The Effectiveness of the Drone Campaign against Al Qaeda Central. A Case Study

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Abstract

This article examines the effects which the drone strike campaign in Pakistan is having on Al Qaeda Central. To that end, it constructs a theoretical model to explain how the campaign is affecting Al Qaeda's capacity to carry out terrorist attacks in the United States and Western Europe. Although the results of one single empirical case cannot be generalised, they nonetheless constitute a preliminary element for the construction of a broader theoretical framework concerning the use of armed drones as part of a counter-terrorism strategy.

Key Words: Al Qaeda, Terrorism, Intelligence, Drones, United States, Pakistan.

Introduction

Although it has tried to repeat its highly lethal attacks, Al Qaeda Central has been unable to strike successfully in the United States since 9/11 or in Western Europe since 7 July 2005 (London bombings). Logically, as with all complex social phenomena, the operational decline of the terrorist organisation is the result of multiple factors. This article focuses on just one: the campaign of drone strikes against Al Qaeda Central in Pakistan, particularly North Waziristan.

A fruitful academic debate is taking place at present regarding the effectiveness of High Value Targeting (HVT) campaigns in the fight against terrorist organisations. Based on empirical studies involving relatively large samples, several authors question the effectiveness of such campaigns and even warn that they may be counterproductive.[1] Others, however, also use empirical research to show that HVT reduces the effectiveness of terrorist organisations.[2] Yet others limit their analysis exclusively to the Israeli HVT during the second

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[1] Jenna Jordan, 'When Heads Roll: Assessing the Effectiveness of Leadership Decapitation', *Security Studies* 18/4 (2009) 719-55; Audrey Kurth Cronin, *How Terrorism Ends: Understanding the Decline and Demise of Terrorist Campaigns*, (Princeton: Princeton University Press, 2009); Aaron Mannes, 'Testing the Snake Head Strategy: Does Killing or Capturing its Leaders Reduce a Terrorist Group's Activity?', *The Journal of International Policy Solutions* 9 (2008) 40-9.

[2] Bryan C. Price, 'Targeting Top Terrorists. How Leadership Decapitation Contributes to Counterterrorism', *International Security* 36/4 (2012) 9-46; Patrick B. Johnston, 'Does Decapitation Work? Assessing the Effectiveness of Leadership Targeting in Counterinsurgency Campaigns', *International Security* 36/4 (2012) 47-79; Daniel L. Byman, 'Do Targeted Killings Work?', *Foreign Affairs* 85/2 (2006) 95-112.

intifada and conclude that the effects are neither positive nor negative in terms of the operational capability and longevity of the targeted organisation and such a policy has to be viewed therefore rather as an instrument of vengeance and political marketing (the number of strikes giving the impression that the government is doing something).[3] Lastly, some authors argue that, due to methodological problems, the research work carried out thus far does not allow generalisations to be made concerning the effectiveness of HVT as a counter-terrorism tool.[4]

This article is premised on the last of the above arguments. The fact that it is impossible to generalise on the basis of existing works makes it advisable for investigation of the effectiveness of HVT to be undertaken case by case, using specific studies.[5]

A further reason warranting study of this issue using a specific case approach is that the drone campaign against Pakistan transcends the concept of HVT. Although some strikes have targeted Al Qaeda leaders and cadres, many others have been *signature strikes* against individuals of unknown identity but whose behaviour patterns supposedly linked them to terrorist and insurgent organisations.[6] Available figures on the number of militants killed in drone strikes (between 1.567 and 2.713 during the period 2004-May 2013, according to the New America Foundation) show that the majority of the targets are rank and file militants.[7] The majority of strikes using drones in Pakistan are aimed at the Taliban although, given the highly porous boundaries separating the different groups, it is likely that a number of militants killed in safe houses or training camps had links to Al Qaeda Central also.

To facilitate the case study, the article begins by outlining a theoretical model in which drone attacks are the independent variable and the capacity of Al Qaeda Central to carry out highly lethal terrorist attacks repeatedly in the United States and Europe is the dependent variable.

Logically, however, it would be wrong to attribute any eventual deterioration in Al Qaeda Central's terrorist capacity to a single independent variable. Among other reasons, the decline in the lethality of Al Qaeda in the United States and Europe can be ascribed to tighter border controls, the adaptation of legislation to the operating methods of jihadist terrorism, increased international cooperation and the greater attention devoted to the threat by intelligence agencies and police forces.

