverned, lands. In the absence of official government statistics, a number of independent organizations have produced data on drone strikes based largely on newspaper reports and intelligence sources. There is substantial variation in the total deaths claimed for drone strikes across these databases. According to widely cited data collected by the New America Foundation, 334 drone strikes were conducted in Pakistan between June 2004 and October 2012.¹⁹ President Obama is responsible for a vast increase in the number of drone strikes, with 288 strikes (86 per cent of the total) conducted in Pakistan alone between January 2009 and October 2012. No precise casualty figures are available for each strike, only estimates based on often conflicting news reports. The casualty range is between 1,886 and 3,191 deaths for the period 2004–2012, which suggests an average of 5.6 to 9.5 people killed per strike. The Bureau of Investigative Journalism (TBIJ) has compiled its own data on strikes in Pakistan and found that 346 drone strikes were conducted between June 2004 and October 2012. They have arrived at a death toll of 2,570–3,337 deaths, which indicated an average of 7.4 to 9.6 people killed per strike.²⁰ TBIJ also reported that between 1,232 and 1,366 Pakistanis have been injured in drone strikes during this eight-year period. In Yemen, TBIJ reports 40–50 confirmed US drone strikes from 2002 to September 2012, with a total death toll of between 357 and 1,026.²¹ In Somalia, there have been between three and nine drone strikes, with a total death toll between 58 and 170.

The aggregate numbers tell only part of the story of drone strikes. The New America Foundation classifies approximately 85 per cent of those killed between 2004 and 2012 as ‘militants’.²² According to their data, the accuracy of drone strikes has increased over time. Between 2004 and 2007, civilians constituted over 50 per cent of the casualties from drone strikes in Pakistan, but only 1 per cent of all casualties in 2011.²³ Taken at face value, these data suggest that Brennan was correct when he argued that civilian casualties from drone strikes in Pakistan are ‘exceedingly rare’.²⁴ TBIJ is more circumspect about calling the victims of drone strikes

¹⁸ It has provided some details for the drone strikes in Afghanistan, though the number of casualties produced by these strikes has never been publicly reported. Between 2009 and October 2012, the US engaged in 1,160 ‘weapons releases’ from remotely targeted aircraft. See Noah Shachtman, ‘Military stats reveal epicenter of US drone war’, *Wired*, 9 Nov. 2012, <http://www.wired.com/dangerroom/2012/11/drones-afghan-air-war/>, accessed 16 Dec. 2012.

¹⁹ See New America Foundation, ‘The year of the drone’, <http://counterterrorism.newamerica.net/drones>, accessed 16 Dec. 2012.

²⁰ TBIJ, ‘September 2012 update: US covert actions in Pakistan, Yemen and Somalia’, <http://www.thebureauinvestigates.com/2012/10/01/september-2012-update-us-covert-actions-in-pakistan-yemen-and-somalia/>, accessed 16 Dec. 2012.

²¹ One of the complicating aspects in relation to Yemen is that TBIJ reports that there have been between 117 and 133 additional US operations (such as special forces operations) which may increase the casualty total. TBIJ, ‘September 2012 update’.

²² This analysis is current as of 1 Oct. 2012. See New America Foundation, ‘The year of the drone’.

²³ The New America Foundation estimated that between 2004 and 2007 civilians accounted for 54–61% of all casualties from drone strikes. See New America Foundation, ‘The year of the drone’.

²⁴ Quoted in Brian Bennett and David S. Cloud, ‘Obama’s counterterrorism advisor defends drone strikes’, *Los*

'militants', but it does keep a running total of the number of civilians killed in drone strikes. According to its data, the civilian casualty numbers range between 18 and 26 per cent of the deaths from drone strikes in Pakistan, approximately 16 per cent of the deaths from drone strikes in Yemen, and between 7 and 33.5 per cent of the deaths from drone strikes in Somalia.²⁵ Advocates of drones have argued that these civilian casualty ratios, combined with the low financial cost of drones and the absence of risk to US personnel in their operation, make a compelling case for drones as an efficient and moral weapon of war.²⁶

The wide variation in the estimates of 'militants' and 'civilians' killed across these two datasets raises some questions about the validity and reliability of the underlying news reports. First, it is nearly impossible to verify the number of civilians killed in a drone strike. Most of these drone strikes are concentrated in ungoverned spaces of Pakistan, Yemen and Somalia where the central government has only limited ability to monitor attacks or investigate their effects. As a result, most of the casualty estimates are educated guesses, varying significantly in both numbers and types of victims.²⁷ Moreover, casualties from drone strikes are removed from the area of the attack and buried by sunset in accordance with Muslim law, which makes verification of the numbers killed and the identity of the victims nearly impossible.²⁸ Second, government and intelligence officials in both the United States and the targeted states often assert without evidence that all those killed were either 'militants' or 'civilians'.²⁹ These assertions are often presented as fact in the newspaper articles that underlie most of the available datasets. Third, the casualty numbers are subject to a considerable amount of spin on all sides.³⁰ For example, Islamist groups inflate the number of people killed in US strikes and aggressively push their higher casualty totals to local and international media outlets. Similarly, the US often underestimates the number of casualties from drone strikes, even when the available evidence suggests that some civilian deaths have occurred. For example, Brennan declared that there were absolutely no civilian casualties from drone strikes between June 2010 and June

Angeles Times, 30 April 2012, <http://articles.latimes.com/2012/apr/30/world/la-fg-brennan-drones-20120501>, accessed 16 Dec. 2012.

²⁵ These numbers are calculated by comparing the high and low civilian casualty totals with the high and low total casualty numbers. TBIJ, 'September 2012 update'.

²⁶ Shane, 'The moral case for drones'; Matthew Fricker, Avery Plaw and Brian Glyn Williams, 'New light on the accuracy of the CIA's predator drone campaign in Pakistan', *Terrorism Monitor* 8: 41, 11 Nov. 2010, pp. 8–13.

²⁷ One recent attempt by the Human Rights Clinic at Columbia Law School to examine the underlying sources for drone strikes, considering only drone strikes in Pakistan in 2011, illustrates these difficulties. It found that it could confirm that between 456 and 661 people were killed, of whom 330–575 were identified as 'militants' and 72–155 as 'civilians'. These ranges indicate the degree of uncertainty in casualty estimates for drone strikes. It is also worth noting that the authors concluded that their estimates were most consistent with those produced by TBIJ. See Columbia Law School Human Rights Clinic, 'Counting drone strike deaths', Oct. 2012, http://web.law.columbia.edu/sites/default/files/microsites/human-rights-institute/COLUMBIA_CountingDronesFinalNotEmbargo.pdf, accessed 16 Dec. 2012.

²⁸ Micah Zenko, 'Raising the curtain on US drone strikes', Council on Foreign Relations, Washington DC, 2 June 2010.

²⁹ International Human Rights and Conflict Resolution Clinic (Stanford Law School) and Global Justice Clinic (NYU School of Law), *Living under drones: death, injury and trauma to civilians from US drone practices in Pakistan*, Sept. 2012, p. 31.

³⁰ Peter Bergen and Katherine Tiedemann, 'Washington's phantom war: the effects of the US drone program in Pakistan', *Foreign Affairs* 90: 4, July–Aug. 2011, pp. 12–18.

2011.³¹ Against clear evidence to the contrary, another senior Obama administration official claimed that casualties were in the ‘single digits’ and suggested that those reporting hundreds of civilians dead were foolishly using enemy propaganda.³² While there are reasons to suspect that drone strikes are becoming more accurate and causing fewer civilian casualties than they did between 2004 and 2008, there is no reason to believe that the civilian death toll hovers in the single digits, and the estimates from the best-sourced database (TBIJ) suggest that the tallies of civilian deaths are much higher.³³

One reason why the US has been so successful in spinning the number of civilian casualties is that it has adopted a controversial method for tracking casualties which inflates the totals of ‘militants’ killed and systematically underestimates civilian casualties. According to a report in the *New York Times*, the US records all military-age males in a strike zone as ‘militants’ unless clear evidence to the contrary emerges after the attack.³⁴ This method assumes that anyone close to a targeted actor must be a ‘bad guy’ because of the high levels of operational security maintained by groups like Al-Qaeda. This assumption of guilt by association is unjustifiable for three reasons. First, no man—not even a hardened terrorist—is an island. As the Bin Laden raid illustrated, many ‘terrorists’ or ‘militants’ live with their families and have interactions with a range of actors—shopkeepers, suppliers, drivers—who are innocent but have fairly regular contact with them. Killing these people in drone strikes and presuming that they are guilty by association violates the principle of non-combatant immunity that lies at the heart of international humanitarian law. Second, drone strikes have expanded to target organizations such as the Taliban, the Haqqani network and other smaller Islamist groups which have lower levels of operational security and denser connections with the civilian population than Al-Qaeda has. It is likely that using drones to attack local militant networks more deeply embedded in the civilian population carries a higher risk of killing non-combatants. Third, many of the strikes are on residences in areas (such as Waziristan) where the cultural norm is for many family members to live together in a single, sometimes rudimentary, structure. In these instances, it is highly likely that the blast range from drone strikes will kill or wound women and children. For example, in Pakistan, TBIJ reports that 176 children have been killed in drone strikes since 2004.³⁵ Although some civilian casualties are inevitable in warfare, the direct targeting of these residences may increase the number of civilian casualties beyond what is considered proportionate. Even more strikingly, the Obama administration’s ‘guilt by association’ approach

³¹ Cited in Fricker et al., ‘New light on the accuracy of the CIA’s predator drone campaign in Pakistan’, p. 60. The authors note that none of the major databases for drone strikes, including their own UMass DRONE (University of Massachusetts Dartmouth Research on Operational Neutralization Events) data, substantiates Brennan’s claim.

³² Reported in Jo Becker and Scott Shane, ‘Secret “kill list” proves a test of Obama’s principles and will’, *New York Times*, 29 May 2012.

³³ The Stanford Law School and NYU School of Law *Living under drones* report argues that the TBIJ database is the most reliable because it cross-checks numbers from multiple sources, adjusts casualty totals when conflicts occur, and uses more local sources. See pp. 29–54.

³⁴ Reported in Becker and Shane, ‘Secret “kill list”’.