It is not possible to perform a counterfactual analysis to determine Al Qaeda's terrorist capacity if the drone strike campaign in Pakistan were excluded and the other independent variables relating to law enforcement retained. Nonetheless, it is reasonable to assume that the interaction between the independent variable "drone campaign" and the other independent variables

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[3] 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) 359-82

[4] Stephanie Carvin, 'The Trouble with Targeted Killing', *Security Studies*, 21/3 (2012), 529-555.

[5] Ibid., 553.

[6] Scott Shane 'Election Spurred a Move to Codify U.S. Drone Policy' *The New York Times* (24 November 2012)

[7] National Security Studies Program, *The Drone War in Pakistan*, New America Foundation web site <http://natsec.newamerica.net/drones/pakistan/analysis>.

increases the impact of all of variables on the diminished terrorist capacity of Al Qaeda.

In addition to the dependent and independent variables, the model considers three sets of intervening variables: the hierarchical structure, qualified human resources and key material resources of the terrorist organisation. These variables facilitate an understanding of the relationship between the independent and dependent variables.

Based on the proposed model, and although bearing in mind the limitations inherent in generalising single-case studies, the article aims to offer a theoretical starting point to assess the effectiveness of similar campaigns, involving precision strikes with drones, against other trans-regional terrorist organisations (which is precisely one of the potential benefits of case studies). Drone strikes have become a relatively surgical instrument for the application of force and carry a much lower political and economic cost than major ground interventions.[8] Accordingly, and is already happening today in Yemen against Al Qaeda in the Arabian Peninsula or, to a lesser degree, in Somalia against Al Shabab, one can expect them to be used again in future against other terrorist organisations that become a trans-regional threat.

Factors conferring trans-regional scope and highly lethal capacity on terrorist organisations

Although Brian Jenkins' famous remark that "terrorists want a lot of people watching, not a lot of people dead" can be applied to many terrorist organisations, others such as Al Qaeda are characterised by the high number of fatalities caused by their attacks.[9] However, in addition to the will of being extremely lethal, there are three other sets of factors associated with the organisation that help make its actions destructive: its hierarchical structure, qualified human resources and key material resources. Logically, these factors are not always indispensable. The case of "lone wolf" Anders Breivik in Norway in July 2011 shows that a single individual is capable of causing 77 deaths in a twin terrorist action (even though his is a truly exceptional case). However, as the following pages will show, the model's three sets of intervening variables substantially increase the likelihood of a terrorist organisation achieving its goal to be extremely deadly.

Hierarchical structure

The emphasis placed by the present article on the advantages of hierarchical structures over horizontal networks in terms of efficiency, particularly in the case of sustained terrorist campaigns and/or highly deadly strikes, contrasts with the emphasis many authors place on the decentralised nature of Al Qaeda. However, where confusion exists it may well be due to the conceptualisation of the term Al Qaeda. The case study offered here covers Al Qaeda Central, not the "Al Qaeda movement" (also referred to by some authors as the global jihadist movement).

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[8] Daniel Klaidman, *Kill or Capture: The War on Terror and the Soul of the Obama Presidency*, (Boston: Houghton Mifflin Harcourt 2012).

[9] Brian M. Jenkins, *Will Terrorists go Nuclear?*, (Santa Monica, Calif.: RAND 1975) 5

Hierarchical terrorist organisations - where one unit wields authority over another - are more effective in terms of lethality. Heger, Jung and Wong support this view with an empirical study based on an examination of over 19,000 terrorist attacks. They attribute the greater lethality of hierarchical terrorist organisations to three reasons:[10]

- Hierarchies have the capacity for centralised command and control, with the advantage this brings in terms of setting objectives and articulating the means to achieve them. Conversely, non-hierarchical organisations find it more difficult to establish a strategic agenda and are more likely to multiply their functions. While this may give horizontal networks greater resistance and flexibility, it also reduces their effectiveness.
- Hierarchies find it easier to apply accountability mechanisms, meaning that badly- planned or poorly-executed actions can be punished.
- As a consequence of the above, hierarchies tend to have specialised functions within the organisation and they therefore use available resources better, increasing their effectiveness.