³⁵ TBIJ, ‘September 2012 update’.

implies an indifference to the combatant status of the potential victims that is at odds with the legal and moral responsibility to make this determination before killing them.³⁶

The result of the ‘guilt by association’ approach has been a gradual loosening of the standards by which the US selects targets for drone strikes. The consequences can be seen in the targeting of mosques or funeral processions that kill non-combatants and tear at the social fabric of the regions where they occur. In February 2012, TBIJ reported that in Pakistan alone US drone strikes had killed at least 50 civilians who were participating in attempts to rescue victims of a prior drone strike.³⁷ These so-called ‘double tap’ strikes have increased civilian casualties, as families of the victims and emergency services are now reluctant to come to the aid of those injured for fear that they will fall victim to a follow-on attack. The result is that those injured often lie suffering, and sometimes die, for lack of medical attention. These secondary attacks are now so common that one humanitarian organization has set a policy forbidding its staff from approaching a drone strike area for at least six hours after the attack.³⁸ A similar dynamic is apparent in strikes on funeral processions. According to TBIJ data, at least 20 civilians have been killed in drone strikes against funeral processions.³⁹ Some estimates of the casualties from attacks on funerals are even higher. In June 2009, a strike—rumoured to have been carried out by a drone, but never confirmed—targeted the funeral procession of a top Pakistani Taliban leader and is said to have killed as many as 60 people, including a number of leading Taliban figures.⁴⁰ Attacks like these illustrate how the standards of proportionality have been eroded with drone warfare, as the US has engaged in attacks that kill more civilians than combatants if they eliminate HVTs. Yet the deliberate targeting of civilian events like funeral processions, and the attacks on emergency services coming to the aid of victims, are neither proportionate nor justifiable, and would constitute war crimes if conducted in an active theatre of war.

The increasingly indiscriminate nature of the drone strikes can also be seen in the adoption of so-called ‘signature strikes’, where the targeting criterion is not the combatant status of an individual but rather their ‘pattern of behavior’.⁴¹ In these cases, strikes are authorized without knowledge of the identity of the target, solely on the basis of behaviour—such as gathering at a known Al-Qaeda compound, loading a truck with what appears to be bomb-making material or even crossing a border multiple times in a short period—that appears suspicious. The obvious risk is that more innocent civilians will be killed on the basis of a

³⁶ The Obama administration portrays itself as discriminate in its target selection for drone strikes and claims that it goes to significant lengths to avoid civilian casualties, but has been opaque about what standards it uses for selecting targets. It is therefore difficult, if not impossible, to determine whether its prior identification of a person as a combatant or non-combatant and its assessments of proportionality in authorizing strikes would meet the thresholds normally employed in just war theory.

³⁷ Scott Shane, ‘US said to target rescuers at drone strike sites’, *New York Times*, 5 Feb. 2012.

³⁸ Scott Shane, ‘Report cites high civilian toll in Pakistan drone strikes’, *New York Times*, 25 Sept. 2012.

³⁹ Shane, ‘US said to target rescuers at drone strike sites’.

⁴⁰ Pir Zubair Shah and Salman Masood, ‘US drone said to kill 60 in Pakistan’, *New York Times*, 23 June 2009.

⁴¹ Greg Miller, ‘CIA seeks new authority to expand Yemen drone campaign’, *Washington Post*, 18 April 2012.

misinterpretation of their behaviour by drone operators, or that the standards by which a 'pattern of life' is identified might be too lax.⁴² One senior State Department official remarked that when CIA officials see 'three guys doing jumping jacks' they assume it must be a terrorist training camp.⁴³ The dangers of a false positive—that is, a strike which kills only civilians by mistaking them for combatants—with signature strikes is much greater than with those strikes in which the target is identified, however imperfectly, in advance. At a more fundamental level, the adoption of signature strikes makes indiscriminate killing a policy and reflects an underlying indifference to the combatant status of potential victims that is at odds with much of the legal and ethical foundation of modern warfare.

The second major claim for the effectiveness of drone strikes is based on their ability to kill HVTs, defined as key operational and political leaders of Al-Qaeda and related groups. From the campaign trail to his time in office, President Obama has consistently maintained that he would not hesitate to use lethal force to remove leading figures in Al-Qaeda.⁴⁴ Yet the actual record of drone strikes suggests that forces under his command have killed far more lower-ranked operatives associated with other Islamist movements and civilians than HVTs from Al-Qaeda. Peter Bergen has estimated that the drone strikes have killed 49 high-ranking 'militant' leaders since 2004, only 2 per cent of the total number of deaths from drone strikes.⁴⁵ The remaining 98 per cent of drone strikes have been directed against lower-ranking operatives, only some of whom are engaged in direct hostilities against the United States, and civilians. Many of these actors pose no direct or imminent threats, but rather speculative ones, such as individuals who might some day attack the US or its interests abroad.⁴⁶ Even as President Obama has increased the number of drone strikes, the number of HVTs killed has 'slipped or barely increased'.⁴⁷ In 2010, a mid-ranking Haqqani network fighter concluded that 'it seems they really want to kill everyone, not just the leaders'.⁴⁸ The decision to expand targeted killing to this scale and take aim at even low-ranking 'foot soldiers' is unprecedented and sets the Obama administration's drone programme apart in both scale and character from targeted killing operations elsewhere.⁴⁹

⁴² See the discussion in Becker and Shane, 'Secret "kill list"'. The term 'patterns of life' comes from David S. Cloud, 'CIA drones have broader list of targets', *Los Angeles Times*, 5 May 2010. See also Stanford Law School and NYU School of Law, *Living under drones*, p. 12.

⁴³ Quoted in Becker and Shane, 'Secret "kill list"'.
⁴⁴ On the campaign trail in 2007–2008, the then Senator Obama maintained he would not hesitate to strike within Pakistan if an HVT such as Osama bin Laden, Ayman al-Zawahiri or another top Al-Qaeda commander were identified. At that time, he did not argue that the definition of an HVT would be expanded downwards to include lower-ranking operatives, or sideways to include indigenous militant networks.

⁴⁵ Peter Bergen, 'Drone is Obama's weapon of choice', CNN.com, 19 Sept. 2012, http://europe.cnn.com/2012/09/05/opinion/bergen-obama-drone/index.html?iid=article_sidebar, accessed 16 Dec. 2012.

⁴⁶ Rosa Brooks, 'Take two drones and call me in the morning', *Foreign Policy*, 12 Sept. 2012.

⁴⁷ Greg Miller, 'Increased US drone strikes in Pakistan killing few high value militants', *Washington Post*, 21 Feb. 2011.

⁴⁸ Jane Perlez and Pir Zubair Shah, 'Drones batter Al Qaeda and its allies in Pakistan', *New York Times*, 4 April 2010.

⁴⁹ This is an important point because much of the existing literature on targeted killing has focused on attacks against high-ranking leaders, rather than the rank and file, and even this literature has suggested very mixed results from a policy of targeted killing. The Israeli targeted killing programme most closely mirrors what

The extent to which the Obama administration has targeted lower-ranked operatives is not without consequences. Many of these lower-ranked operatives are densely connected to local tribal and clan structures. Their deaths in drone strikes may lead those connected to them by family and tribal ties to seek revenge, thus swelling the ranks of Al-Qaeda and its affiliate groups. As David Kilcullen and Andrew Exum have argued, 'every one of these dead noncombatants represents an alienated family, a new desire for revenge, and more recruits for a militant movement that has grown exponentially even as drone strikes have increased'.⁵⁰ Moreover, the vast increase in the number of deaths of low-ranking operatives has deepened political resistance to the US programme in Pakistan, Yemen and other countries. For example, while Pakistani officials have supported and even celebrated drone strikes against high-ranking operatives such as Baitullah Mehsud, they have taken a dimmer view of CIA attempts to kill mere foot soldiers with similar strikes.⁵¹ Such strikes tend to generate more political pressure on the Pakistani government to oppose the US than strikes against well-known figures whose leadership in militant networks was indisputable. Pakistani opposition leader Imran Khan has pointed directly to the deaths of civilians and low-level operatives as the reason why, if elected to office, he would order the air force to shoot down US drones.⁵² A similar dynamic has occurred in Yemen, where US drone strikes have driven more civilians into the ranks of Al-Qaeda and strengthened local insurgent forces challenging the Yemeni government.⁵³

Third, advocates of drones argue that they have been effective at placing sufficient pressure on terrorist activities to degrade their organizational capacity and ability to strike. The logic of this argument is that as drone strikes place pressure on its members, a terrorist group will begin to fracture, lose recruits and eventually collapse. There is certainly some evidence from anecdotal reports that militants have found it harder to operate due to drone attacks. In particular, the necessity

the Obama administration is doing, but Israel's programme was more limited and focused on high-level individuals in organizations like Hamas. There are also a number of reasons to suspect that Israel is a *sui generis* case and that inferences from its targeted killing programme cannot be extrapolated elsewhere. Among these reasons are the fact that Israel uses drone strikes in the West Bank and Gaza, where it has high levels of effective military control and dense networks of informers to allow it to identify its targets. On this point, see the helpful review in Stephanie Carvin, 'The trouble with targeted killings', *Security Studies* 21: 3, 2012, pp. 529–55. On targeted killing as a policy, see Daniel Byman, 'Do targeted killings work?', *Foreign Affairs* 85: 2, March–April 2006, pp. 95–111; Mohammed M. Hafez and Joseph M. Hatfield, 'Do targeted assassinations work? A multivariate analysis of Israel's controversial tactic during the Al-Aqsa uprising', *Studies in Conflict and Terrorism* 29: 4, 2006, pp. 357–83; Aaron Mannes, 'Testing the snake head strategy: does killing or capturing leaders reduce a terrorist group's activity?', *Journal of International Policy Solutions* 9, Spring 2008, pp. 40–49; Jenna Jordan, 'When heads roll: assessing the effectiveness of leadership decapitation', *Security Studies* 18: 4, Dec. 2009, pp. 719–55; Patrick Johnson, 'Does decapitation work? Assessing the effectiveness of leadership targeting in counterinsurgency campaigns', *International Security* 36: 4, Spring 2012, pp. 47–79.

⁵⁰ David Kilcullen and Andrew McDonald Exum, 'Death from above, outrage down below', *New York Times*, 16 May 2009, <http://www.nytimes.com/2009/05/17/opinion/17exum.html?pagewanted=all>, accessed 16 Dec. 2012.

⁵¹ For an account of the reaction of Pakistani officials to Mehsud's death, see Mayer, 'The predator war'. The quotation is from Miller, 'Increased US drone strikes in Pakistan'.

⁵² Palash R. Ghosh, 'I would order the air force to shoot down US drones: Pakistani opposition leader Imran Khan', *International Business Times*, 5 Oct. 2012.

⁵³ Sudarsan Raghavan, 'In Yemen, US air strikes breed anger, and sympathy for al-Qaeda', *Washington Post*, 29 May 2012.

to move constantly to avoid drone strikes has made it harder to train operatives and plan operations further afield.⁵⁴ Even Al-Qaeda has acknowledged the devastating effects of drone strikes, saying in a publication that they 'are seen: carnage, destruction, arrest and pursuit, but they themselves remain unseen, just like Satan and his ilk who see us while remaining unseen'.⁵⁵ In writings discovered after his death, Osama bin Laden lamented the impact of drone strikes and recommended that Al-Qaeda leaders flee Waziristan to safer terrain to avoid them.⁵⁶

Yet the evidence that drones inhibit the operational latitude of terrorist groups and push them towards collapse is more ambiguous than these accounts suggest.⁵⁷ In Pakistan, the ranks of Al-Qaeda have been weakened significantly by drone strikes, but its members have hardly given up the fight. Hundreds of Al-Qaeda members have fled to battlefields in Yemen, Somalia, Iraq, Syria and elsewhere.⁵⁸ These operatives bring with them the skills, experience and weapons needed to turn these wars into fiercer, and perhaps longer-lasting, conflicts.⁵⁹ In other words, pressure from drone strikes may have scattered Al-Qaeda militants, but it does not neutralize them. Many Al-Qaeda members have joined forces with local insurgent groups in Syria, Mali and elsewhere, thus deepening the conflicts in these states.⁶⁰ In other cases, drones have fuelled militant movements and reordered the alliances and positions of local combatants. Following the escalation of drone strikes in Yemen, the desire for revenge drove hundreds, if not thousands, of Yemeni tribesmen to join Al-Qaeda in the Arabian Peninsula (AQAP), as well as smaller, indigenous militant networks.⁶¹ Even in Pakistan, where the drone strikes have weakened Al-Qaeda and some of its affiliated movements, they have not cleared the battlefield. In Pakistan, other Islamist groups have moved into the vacuum left by the absence of Al-Qaeda, and some of these groups, particularly the cluster of groups arrayed under the name Tehrik-i-Taliban Pakistan (TTP), now pose a greater threat to the Pakistani government than Al-Qaeda ever did.⁶² Drone strikes have distinct political effects on the ecology of militant networks

⁵⁴ Perlez and Shah, 'Drones batter Al Qaeda and its allies in Pakistan'.

⁵⁵ Quoted in Brian Glyn Williams, 'The CIA's covert predator drone war in Pakistan 2004–2010: the history of an assassination campaign', *Studies in Conflict and Terrorism* 33: 10, 2010, p. 879.

⁵⁶ Pam Benson, 'Bin Laden documents: fear of drones', CNN.com, 3 May 2012, <http://security.blogs.cnn.com/2012/05/03/bin-laden-documents-fear-of-drones/>, accessed 16 Dec. 2012.

⁵⁷ Greg Miller, 'US officials believe Al Qaeda on the brink of collapse', *Washington Post*, 21 July 2011.

⁵⁸ Micah Zenko, 'The seven deadly sins of John Brennan', *Foreign Policy*, 18 Sept. 2012.

⁵⁹ The obvious precedent is the *mujahideen* in Afghanistan, many of whom scattered to different wars in places such as Algeria and Bosnia after the Soviet occupation ended. In some cases their presence was negligible, but in others these 'veterans' of the Afghan jihad joined forces with local insurgent groups and made conflict longer and bloodier than it might otherwise have been.

⁶⁰ Bruce Riedel, 'Al Qaeda 3.0: terrorism's emergent new power bases', *Daily Beast*, 3 Dec. 2012, <http://www.thedailybeast.com/articles/2012/12/03/al-qaeda-3-0-terrorism-s-emergent-new-power-bases.html>, accessed 16 Dec. 2012.

⁶¹ Zenko, 'The seven deadly sins of John Brennan'. Christopher Swift has argued that these fears of blowback from drone strikes in Yemen are overstated and that much of the recruitment to militant networks is due to poverty and lack of job opportunities. See Christopher Swift, 'The drone blowback fallacy', *Foreign Affairs*, 1 July 2012, <http://www.foreignaffairs.com/articles/137760/christopher-swift/the-drone-blowback-fallacy>, accessed 20 Dec. 2012.

⁶² The Pakistani Taliban is not a single or monolithic organization, but rather is shorthand for an array of groups with disparate interests and relationships with the Pakistani government. For a helpful overview, see C. Christine Fair, 'The militant challenge in Pakistan', *Asia Policy* 11, Jan. 2011, pp. 121–32.

in these countries, leaving some armed groups in a better position while crippling others. It is this dynamic that has accounted for the US decision gradually to expand the list of groups targeted by drone strikes, often at the behest of Pakistan. Far from concentrating exclusively on Al-Qaeda, the US has begun to use drone strikes against Pakistan's enemies, including the TTP, the Mullah Nazir group, the Haqqani network and other smaller Islamist groups.⁶³ The result is that the US has weakened its principal enemy, Al-Qaeda, but only at the cost of earning a new set of enemies, some of whom may find a way to strike back.⁶⁴ The cost of this expansion of targets came into view when the TTP inspired and trained Faisal Shahzad to launch his attack on Times Square.⁶⁵ Similarly, the TTP claimed to be involved, possibly with Al-Qaeda, in attacking a CIA outpost at Camp Chapman in the Khost region of Afghanistan on 30 December 2009.⁶⁶

Finally, a number of experts have argued that drone strikes are not only effective but even morally required, because they cause fewer civilian casualties than air strikes or ground operations in combat zones.⁶⁷ Contrasting the relative precision of drone warfare to indiscriminate attacks such as the firebombing of Dresden during the Second World War, Henry A. Crumpton, former deputy chief of the CIA's counterterrorism centre, concluded that drones are a morally superior, even humane, form of warfare.⁶⁸ Others have made the counterfactual argument: that far more US and allied troops and Afghan civilians would have been killed over time through enemy attacks and normal NATO ground and air operations if the high-level militants killed by the drone strikes had not been removed from the battlefield.⁶⁹ Referring either to real casualties or to casualties prevented by keeping hardened terrorists off the battlefield, many experts have argued that drones are more attractive, and morally defensible, than aerial bombardments or ground military operations.

On this point, the distinction between drone strikes inside and outside a theatre of active combat becomes relevant. One could plausibly argue that drone strikes are a more humane option for active theatres of war, where the alternatives—such as air strikes or ground operations—may kill more civilians.⁷⁰ In this respect, the Pentagon-run drone programme in Afghanistan might be morally justifiable if the alternatives—such as US air strikes or Afghan ground operations—were worse from the vantage point of non-combatant casualties. At least in the first instance, this is an empirical question. If it is true that drones kill fewer Afghan

⁶³ The *Long War Journal* has produced a helpful summary of the targets of drone strikes in Pakistan: see <http://www.longwarjournal.org/pakistan-strikes.php>, accessed 16 Dec. 2012.

⁶⁴ I have discussed this dynamic previously in Michael J. Boyle, 'Do counterterrorism and counterinsurgency go together?', *International Affairs* 86: 2, March 2010, pp. 333–53.

⁶⁵ Mark Mazzetti and Scott Shane, 'Evidence mounts for Taliban role in bomb plot', *New York Times*, 5 May 2010.

⁶⁶ 'Pakistani Taliban say they carried out CIA attack', Associated Press, 1 Jan. 2010.

⁶⁷ The 'morally required' case is made in Strawser, 'Moral predators'. See also Shane, 'The moral case for drones'.

⁶⁸ Quoted in Shane, 'The moral case for drones'.

⁶⁹ I am grateful to the anonymous reviewer for this point.

⁷⁰ A similar argument about the ratio of civilian casualties relative to ground operations by the Pakistani army and other non-drone operations by the United States is made in Fricker et al., 'New light on the accuracy of the CIA's predator drone campaign in Pakistan'. This version of the argument—which compares Pakistani (as opposed to US) military operations with drone strikes in areas where they are in active conflict—avoids the logical fallacy specified elsewhere.

civilians than NATO air strikes, it would be hard to argue that air strikes should be employed in preference to drones in active theatres of war, although hard questions would remain about the procedures and standards for selecting targets for those strikes.⁷¹ Yet this comparison breaks down when applied to the CIA-run drone programme operating in countries where the United States is not at war. In these cases, the comparison to normal war-fighting is fallacious: the alternative to drones in Pakistan, Yemen, Somalia and elsewhere is not American-led ground operations or air strikes. The US is not formally at war with any of these states and is not legally entitled to use ground forces or air strikes on their territory (though this has not stopped the US from launching periodic air strikes in the past). The realistic alternatives to drones in these cases range from diplomatic pressure to capacity-building to even covert operations, all of which were employed to some benefit prior to the Obama administration's escalation of drone strikes in 2009. In countries such as Pakistan, Yemen and Somalia, a cost-benefit analysis of drones has to be measured against these plausible alternatives, not against options that are neither realistic nor legally permitted outside a war zone. In these cases, drones are likely to be found wanting. It is hard to argue, for example, that drone strikes will consistently be more effective and kill fewer civilians than carefully constructed covert operations against HVTs. It is also hard to argue that drone strikes constitute a durable or long-term strategy in countries where there is a pressing need for capacity-building, especially in policing and intelligence work. The cost-benefit analysis for drones in these cases needs to be measured against these less violent alternatives, not against extreme examples from wartime like the firebombing of Dresden.

As this discussion illustrates, each of the most common claims for the effectiveness of drones is based on shaky empirical evidence, questionable assumptions and logical fallacies. Several of them conflate arguments about efficiency—that is, the relative ratio of inputs (measured in dollars or risk to US personnel) to outputs (measured in killed terrorists) with arguments about effectiveness. Drones are only 'effective' if they contribute to achieving US strategic goals in a region, a fact which is often lost in analyses that point only to body counts as a measure of their worthiness. More generally, arguments in favour of drones tend to present only one side of the ledger, measuring the losses for groups like Al-Qaeda and the Taliban without considering how many new recruits they gain as a result of the escalation of drone strikes. They ignore the fact that drones have replaced Guantánamo Bay as the number one recruiting tool for Al-Qaeda today.⁷² The gruesome mathematics of assessing drone strikes, especially when measured only in the dead bodies of those associated with terrorist movements, ignores the impact that drones are having on how the US is perceived among the populations of these states. Drone warfare may be considered 'effective' only if one operates with an

⁷¹ There is an argument, explored by Sparrow, among others, that the fact that one cannot identify the individual responsible for a drone strike renders these strikes unacceptable according to *jus ad bellum* laws. See Sparrow, 'Killer robots'.