As noted by Rohan Gunaratna and Aviv Oreg, a "leaderless terrorism" or a network-based organization remains mostly unsuited for carrying out complex task that require communication, cooperation, and mostly significant professional training. Horizontal network organisations are incapable of executing complex attacks such as those of 11 September 2001.[11] In the years immediately after losing its refuge in Afghanistan, Al Qaeda regenerated and kept much of its hierarchical structure operational in Pakistan, thus enabling it to carry out new attacks in the West, specifically the Madrid train bombings in March 2004 and the July 2005 London bombings.[12]

At the same time, Al Qaeda also retained during those years what Bruce Hoffman calls "a remarkably agile and flexible organisation that exercises both top-down and bottom-up planning and operational capabilities".[13] In other words, the low-level cells were not mere executors of orders handed down by the leadership. Al Qaeda's hierarchical structure was in no way comparable to the formal structure of the ideal bureaucracy posited by Max Weber. Cells at the bottom of the structure enjoyed considerable autonomy to propose targets, plan operational details, obtain the required resources and establish horizontal ties with other Al Qaeda cells or cells belonging to like-minded groups such as the Moroccan Islamic Combatant Group or the Salafist Group for Preaching and Combat. Nonetheless, the cells kept their superiors informed during the planning of attacks and, if required, received support from the "parent organisation" in the form of coordination of the different units.

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[10] Lindsay Heger, Danielle Jung and Wendy H. Wung, 'Organizing for Resistence: How Group Structure Impacts the Character of Violence', *Terrorism and Political Violence* 24/5 (2012) 743-68.
[11] Rohan Gunaratna and Aviv Oreg, 'Al Qaeda's Organizational Structure and its Evolution', *Studies in Conflict and Terrorism* 33/12 (2010) 1045.
[12] Fernando Reinares, 'The Madrid Bombings and Global Jihadism', *Survival* 52/2 (2010) 83-104. Bruce Hoffman, 'Radicalization and Subversion: Al Qaeda and the 7 July 2005 Bombings and the 2006 Airline Bombing Plot', *Studies in Conflict and Terrorism* 32/12 (2009) 1100-16.
[13] Bruce Hoffman, 'The Myth of Grass-Roots Terrorism', *Foreign Affairs*, 87/3 (2008) 133-38.

Qualified human resources

A second set of intervening variables is comprised by the level of qualification of the human resources of the terrorist organisation. Said qualification is reflected in two aspects:

1. *Transformational leadership.* Good leadership in organisations contributes positively to performance, effectiveness and innovation.[14] In the case of terrorist groups, leadership tends to be charismatic.[15] Through transformational leadership, the leader conveys to his followers a common vision and objectives for which personal interests should be sacrificed. He provides a sense of mission and creates a common identity[16].

   The need for transformational leadership applies not just to the upper echelons of the organisation but also to middle managers: those who have contact both with high-level leaders and rank and file members. In the case of Al Qaeda Central, the former are located largely in the tribal territories of Pakistan, whereas the latter live in different countries, including in Europe and the United States. Middle managers play an essential role in creating and strengthening ties and facilitating information, resources, skills and strategic direction from the top to the bottom of the organisation.[17] These individuals also require transformational leadership skills and must be good managers, which leads us to the second of the two points.

2. *Critical technical skills.* In addition to sound leadership, a trans-regional terrorist organisation requires individuals with critical skills in intelligence and counter-intelligence, organisational management, bomb-making, training, document forgery, propaganda design, publication and dissemination, and fundraising and financial management, etc. Without such skills, which are often the privilege of a select few members, the overall effectiveness of the group suffers. One of the distinguishing traits of Al Qaeda Central in the years during which it carried out its deadliest attacks was its substantial cadre of individuals with precisely these skills.

Key material resources

Lastly, highly lethal trans-regional terrorist actions, particularly if they are to be repeated, are more likely if the organisation possesses a series of material resources (the third set of intervening variables). The following four are particularly important:

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[14] Dongil Don Jung, Anne Wu, and Chee W. Chow, 'Towards Understanding the Direct and Indirect Effects of CEOs' Transformational Leadership on Firm Innovation', *The Leadership Quarterly* 19/5 (2008) 582-94).

[15] Price, 'Targeting Top Terrorists', 17.

[16] Bernard M. Bass, 'Two Decades of Research and Development in Transformational Leadership', *European Journal of Work and Organizational Psychology* 8/1 (1999) 9-32.

[17] Peter Neumann, Ryan Evans and Raffaello Pantucci, 'Locating Al Qaeda's Center of Gravity: The Role of Middle Managers', *Studies in Conflict and Terrorism* 34/11 (2011) 825-42.

1. *Financial resources.* Although terrorist organisations, unlike their organised crime counterparts, are not driven by an essentially financial motive, they nonetheless require funds for their activities.

2. *Refuge for high-level cadres.* Leaders are a priority target for counter-terrorism actions and therefore need a minimum amount of security to be able to perform their leadership role.