⁷² Originally reported in Becker and Shane, 'Secret "kill list"'. Cited in Stanford Law School and NYU School of Law, *Living under drones*, p. 135.

attenuated notion of effectiveness that focuses on short-term tactical successes—that is, dead terrorists who might some day have posed a threat to the United States—while ignoring or underplaying long-term strategic costs.

Strategic costs

For the United States, the strategic costs of over-reliance on drone strikes are substantial. In fact, drones work at cross-purposes with many other US counterterrorism objectives. The official US counterterrorism strategy identifies a number of goals, including disrupting, degrading and defeating Al-Qaeda, but also eliminating safe havens for terrorist actors and building partnerships and counterterrorism capabilities with governments whose cooperation is crucial.⁷³ This strategy involves building up the resolve and capacity of states that will oppose Al-Qaeda, so that the US can ‘break the cycle of state failure to constrict the space available to terrorist networks’.⁷⁴ As part of the Obama administration’s strategy, the US will seek to ‘leverage’ the capacity of foreign partners to confront terrorist threats within their borders and assist them by building a durable capacity to do so on their own. Much like the Bush administration, the Obama administration assumes that the predominant threat of terrorism comes from the ungoverned spaces of the globe. Along the same lines as Bush, its strategy highlights the need to ensure that states like Pakistan and Yemen have a greater capacity to police their own territory as a way of draining support for terrorist movements over the long term. For this reason, building the capacity of states like Pakistan and Yemen is crucial. Moreover, their central governments need to be seen as legitimate by the majority of the population, so that this policing is conducted at lower cost. Over the long term, the Obama administration’s strategy depends on ensuring that the populations of places like Pakistan and Yemen do not pledge their support to other entities, such as militant groups or tribal networks, that are more sympathetic to Al-Qaeda.

Pakistan

The escalation of drone strikes in Pakistan to its current tempo—one every few days—directly contradicts the long-term American strategic goal of boosting the capacity and legitimacy of the government in Islamabad. Drone attacks are more than just temporary incidents that erase all traces of an enemy. They have lasting political effects that can weaken existing governments, undermine their legitimacy and add to the ranks of their enemies. These political effects come about because drones provide a powerful signal to the population of a targeted state that the perpetrator considers the sovereignty of their government to be negligible.

⁷³ The White House, ‘National Strategy for Counterterrorism’, Washington DC, June 2011, http://www.whitehouse.gov/sites/default/files/counterterrorism_strategy.pdf, accessed 16 Dec. 2012, pp. 9–10. I have described these elsewhere as ‘linchpin states’: see Michael J. Boyle, ‘The war on terror in American grand strategy’, *International Affairs* 84: 2, March 2008, pp. 191–209.

⁷⁴ The White House, ‘National Strategy for Counterterrorism’, p. 9.

The popular perception that a government is powerless to stop drone attacks on its territory can be crippling to the incumbent regime, and can embolden its domestic rivals to challenge it through violence. Such continual violations of the territorial integrity of a state also have direct consequences for the legitimacy of its government. Following a meeting with General David Petraeus, Pakistani President Asif Ali Zardari described the political costs of drones succinctly, saying that 'continuing drone attacks on our country, which result in loss of precious lives or property, are counterproductive and difficult to explain by a democratically elected government. It is creating a credibility gap.'⁷⁵ Similarly, the Pakistani High Commissioner to London Wajid Shamsul Hasan said in August 2012 that

what has been the whole outcome of these drone attacks is that you have directly or indirectly contributed to destabilizing or undermining the democratic government. Because people really make fun of the democratic government—when you pass a resolution against drone attacks in the parliament and nothing happens. The Americans don't listen to you, and they continue to violate your territory.⁷⁶

The appearance of powerlessness in the face of drones is corrosive to the appearance of competence and legitimacy of the Pakistani government. The growing perception that the Pakistani civilian government is unable to stop drone attacks is particularly dangerous in a context where 87 per cent of all Pakistanis are dissatisfied with the direction of the country and where the military, which has launched coups before, remains a popular force.⁷⁷

The political effects of this signal are powerful and lasting even when the reality of the relationship between the perpetrator and the targeted state is more complex. For example, the government of Pakistan has been ambivalent about drone strikes, condemning them in some cases but applauding their results in others.⁷⁸ Much has been made of the extent to which the Pakistani government has offered its 'tacit consent' for the US drone strikes on its territory.⁷⁹ The US has been willing to provide details on drone strikes after the fact, but has refrained from providing advance warning of an attack to the Pakistani government for fear that the information might leak. Pakistan has been operationally compliant with drone strikes and has not ordered its air force to shoot down drones in Pakistani airspace. Despite official denials, it has been revealed that the Pakistani government has permitted the US to launch drones from at least one of its own airbases.⁸⁰ Whatever the complexity of its position and the source of its ambivalence over drone strikes, the political effects of allowing them to escalate to current levels are increasingly clear. The vast expansion of drone warfare under the Obama administration has placed enormous pressure on Pakistan for its complicity with

⁷⁵ Quoted in Glyn Williams, 'The CIA's covert predator drone war in Pakistan 2004–2010', p. 881.

⁷⁶ Quoted in Chris Woods, 'CIA drone strikes violate Pakistan's sovereignty', *Guardian*, 2 Aug. 2012.

⁷⁷ Pew Research Center, 'Pakistani public opinion ever more critical of the US', 27 June 2012. The obvious danger is of a coup, which is possible given how unpopular the Zardari government is (14% support) compared to the relative popularity of the Pakistani military.

⁷⁸ The celebrations over the death of Mehsud are described in Mayer, 'The predator war'.

⁷⁹ See Glyn Williams, 'The CIA's covert predator drone war in Pakistan 2004–2010', pp. 882–3.

⁸⁰ Glyn Williams, 'The CIA's covert predator drone war in Pakistan 2004–2010', pp. 882–3.

the US, multiplied the enemies that its government faces and undermined parts of the social fabric of the country. By most measures, Pakistan is more divided and unstable after the Obama administration's decision to ramp up the tempo and scale of drone attacks than it was during the Bush administration.⁸¹

First, the Pakistani government is under intense pressure from growing popular hostility to the drone strikes. The drone policy carries a number of serious dangers for the regime, not the least of which is that it is seen as complicit in a policy where the US bombs its territory every few days. A Pew Research Center poll in June 2012 revealed that 74 per cent of Pakistanis now consider the United States an enemy.⁸² Only 17 per cent support drone strikes against extremist groups, even if they are conducted with the support of the Pakistani government.⁸³ The drones programme has had a spillover effect for other areas of cooperation, as only 50 per cent of respondents still wish the US to continue to provide financial and humanitarian assistance to the country.⁸⁴ The drone strikes have carried clear strategic costs in making the US widely hated within Pakistan and in jeopardizing support for US programmes designed to build the capacity of the Pakistani state. In this combustible environment, high-profile events such as the release of CIA contractor Raymond Davis after the deaths by shooting of two Pakistani citizens, the killing of 24 Pakistani soldiers in NATO strikes in November 2011 and the protests over the film *Innocence of Muslims* in September 2012 have exploded into waves of anti-American protest. These events, and the latent anger they release, have made it more costly for the government to comply with US demands to counter militant activity in the border regions. This growing anti-US sentiment culminated in the protest march led by Imran Khan in October 2012, where thousands of demonstrators tried to enter South Waziristan in a protest over drone strikes.⁸⁵ Khan has tapped into growing anti-American sentiment and anger over drones to become a leading opposition figure for the next election. His actions, which have pushed the controversy over drones to the forefront of Pakistani politics, have made it more difficult for the Zardari government to support drone strikes that advertise both its complicity and its powerlessness.

Sensing the dangers associated with a close relationship with the US, a number of other Pakistani leaders have moved to put some distance between themselves and the American drone policy. Even while he has secretly supported some of the drone strikes, President Asif Ali Zardari has called for an end to them, though his position was undermined when his associates called for more Pakistani control over the targets of strikes.⁸⁶ Similarly, Prime Minister Raza Gilani has regularly

⁸¹ It is important to note that the direction of causality is difficult to determine here. The drone strikes are probably undermining stability in Pakistan, while the decreasing stability is arguably motivating more drone strikes. The evidence for the increasing instability of Pakistan is manifest, but is particularly evident in the increase in terrorist attacks in the country, from fewer than 100 in 2009 to over 700 by 2010. For details, see the Global Terrorism Database, <http://www.start.umd.edu/gtd/>, accessed 16 Dec. 2012.

⁸² Pew Research Center, 'Pakistani public opinion ever more critical of the US'.

⁸³ Pew Research Center, 'Pakistani public opinion ever more critical of the US'.

⁸⁴ Pew Research Center, 'Pakistani public opinion ever more critical of the US'.

⁸⁵ Salman Masood, 'In Pakistan, drone protest takes detour for safety', *New York Times*, 7 Oct. 2012.

⁸⁶ Sumaira Khan, 'Zardari to US: call off drone campaign', *Express Tribune*, 16 Sept. 2012. On the ambivalence and hypocrisy of Zardari's position, see Joshua Foust's comments in Jeanne Park, 'Interview: drone politics in

excoriated the US for its 'illegal and counterproductive' use of drones, and has argued that it fuels the insurgencies against the central government.⁸⁷ After a review of the country's relationship with the United States, the Pakistani parliament called for an end to drone strikes and to any other operations on its territory.⁸⁸ Across the political spectrum, positioning oneself as a critic of the drone programme and expressing hostility to the United States is increasingly becoming the default position of the Pakistani political class. As this has happened, the US has offered Pakistan more aid—some US\$4.3 billion in 2010 alone, second only to the sum offered to Afghanistan in amounts of US aid given worldwide—in part to build its 'counterinsurgency capability', even while continuing drone strikes signal a lack of faith in the country's capacity and will to tackle terrorism.⁸⁹ Seen in this light, the US–Pakistani relationship is riddled with hypocrisy: the US sidelines the Pakistani government with drones while 'building its capacity' with aid and military equipment transfers, while the Pakistani government secretly cheers when drone strikes kill its enemies, publicly grandstands against the US for the rest of the strikes, and then asks for more aid, much of which is lost through corruption or diverted into wasteful military purchases to deter India.⁹⁰ The consequence of a drone-first counterterrorism policy has only heightened the hypocrisy of this already poisonous relationship, with untold consequences for the future of a nuclear-armed country seething with anti-American sentiment.