3. *Training infrastructure.* Terror organisations seeking to wage extremely deadly campaigns need physical spaces to train members for long hours, with real-life practice. One of the strong points of Al Qaeda Central as an organisation before and immediately after the 9/11 attacks were its training camps, initially in Sudan, then Afghanistan, and latterly in Pakistan. In addition to providing training for hundreds of militants, the camps doubled as selection sites, with the best militants chosen to join the ranks of the organisation.[18]

4. *Weapons.* Weapons are a last resource required for highly lethal terrorist campaigns. Bombs -both home-made and industrial- are the preferred weapon of Al Qaeda and other terrorist groups seeking to cause high casualties.[19] To make and handle a bomb requires technical skill, which is hard to acquire without specialist training, particularly in the case of home-made devices. Accordingly, the use of bombs is subject to two factors already mentioned above: qualified human resources and appropriate training infrastructure.

The three sets of intervening variables do not act in isolation but rather are closely bound up with each other. The hierarchical structure contributes to the qualification of the members of the organisation and to the acquisition of key resources. In turn, the qualification of members contributes to the acquisition of resources and helps leaders exert hierarchical authority. Similarly, the availability of key resources facilitates the existence and preservation of the hierarchy, as well as the qualification of the members of the organisation. The relationship is a systemic one, therefore.

The interesting aspect of this model is that drone strikes (the independent variable) impact negatively on the interaction between the three sets of intervening variables, diminishing the capacity of the terrorist organisation to carry out highly lethal attacks in distant lands (dependent variable). Thus, the model aims to provide a more complete vision of reality, avoiding the simplification of viewing drone attacks exclusively as HVT.

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[18] Petter Nesser, 'How did Europe's Global Jihadis Obtain Training for their Militant Causes?', *Terrorism and Political Violence* 20/2 (2008) 234-256; Rohan Gunaratna, *Inside Al Qaeda. Global Network of Terror*, (New York: Columbia University Press 2002) 7-8

[19] Brian A. Jackson and David R. Frelinger, 'Rifling Through the Terrorists' Arsenal: Exploring Groups' Weapon Choices and Technology Strategies', *Studies in Conflict and Terrorism* 31/7 (2008) 583-604.
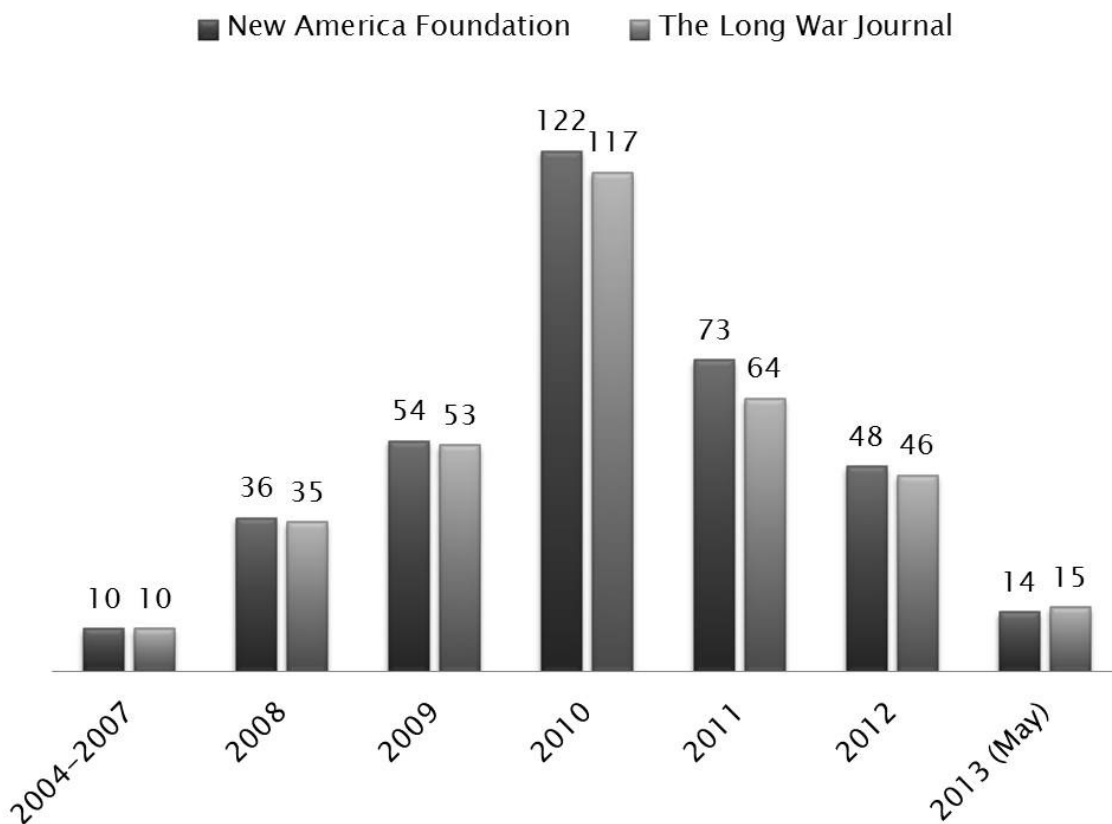
Application of the case study: drone strikes against Al Qaeda Central