At the same time, some of the Pakistani criticism of the drone programme is motivated by more than just cynical opportunism. Some of the objections are based on the logic of counterinsurgency: that is, to drain support from the array of militant movements in Waziristan, FATA and elsewhere, the Pakistani government must appear as a credible competitor for the loyalties of the population in tribal regions. Abdul Basit, a Pakistani Foreign Office spokesperson, has argued that drones are 'not helpful in our efforts to win hearts and minds'.⁹¹ Winning the loyalties of the population is particularly hard to do when drone strikes sideline the central government and signal that the US is a direct combatant in Pakistan's on-and-off-again wars in its tribal regions. In September 2012, Pakistani Foreign Minister Hina Rabbani Khar captured this dilemma well, saying that 'this has to be our war. We are the ones who have to fight against them. As a drone flies over the territory of Pakistan, it becomes an American war again. And this whole logic of this being our fight, in our own interest is immediately put aside and again

Pakistan', Council on Foreign Relations, 12 Oct. 2012, <http://www.cfr.org/pakistan/drone-politics-pakistan/p29259>, accessed 16 Dec. 2012.

⁸⁷ In a Wikileaks release, Gilani was quoted on drones as saying: 'I don't care if they do it as long as they get the right people. We'll protest in the National Assembly and then ignore it.' See Tim Lister, 'Wikileaks: Pakistan quietly approved drone strikes, US special units', CNN.com, 1 Dec. 2010. On the 'illegal and counterproductive argument', see "'Drone attacks" adding to insurgency: PM', *The News (Pakistan)*, <http://www.thenews.com.pk/article-32961-Drone-attacks-adding-to-insurgency:-PM>, accessed 16 Dec. 2012.

⁸⁸ Declan Walsh, 'Pakistani parliament demands end to US drone strikes', *New York Times*, 20 March 2012.

⁸⁹ Susan B. Epstein and K. Alan Kronstadt, 'Pakistan: US foreign assistance', Congressional Research Service, 4 Oct. 2012, <http://www.fas.org/sgp/crs/row/R41856.pdf>, accessed 16 Dec. 2012.

⁹⁰ Epstein and Kronstadt, 'Pakistan: US foreign assistance', p. 16.

⁹¹ Glyn Williams, 'The CIA's covert predator drone war in Pakistan 2004–2010', p. 881.

it is war which is imposed on us.⁹² The extent to which the United States has assumed the role of a direct combatant and marginalized the Pakistani government through drone strikes has systematically undermined the claim that the central government in Islamabad could be a credible competitor for the loyalties of the tribal population.

Second, drone strikes have also multiplied the ranks of the enemies of the Pakistani government and deepened its growing sense of crisis. Pakistan has never had full control over all parts of its territory, especially in the FATA and the Northwest Frontier province. The problem of Islamist militant networks in these regions is an old one, but the scope of their threat expanded dramatically when a number of competing groups coalesced under the banner of the TTP in 2007.⁹³ At this point, the Musharraf government's policy of conciliation with the various militant groups began to show its adverse effects. As the military tried to regain control over these regions, the militants fought back and extended their reach deeper into previously untouched urban areas. By 2008, the TTP and other groups were launching suicide attacks in cities and capturing territory in Swat and Buner, only 70 miles from Islamabad.⁹⁴ While the Pakistani army managed to roll back their territorial advances in 2009, most of these militant groups were not fully defeated. While weakened, many of these Islamist networks redoubled their efforts to challenge the authority of central government and have increasingly resorted to terrorism to do so.⁹⁵ While the sources of mobilization and recruitment to militant networks are numerous, the drones have given them a recruiting boost as the carnage has encouraged relatives and friends of the victims of strikes to join the ranks of the TTP or other militant groups to fight the US or the Pakistani government, holding the latter complicit in their deaths.⁹⁶ Their wrath at American drones is directed first and foremost at the Pakistani government rather than at the United States or its direct interests abroad. While some recruits have joined Al-Qaeda and tried to bring the fight to the United States, the majority of these new recruits have joined local militant networks whose primary targets will be within the country.⁹⁷ The previously existing militant networks in these regions serve as ready receptacles for the radicalized and angry after drone

⁹² Quoted in Asia Society, 'Watch: Pakistani FM calls drone strikes "illegal", says "this has to be our war"', 27 Sept. 2012, <http://asiasociety.org/blog/asia/watch-pakistan-fm-calls-drone-strikes-illegal-says-has-be-our-war>, accessed 16 Dec. 2012.

⁹³ Hassan Abbas, *Militancy in Pakistan's borderlands: implications for the nation and Afghan policy* (New York: Century Foundation, 2010), <http://tcf.org/publications/2010/10/militancy-in-pakistan2010s-borderlands-implications-for-the-nation-and-for-afghan-policy/pdf>, accessed 16 Dec. 2012.

⁹⁴ Zahid Hussain, 'Pakistan's most dangerous place', *Wilson Quarterly*, Winter 2012, <http://www.wilsonquarterly.com/article.cfm?AID=2097>, accessed 16 Dec. 2012.

⁹⁵ In a perceptive recent article, Pervez Hoodboy has argued that the suicide bombers for these networks, trained in the *madrasas* and training camps in Waziristan, are the 'drones' that these local groups employ, to the shameful silence of much of the Pakistani political class that condemns US policy. See Pervez Hoodboy, 'Drones: theirs and ours', *OpenDemocracy*, 3 Nov. 2012, <http://www.opendemocracy.net/pervez-hoodboy/drones-theirs-and-ours>, accessed 20 Dec. 2012.

⁹⁶ Stanford Law School and NYU School of Law, *Living under drones*, pp. 133–4. It is important to stress that the claim here is not that drones are the only mobilizing factor for recruitment networks, but that they are an increasingly important one as the tempo of strikes has increased.

⁹⁷ See also Leila Hudson, Colin S. Owens and Matt Flannes, 'Drone warfare: blowback from the American way of war', *Middle East Policy* 18: 3, Fall 2011, p. 126.

strikes; arguably, the biggest danger of these fresh recruits is not to the United States, but to the government of the country where the strikes take place, as the ranks of its enemies swell after drone attacks. The membership of the TTP, for example, has increased to approximately 35,000 through both existing groups pledging their allegiance to its leadership and the infusion of new recruits, some (but not all) of whom were motivated by revulsion over drone strikes.⁹⁸

Yemen

In Yemen, drone strikes have replicated some of the same dynamics evident in Pakistan. The US has drifted into the role of a direct combatant in Yemen's growing internal conflict through its drone strikes against AQAP and other local Islamist networks. This is the war that dare not speak its name. Senior US officials have repeatedly insisted that the US is not engaged in fighting an insurgency in Yemen and that it will not be drawn into a civil war there. President Obama went so far as to admonish a US general in the Situation Room for even mentioning a 'campaign' in Yemen.⁹⁹ Yet there is significant evidence that the US has targeted local insurgents who have no interest in attacking US targets.¹⁰⁰ By 19 October, the US had conducted 35 drone strikes in Yemen in 2012 alone.¹⁰¹ Many of these strikes were directed not just against AQAP, but against local Islamist factions hostile to the government. There is also significant evidence that the US has expanded its target set to include local militants who are linked to the AQAP movement but have no ability to strike, or interest in striking, the United States.¹⁰² As Micah Zenko remarked: 'Unless they were about to get on a flight to New York to conduct an attack, they were not an imminent threat to the United States ... We don't say that we're the counterinsurgency air force of Pakistan, Yemen and Somalia, but we are.'¹⁰³

Yemen's government, like Pakistan's, has a cynical attitude towards the strikes, publicly condemning them while secretly supporting them when they take out its enemies. In a meeting with General David Petraeus in 2010, then Deputy Prime Minister Rashad al-Alimi promised, 'we'll continue saying the bombs are ours, not yours', and joked that he would just lie to parliament about the US control over the strikes.¹⁰⁴ More recently, the Yemeni government has embraced the drone programme as a remedy for dealing with AQAP and its local insurgent movements. Yemeni President Abed Rabbo Mansour Hadi even offered rare public support for drones in a widely noted speech at the Woodrow Wilson Center

⁹⁸ This figure is taken from the South Asia Terrorism Portal's profile of the TTP: see <http://www.satp.org/satportg/countries/pakistan/terroristoutfits/ttp.htm>, accessed 16 Dec. 2012. It is important to stress that not all of these new recruits are driven by drones, only an unknown percentage.

⁹⁹ Jeremy M. Sharp, 'Yemen: background and US relations', Congressional Research Service, 1 Nov. 2012, p. 9, <http://www.fas.org/sgp/crs/mideast/RL34170.pdf>, accessed 20 Dec. 2012.

¹⁰⁰ Zenko, 'The seven deadly sins of John Brennan'.

¹⁰¹ Greg Miller, 'CIA seeking more drones', *Washington Post*, 19 Oct. 2012.

¹⁰² Greg Miller, 'US drone targets in Yemen raise questions', *Washington Post*, 2 June 2012.

¹⁰³ Quoted in Scott Shane, 'Election spurred move to codify US drone policy', *New York Times*, 24 Nov. 2012.

¹⁰⁴ Cited in Peter Bergen and Jennifer Rowland, 'Obama ramps up covert war in Yemen', CNN.com, 12 June 2012.

in September 2012.¹⁰⁵ The same inconsistent impulses that motivated US policy towards Pakistan are at work here too. The United States has provided US\$326 million in security assistance to Yemen since 2007 and extensively developed the counterterrorism capacity of its special forces while sidelining the government in its unilateral drone strikes.¹⁰⁶ In other words, the US is building up a government that it marginalizes with drone strikes, strengthening its capacity while also undermining its legitimacy.

Just as in Pakistan, the result of a drone-first policy in Yemen has been to increase the ranks of the government's enemies. Drone strikes against AQAP have fostered anti-American sentiment in the tribal regions of the country and encouraged friends and family of civilians killed to join AQAP or other militant networks. The drone strikes have bred 'psychological acceptance' of AQAP among Yemenis, in part because they appear to confirm its narrative of a bloodthirsty US dropping bombs from afar with no concern for who is killed.¹⁰⁷ A prominent Yemeni youth activist, Ibrahim Mothana, has argued that 'drone strikes are causing more and more Yemenis to hate America and join radical militants; they are not driven by ideology but rather by a sense of revenge and despair'.¹⁰⁸ As Zenko has reported, AQAP has increased its membership from a few hundred in 2010 to a 'few thousand' today.¹⁰⁹ It is impossible to know how many of these recruits have come to AQAP as a result of the drone strikes or because of other factors, but this trend raises the worrying possibility that AQAP may gain several recruits for every leader killed in a drone strike.¹¹⁰ As one local human rights leader put it, 'the drones are killing al Qaeda leaders, but they are also turning them into heroes'.¹¹¹ Another beneficiary of drone strikes in Yemen has been Ansar al-Sharia, a Yemeni group affiliated with AQAP which has waged an increasingly vicious insurgency against the government since the beginning of the Arab Spring.¹¹² As the Yemeni government has relied more on American drones to patrol its ungoverned spaces, Ansar al-Sharia has stepped into the vacuum and begun to provide social services in its place. The danger, as former CIA official Robert Grenier put it, is that the increasing reliance on signature drone strikes may create a 'larger terrorist safe haven' in Yemen.¹¹³

¹⁰⁵ Ty McCormick, 'Yemeni president: I love drones', *Foreign Policy*, 28 Sept. 2012, http://blog.foreignpolicy.com/posts/2012/09/28/yemens_president_warns_iran_endorses_us_drone_policy_o, accessed 16 Dec. 2012.

¹⁰⁶ Leila Hudson, Colin S. Owens and David J. Callen, 'Drone warfare in Yemen: fostering Emirates through counterterrorism', Middle East Policy Council, 2012, <http://www.mepc.org/journal/middle-east-policy-archives/drone-warfare-yemen-fostering-emirates-through-counterterrorism>, accessed 16 Dec. 2012.

¹⁰⁷ The quotation is from Anssaf Ali Mayo, head of a leading Islamic party, reported in Sudarasan Raghavan, 'In Yemen, US airstrikes breed anger, and sympathy for al Qaeda', *Washington Post*, 29 May 2012.

¹⁰⁸ Ibrahim Mothana, 'How drones help al Qaeda', *New York Times*, 13 June 2012.

¹⁰⁹ Zenko, 'The seven deadly sins of John Brennan'.

¹¹⁰ As noted above, Christopher Swift argues that economic factors are also relevant for militant recruitment in Yemen, though he also notes that drones are considered by many Yemenis to be an affront to national pride. See his 'The drone blowback fallacy'.

¹¹¹ Raghavan, 'In Yemen, US airstrikes breed anger, and sympathy for al-Qaeda'.

¹¹² Hudson et al., 'Drone warfare in Yemen'.

¹¹³ Quoted in Hudson et al., 'Drone warfare in Yemen'.

Social effects

Drone strikes have an invidious and subtle effect on the social fabric of the societies where they occur. Drones do not just affect their targets, but spread fear and suspicion throughout the society in unexpected ways. As Brian Glyn Williams has noted, in Pakistan drones are often described by local villagers as *machays* (wasps) for their stings or *bangana* (thunder) for their ability to strike without warning.¹¹⁴ While drones terrify their intended targets, innocent villagers are equally terrified of being in the wrong place at the wrong time when an attack occurs. Drones produce among the civilian population a 'wave of terror' which has been described by some mental health professionals as 'anticipatory anxiety'.¹¹⁵ David Rohde, a journalist who was captured and held by the Taliban, has described the fear produced by drone strikes as the aircraft were heard whirring overhead for hours at a time and calls them a 'potent, unnerving symbol of unchecked American power'.¹¹⁶ This fear leads ordinary civilians to refrain from helping those wounded in drone strikes in case they are targeted in a 'double tap' strike. Drones have inhibited normal economic and social activity, and even made parents reluctant to send their children to schools that might be accidentally targeted.¹¹⁷ The drones have also turned neighbours on neighbours and fuelled communal mistrust in a society where overlapping family, tribal and social ties are crucial. The targets of drone strikes are often pinpointed by paid informants who place small electronic targeting devices in the homes or vehicles of suspected terrorists.¹¹⁸ Yet there is no way to tell whether these chips are left with real terrorist operatives or with those against whom the informant has a personal grudge. Rumours of these chips have produced high levels of mistrust in the community as 'neighbors suspect neighbors of spying for the US, Pakistani or Taliban intelligence or using drone strikes to settle feuds'.¹¹⁹ While the drones circling overhead spread fear throughout the population and disrupt normal life, the suspicion produced by these chips and other means of nominating targets have eroded the trust that underlies much of religious, economic and political life in these societies.

The use of drones also has a series of second-order political effects that must be weighed against advantages accrued through the killing of terrorist operatives. Drones can subject governments to high levels of political pressure that make compliance with US requests more costly. They can multiply the ranks of enemies in insurgencies and undermine the social fabric that allows many of these societies to function. Many of these consequences are systematically discounted in analyses of drones that focus exclusively on how many terrorists are killed relative to civilians. More generally, these costs illustrate a central inconsistency of American policy: that if the commitment to degrade or destroy terrorists is put into practice

¹¹⁴ Glyn Williams, 'The CIA's covert predator drone war in Pakistan 2004–2010', p. 879.

¹¹⁵ Stanford Law School and NYU School of Law, *Living under drones*, p. 81.

¹¹⁶ David Rohde, 'The Obama doctrine: how the President's secret wars are backfiring', *Foreign Policy* 192, March–April 2012, p. 66.

¹¹⁷ Stanford Law School and NYU School of Law, *Living under drones*, pp. 73–99.

¹¹⁸ Stanford Law School and NYU School of Law, *Living under drones*, p. 99.

¹¹⁹ Stanford Law School and NYU School of Law, *Living under drones*, p. 100.

with drone strikes, it will damage the perceived competence and legitimacy of governments that the US is most dependent upon for counterterrorism cooperation. The long-term goal of building strong and legitimate governments that can police their territory and work as reliable partners with the United States is undermined by a drones-first policy that sidelines these governments or treats them as subservient accomplices to the brute exercise of American power.

The race for drones

An important, but overlooked, strategic consequence of the Obama administration's embrace of drones is that it has generated a new and dangerous arms race for this technology. At present, the use of lethal drones is seen as acceptable to US policy-makers because no other state possesses the ability to make highly sophisticated drones with the range, surveillance capability and lethality of those currently manufactured by the United States. Yet the rest of the world is not far behind. At least 76 countries have acquired UAV technology, including Russia, China, Pakistan and India.¹²⁰ China is reported to have at least 25 separate drone systems currently in development.¹²¹ At present, there are 680 drone programmes in the world, an increase of over 400 since 2005.¹²² Many states and non-state actors hostile to the United States have begun to dabble in drone technology. Iran has created its own drone, dubbed the 'Ambassador of Death', which has a range of up to 600 miles.¹²³ Iran has also allegedly supplied the Assad regime in Syria with drone technology.¹²⁴ Hezbollah launched an Iranian-made drone into Israeli territory, where it was shot down by the Israeli air force in October 2012.¹²⁵

A global arms race for drone technology is already under way. According to one estimate, global spending on drones is likely to be more than US\$94 billion by 2021.¹²⁶ One factor that is facilitating the spread of drones (particularly non-lethal drones) is their cost relative to other military purchases. The top-of-the line Predator or Reaper model costs approximately US\$10.5 million each, compared to the US\$150 million price tag of a single F-22 fighter jet.¹²⁷ At that price, drone technology is already within the reach of most developed militaries, many of which will seek to buy drones from the US or another supplier. With demand growing, a number of states, including China and Israel, have begun the aggressive selling of drones, including attack drones, and Russia may also be moving into this market.¹²⁸ Because of concerns that export restrictions are harming US

¹²⁰ Stanford Law School and NYU School of Law, *Living under drones*, p. 141.

¹²¹ Micah Zenko, '10 things you didn't know about drones', *Foreign Policy* 192, March–April 2012, http://www.foreignpolicy.com/articles/2012/02/27/10_things_you_didnt_know_about_drones, accessed 20 Dec. 2012.

¹²² Zenko, '10 things you didn't know about drones'.

¹²³ Stanford Law School and NYU School of Law, *Living under drones*, p. 141. The Iranian regime has noted that the message of its drone programme is 'peace and friendship': see Zenko, '10 things you didn't know about drones'.

¹²⁴ Stanford Law School and NYU School of Law, *Living under drones*, p. 141.

¹²⁵ Gili Cohen, 'Parts of intercepted drone left behind at crash site', *Haaretz*, 15 Oct. 2012.

¹²⁶ Scott Shane, 'Coming soon: the drones arms race', *New York Times*, 8 Oct. 2011.

¹²⁷ William Wan and Peter Finn, 'Global race to match US drone capabilities', *Washington Post*, 4 July 2011.

¹²⁸ Wan and Finn, 'Global race to match US drone capabilities'.

competitiveness in the drones market, the Pentagon has granted approval for drone exports to 66 governments and is currently being lobbied to authorize sales to even more.¹²⁹ The Obama administration has already authorized the sale of drones to the UK and Italy, but Pakistan, the UAE and Saudi Arabia have been refused drone technology by congressional restrictions.¹³⁰ It is only a matter of time before another supplier steps in to offer the drone technology to countries prohibited by export controls from buying US drones. According to a study by the Teal Group, the US will account for 62 per cent of research and development spending and 55 per cent of procurement spending on drones by 2022.¹³¹ As the market expands, with new buyers and sellers, America's ability to control the sale of drone technology will be diminished. It is likely that the US will retain a substantial qualitative advantage in drone technology for some time, but even that will fade as more suppliers offer drones that can match US capabilities.

The emergence of this arms race for drones raises at least five long-term strategic consequences, not all of which are favourable to the United States over the long term. First, it is now obvious that other states will use drones in ways that are inconsistent with US interests. One reason why the US has been so keen to use drone technology in Pakistan and Yemen is that at present it retains a substantial advantage in high-quality attack drones. Many of the other states now capable of employing drones of near-equivalent technology—for example, the UK and Israel—are considered allies. But this situation is quickly changing as other leading geopolitical players, such as Russia and China, are beginning rapidly to develop and deploy drones for their own purposes. While its own technology still lags behind that of the US, Russia has spent huge sums on purchasing drones and has recently sought to buy the Israeli-made Eitan drone capable of surveillance and firing air-to-surface missiles.¹³² China has begun to develop UAVs for reconnaissance and combat and has several new drones capable of long-range surveillance and attack under development.¹³³ China is also planning to use unmanned surveillance drones to allow it to monitor the disputed East China Sea Islands, which are currently under dispute with Japan and Taiwan.¹³⁴ Both Russia and China will pursue this technology and develop their own drone suppliers which will sell to the highest bidder, presumably with fewer export controls than those imposed by the US Congress. Once both governments have equivalent or near-equivalent levels of drone technology to the United States, they will be similarly tempted to use it for surveillance or attack in the way the US has done. Thus, through its own over-reliance on drones in places such as Pakistan and Yemen, the US may be hastening the arrival of a world where its qualitative advantages in drone

¹²⁹ Stanford Law School and NYU School of Law, *Living under drones*, pp. 142–3.

¹³⁰ 'Drones finally make it onto the global arms sales market for sale', Reuters, 13 July 2012.

¹³¹ Teal Group Corporation, 'Teal Group predicts that worldwide UAV market will total \$89 billion in its 2012 UAV market profile and forecast', 11 April 2012, <http://tealgroup.com/index.php/about-teal/teal-group-in-the-media/3/79-teal-group-predicts-worldwide-uav-market-will-total-89-billion-in-its-2012-uav-market-profile-and-forecast>, accessed 16 Dec. 2012.

¹³² Spencer Ackerman, 'Will Israel sell Russia its prized monster drone?', *Wired*, 18 Jan. 2011.

¹³³ Wan and Finn, 'Global race to match US drone capabilities'.

¹³⁴ 'China to use drones on islands in dispute with Japan', Associated Press, 24 Sept. 2012.

technology are eclipsed and where this technology will be used and sold by rival Great Powers whose interests do not mirror its own.

A second consequence of the spread of drones is that many of the traditional concepts which have underwritten stability in the international system will be radically reshaped by drone technology. For example, much of the stability among the Great Powers in the international system is driven by deterrence, specifically nuclear deterrence.¹³⁵ Deterrence operates with informal rules of the game and tacit bargains that govern what states, particularly those holding nuclear weapons, may and may not do to one another.¹³⁶ While it is widely understood that nuclear-capable states will conduct aerial surveillance and spy on one another, overt military confrontations between nuclear powers are rare because they are assumed to be costly and prone to escalation. One open question is whether these states will exercise the same level of restraint with drone surveillance, which is unmanned, low cost, and possibly deniable. States may be more willing to engage in drone overflights which test the resolve of their rivals, or engage in 'salami tactics' to see what kind of drone-led incursion, if any, will motivate a response.¹³⁷ This may have been Hezbollah's logic in sending a drone into Israeli airspace in October 2012, possibly to relay information on Israel's nuclear capabilities.¹³⁸ After the incursion, both Hezbollah and Iran boasted that the drone incident demonstrated their military capabilities.¹³⁹ One could imagine two rival states—for example, India and Pakistan—deploying drones to test each other's capability and resolve, with untold consequences if such a probe were misinterpreted by the other as an attack. As drones get physically smaller and more precise, and as they develop a greater flying range, the temptation to use them to spy on a rival's nuclear programme or military installations might prove too strong to resist. If this were to happen, drones might gradually erode the deterrent relationships that exist between nuclear powers, thus magnifying the risks of a spiral of conflict between them.

Another dimension of this problem has to do with the risk of accident. Drones are prone to accidents and crashes. By July 2010, the US Air Force had identified approximately 79 drone accidents.¹⁴⁰ Recently released documents have revealed that there have been a number of drone accidents and crashes in the Seychelles and Djibouti, some of which happened in close proximity to civilian airports.¹⁴¹ The rapid proliferation of drones worldwide will involve a risk of accident to

¹³⁵ On this point, I am borrowing much from Kenneth Waltz's argument about the effects of nuclear weapons. See Scott Sagan and Kenneth Waltz, *The spread of nuclear weapons: a debate renewed* (New York: Norton, 2003).

¹³⁶ See esp. Thomas Schelling, *Arms and influence* (New Haven, CT: Yale University Press, 1966).

¹³⁷ On these strategies, see Alexander L. George and William E. Simons, *The limits of coercive diplomacy*, 2nd edn (Boulder, CO: Westview, 1994).

¹³⁸ Sheera Frankel, 'Hezbollah drone may have been sent to monitor Israel's nuclear activity at Dimona', McClatchy, <http://www.mcclatchydc.com/2012/10/12/171390/hezbollah-drone-may-have-been.html>, accessed 16 Dec. 2012.

¹³⁹ 'Iran: Hezbollah drone proves our military capabilities', Associated Press and *Haaretz*, 14 Oct. 2012, <http://www.haaretz.com/news/diplomacy-defense/iran-hezbollah-drone-proves-our-military-capabilities-1.469916>, accessed 16 Dec. 2012.

¹⁴⁰ Zenko, '10 things you didn't know about drones'.

¹⁴¹ Craig Whitlock, 'Drone crashes mount at civilian airports', *Washington Post*, 30 Nov. 2012.

civilian aircraft, possibly producing an international incident if such an accident were to involve an aircraft affiliated to a state hostile to the owner of the drone. Most of the drone accidents may be innocuous, but some will carry strategic risks. In December 2011, a CIA drone designed for nuclear surveillance crashed in Iran, revealing the existence of the spying programme and leaving sensitive technology in the hands of the Iranian government.¹⁴² The expansion of drone technology raises the possibility that some of these surveillance drones will be interpreted as attack drones, or that an accident or crash will spiral out of control and lead to an armed confrontation.¹⁴³ An accident would be even more dangerous if the US were to pursue its plans for nuclear-powered drones, which can spread radioactive material like a dirty bomb if they crash.¹⁴⁴

Third, lethal drones create the possibility that the norms on the use of force will erode, creating a much more dangerous world and pushing the international system back towards the rule of the jungle. To some extent, this world is already being ushered in by the United States, which has set a dangerous precedent that a state may simply kill foreign citizens considered a threat without a declaration of war. Even John Brennan has recognized that the US is 'establishing a precedent that other nations may follow'.¹⁴⁵ Given this precedent, there is nothing to stop other states from following the American lead and using drone strikes to eliminate potential threats. Those 'threats' need not be terrorists, but could be others—dissidents, spies, even journalists—whose behaviour threatens a government. One danger is that drone use might undermine the normative prohibition on the assassination of leaders and government officials that most (but not all) states currently respect. A greater danger, however, is that the US will have normalized murder as a tool of statecraft and created a world where states can increasingly take vengeance on individuals outside their borders without the niceties of extradition, due process or trial.¹⁴⁶ As some of its critics have noted, the Obama administration may have created a world where states will find it easier to kill terrorists rather than capture them and deal with all of the legal and evidentiary difficulties associated with giving them a fair trial.¹⁴⁷

Fourth, there is a distinct danger that the world will divide into two camps: developed states in possession of drone technology, and weak states and rebel

¹⁴² Scott Shane and David E. Sanger, 'Drone crash in Iran reveals secret US surveillance effort', *New York Times*, 7 Dec. 2011. See also Ali Akbar Dareini, 'Iran says it can make copy of captured CIA drone', Associated Press, 12 Dec. 2012.

¹⁴³ It is worth noting that drones can be hacked, which can result in an accident or an international incident. A University of Texas Austin research team recently hacked into, and hijacked, a drone in midair controlled by the Department of Homeland Security. See Colin Lecher, 'Texas students hijack a US government drone in midair', *Popular Science*, 28 June 2012, <http://www.popsoci.com/technology/article/2012-06/researchers-hack-government-drone-1000-parts>, accessed 16 Dec. 2012.

¹⁴⁴ Nick Fielding, 'US draws up plans for nuclear drones', *Guardian*, 2 April 2012.

¹⁴⁵ Brennan, 'The efficacy and ethics of US counterterrorism strategy'.

¹⁴⁶ The term 'murder' is used deliberately here. The drone literature is replete with euphemisms for killing people—targeted killings, assassinations, collateral damage—that are designed to obscure the basic fact that a drone strike is an intentional act designed to end a human life. As George Orwell observed in his essay 'Politics and the English language', such vague, antiseptic language is typically used to make murder 'respectable'.

¹⁴⁷ Senator Saxby Chambliss has argued that the Obama administration is deliberately killing, not capturing, to avoid the difficulties of trying terrorist suspects. See Stanford Law School and NYU School of Law, *Living under drones*, p. 143.

movements that lack them. States with recurring separatist or insurgent problems may begin to police their restive territories through drone strikes, essentially containing the problem in a fixed geographical region and engaging in a largely punitive policy against them. One could easily imagine that China, for example, might resort to drone strikes in Uighur provinces in order to keep potential threats from emerging, or that Russia could use drones to strike at separatist movements in Chechnya or elsewhere. Such behaviour would not necessarily be confined to authoritarian governments; it is equally possible that Israel might use drones to police Gaza and the West Bank, thus reducing the vulnerability of Israeli soldiers to Palestinian attacks on the ground. The extent to which Israel might be willing to use drones in combat and surveillance was revealed in its November 2012 attack on Gaza. Israel allegedly used a drone to assassinate the Hamas leader Ahmed Jabari and employed a number of armed drones for strikes in a way that was described as ‘unprecedented’ by senior Israeli officials.¹⁴⁸ It is not hard to imagine Israel concluding that drones over Gaza were the best way to deal with the problem of Hamas, even if their use left the Palestinian population subject to constant, unnerving surveillance. All of the consequences of such a sharp division between the haves and have-nots with drone technology is hard to assess, but one possibility is that governments with secessionist movements might be less willing to negotiate and grant concessions if drones allowed them to police their internal enemies with ruthless efficiency and ‘manage’ the problem at low cost. The result might be a situation where such conflicts are contained but not resolved, while citizens in developed states grow increasingly indifferent to the suffering of those making secessionist or even national liberation claims, including just ones, upon them.

Finally, drones have the capacity to strengthen the surveillance capacity of both democracies and authoritarian regimes, with significant consequences for civil liberties. In the UK, BAE Systems is adapting military-designed drones for a range of civilian policing tasks including ‘monitoring antisocial motorists, protesters, agricultural thieves and fly-tippers’.¹⁴⁹ Such drones are also envisioned as monitoring Britain’s shores for illegal immigration and drug smuggling. In the United States, the Federal Aviation Administration (FAA) issued 61 permits for domestic drone use between November 2006 and June 2011, mainly to local and state police, but also to federal agencies and even universities.¹⁵⁰ According to one FAA estimate, the US will have 30,000 drones patrolling the skies by 2022.¹⁵¹ Similarly, the European Commission will spend US\$260 million on Eurosur, a

¹⁴⁸ Drone Wars UK, ‘Gaza under drones’, Global Research, 29 Nov. 2012, <http://www.globalresearch.ca/gaza-under-drones/5313437>, accessed 16 Dec. 2012. The Israeli official’s quote is from Arie Egozi, ‘Israeli sources hail UAV contribution to Gaza operation’, *Flightglobal*, 23 Nov. 2012, <http://www.flightglobal.com/news/articles/israeli-sources-hail-uav-contribution-to-gaza-operation-379396/>, accessed 16 Dec. 2012.

¹⁴⁹ Paul Lewis, ‘CCTV in the sky: police plan to use military-style spy drones’, *Guardian*, 23 Jan. 2010. The term ‘fly-tipping’ refers to the illegal disposal of garbage or waste.

¹⁵⁰ Jim Gold, ‘Poll: Americans OK with some domestic drones—but not to catch speeders’, *NBC News*, 13 June 2012, http://usnews.nbcnews.com/_news/2012/06/13/12205763-poll-americans-ok-with-some-domestic-drones-but-not-to-catch-speeders?lite, accessed 16 Dec. 2012.

¹⁵¹ Gold, ‘Poll: Americans OK with some domestic drones’.

new programme that will use drones to patrol the Mediterranean coast.¹⁵² The risk that drones will turn democracies into ‘surveillance states’ is well known, but the risks for authoritarian regimes may be even more severe. Authoritarian states, particularly those that face serious internal opposition, may tap into drone technology now available to monitor and ruthlessly punish their opponents. In semi-authoritarian Russia, for example, drones have already been employed to monitor pro-democracy protesters.¹⁵³ One could only imagine what a truly murderous authoritarian regime—such as Bashar al-Assad’s Syria—would do with its own fleet of drones. The expansion of drone technology may make the strong even stronger, thus tilting the balance of power in authoritarian regimes even more decisively towards those who wield the coercive instruments of power and against those who dare to challenge them.

Conclusion

Even though it has now been confronted with blowback from drones in the failed Times Square bombing, the United States has yet to engage in a serious analysis of the strategic costs and consequences of its use of drones, both for its own security and for the rest of the world. Much of the debate over drones to date has focused on measuring body counts and carries the unspoken assumption that if drone strikes are efficient—that is, low cost and low risk for US personnel relative to the terrorists killed—then they must also be effective. This article has argued that such analyses are operating with an attenuated notion of effectiveness that discounts some of the other key dynamics—such as the corrosion of the perceived competence and legitimacy of governments where drone strikes take place, growing anti-Americanism and fresh recruitment to militant networks—that reveal the costs of drone warfare. In other words, the analysis of the effectiveness of drones takes into account only the ‘loss’ side of the ledger for the ‘bad guys’, without asking what America’s enemies gain by being subjected to a policy of constant surveillance and attack.

In his second term, President Obama has an opportunity to reverse course and establish a new drones policy which mitigates these costs and avoids some of the long-term consequences that flow from them. A more sensible US approach would impose some limits on drone use in order to minimize the political costs and long-term strategic consequences. One step might be to limit the use of drones to HVTs, such as leading political and operational figures for terrorist networks, while reducing or eliminating the strikes against the ‘foot soldiers’ or other Islamist networks not related to Al-Qaeda. This approach would reduce the number of strikes and civilian deaths associated with drones while reserving their use for those targets that pose a direct or imminent threat to the security of the United States.

¹⁵² Nick Craven, ‘Spy in the sky drones to patrol Britain’s shores for terrorists, smugglers, and illegal immigrants’, *Daily Mail*, 11 Aug. 2012.

¹⁵³ Lorenzo Franceschi-Bicchierai, ‘Report: Russia is stockpiling drones to spy on street protests’, CNN.com, 25 June 2012, <http://www.cnn.com/2012/07/25/tech/innovation/russia-stockpiling-drones-wired/index.html>, accessed 16 Dec. 2012.

Such a self-limiting approach to drones might also minimize the degree of political opposition that US drone strikes generate in states such as Pakistan and Yemen, as their leaders, and even the civilian population, often tolerate or even approve of strikes against HVTs. Another step might be to improve the levels of transparency of the drone programme. At present, there are no publicly articulated guidelines stipulating who can be killed by a drone and who cannot, and no data on drone strikes are released to the public.¹⁵⁴ Even a Department of Justice memorandum which authorized the Obama administration to kill Anwar al-Awlaki, an American citizen, remains classified.¹⁵⁵ Such non-transparency fuels suspicions that the US is indifferent to the civilian casualties caused by drone strikes, a perception which in turn magnifies the deleterious political consequences of the strikes. Letting some sunlight in on the drones programme would not eliminate all of the opposition to it, but it would go some way towards undercutting the worst conspiracy theories about drone use in these countries while also signalling that the US government holds itself legally and morally accountable for its behaviour.¹⁵⁶

A final, and crucial, step towards mitigating the strategic consequences of drones would be to develop internationally recognized standards and norms for their use and sale. It is not realistic to suggest that the US stop using its drones altogether, or to assume that other countries will accept a moratorium on buying and using drones. The genie is out of the bottle: drones will be a fact of life for years to come. What remains to be done is to ensure that their use and sale are transparent, regulated and consistent with internationally recognized human rights standards. The Obama administration has already begun to show some awareness that drones are dangerous if placed in the wrong hands. A recent *New York Times* report revealed that the Obama administration began to develop a secret drones 'rulebook' to govern their use if Mitt Romney were to be elected president.¹⁵⁷ The same logic operates on the international level. Lethal drones will eventually be in the hands of those who will use them with fewer scruples than President Obama has. Without a set of internationally recognized standards or norms governing their sale and use, drones will proliferate without control, be misused by governments and non-state actors, and become an instrument of repression for the strong. One remedy might be an international convention on the sale and use of drones which could establish guidelines and norms for their use, perhaps along the lines of the Convention on Certain Conventional Weapons (CCW) treaty, which attempted to spell out rules on the use of incendiary devices and fragment-based weapons.¹⁵⁸ While enforcement of these guidelines and adherence to rules on their use will be imperfect and marked by derogations, exceptions and

¹⁵⁴ David Cole, 'It's time to stop killing in secret', *New York Review of Books*, 28 Nov. 2012.

¹⁵⁵ Charlie Savage, 'Secret US memo made a legal case to kill a citizen', *New York Times*, 8 Oct. 2011.

¹⁵⁶ For an interesting way to do this, see Omar S. Bashir, 'Who watches the drones? The case for independent oversight', *Foreign Affairs*, 24 Sept. 2012, <http://www.foreignaffairs.com/articles/138141/omar-s-bashir/who-watches-the-drone>, accessed 20 Dec. 2012

¹⁵⁷ Shane, 'Election spurred move to codify US drones policy'.

¹⁵⁸ This treaty entered into force in 1983, and currently 114 states are signatories. For more information, see the documents at the UN Office in Geneva's website: [http://www.unog.ch/80256EE600585943/\(httpPages\)/4FoDEF093B4860B4C1257180004B1B30?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/4FoDEF093B4860B4C1257180004B1B30?OpenDocument), accessed 20 Dec. 2012.

violations, the presence of a convention may reinforce norms against the flagrant misuse of drones and induce more restraint in their use than might otherwise be seen. Similarly, a UN investigatory body on drones would help to hold states accountable for their use of drones and begin to build a gradual consensus on the types of activities for which drones can, and cannot, be used.¹⁵⁹ As the progenitor and leading user of drone technology, the US now has an opportunity to show leadership in developing an international legal architecture which might avert some of the worst consequences of their use.

If the US fails to take these steps, its unchecked pursuit of drone technology will have serious consequences for its image and global position. Much of American counterterrorism policy is premised on the notion that the narrative that sustains Al-Qaeda must be challenged and eventually broken if the terrorist threat is to subside over the long term. The use of drones does not break this narrative, but rather confirms it. It is ironic that Al-Qaeda's image of the United States—as an all-seeing, irreconcilably hostile enemy who rains down bombs and death on innocent Muslims without a second thought—is inadvertently reinforced by a drones policy that does not bother to ask the names of its victims. Even the casual anti-Americanism common in many parts of Europe, the Middle East and Asia, much of which portrays the US as cruel, domineering and indifferent to the suffering of others, is reinforced by a drones policy which involves killing foreign citizens on an almost daily basis. A choice must be made: the US cannot rely on drones as it does now while attempting to convince others that these depictions are gross caricatures. Over time, an excessive reliance on drones will deepen the reservoirs of anti-US sentiment, embolden America's enemies and provide other governments with a compelling public rationale to resist a US-led international order which is underwritten by sudden, blinding strikes from the sky. For the United States, preventing these outcomes is a matter of urgent importance in a world of rising powers and changing geopolitical alignments. No matter how it justifies its own use of drones as exceptional, the US is establishing precedents which others in the international system—friends and enemies, states and non-state actors—may choose to follow. Far from being a world where violence is used more carefully and discriminately, a drones-dominated world may be one where human life is cheapened because it can so easily, and so indifferently, be obliterated with the press of a button. Whether this is a world that the United States wants to create—or even live in—is an issue that demands attention from those who find it easy to shrug off the loss of life that drones inflict on others today.

¹⁵⁹A number of experts, including UN Special Rapporteur on Human Rights and Counterterrorism Ben Emmerson QC, have called for such a body to be established. See Owen Bowcott, 'Drone strikes threaten 50 years of international law, says UN rapporteur', *Guardian*, 21 June 2012.