The intervening variables can often prove difficult to measure, a difficulty which is compounded in this particular case study. The US Administration does not release official information on the number of attacks, of militants killed or wounded, the facilities destroyed or other details concerning the impact of the actions of the drones in Pakistan's border regions. Moreover, in most cases the strikes are carried out in areas to which the media have little access and, as a result, the information can often be inaccurate and incomplete. Notwithstanding these limitations, as much information as possible on the effects of drone strikes has been obtained from open sources. The information is used to examine how the strikes affect the three above-mentioned sets of intervening variables.

Before turning to examine the effects of the drone strikes in Pakistan, some general remarks on the campaign are appropriate. The first drone attack in the tribal territories of Pakistan was launched on 19 June 2004 and killed Taliban leader Nek Mohammed. Since then, up until 31 May 2013, a total of between 340 and 357 attacks have taken place. Figure 1 below gives the distribution of the attacks by year.[20]

Figure 1

Number of drone attacks in Pakistan according to sources

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[20] National Security Studies Program, *The Drone War in Pakistan*; Bill Roggio and Alexander Mayer, 'Charting the data for US airstrikes in Pakistan, 2004 – 2013' *The Long War Journal* <http://www.longwarjournal.org/pakistan-strikes.php>

However, the majority of the strikes have been aimed at the Taliban as opposed to Al Qaeda Central. According to New America Foundation calculations, during the Bush Administration approximately 25% of the strikes were directed at Al Qaeda Central and 40% at the Taliban. During the Obama Administration only 8% of drone strikes targeted Al Qaeda Central, compared to 51% against the Taliban. Drones have also been used against other groups operating in the zone, such as the Haqqani network, Tehrik-Taliban-Pakistan, the Islamic Jihad Union, etc. Notwithstanding these findings, the present article will focus exclusively on the impact of the strikes against Al Qaeda Central.

The strikes are carried out using MQ-1 Predator drones, armed with Hellfire missiles, and MQ-9 Reapers which, in addition to Hellfire missiles, can launch GBU-12 Paveway II laser-guided bombs and JDAM GPS-guided bombs. According to open sources, in 2011 the CIA had about 30 Predator and Reaper drones.[21]

As noted above, the strikes combine actions against specific command cadres (HVT) of Al Qaeda, the Taliban and other extremist groups present in the areas, as well as attacks on unknown individuals whose behaviour leads to suspicions that they may be members of terrorist or insurgent groups (signature strikes).

Up to the end of May 2013, the total number of deaths caused by drone strikes ranged from 2.010 (minimum) to 3,336 (maximum). A very problematic issue of the campaign is the number of non-combatants killed.[22] According to the programme headed by Peter Bergen in the New American Foundation, during the period 2004-2007 between 54 and 61% of fatalities were civilian. However, the figure fell as of 2008: 8-10% in 2008, 11-19% in 2009, 2-3% in 2010, 1-15% in 2011, and 2% in 2012. The New America Foundation figures differ partly to those released by another independent body, the London-based Bureau of Investigative Journalism (TBIJ). According to TBIJ, between June 2004 and 31 May 2013, drone strikes killed between 2.540 and 3.542 people in Pakistan, of whom 441-884 were civilians, 168 of them children. The Bureau's data base contains a broader selection of reporting from the Pakistani and international media, thus enabling the information to be verified better.[23]

Figure 1 illustrates the sharp increase in the number of strikes as of 2008. In July of that year, shortly after the attack on the Indian Embassy in Afghanistan, US intelligence - tired of leaks to the Taliban by the ISI (Pakistani intelligence) - requested authorisation from President Bush to step up the strikes against Al Qaeda and Taliban commanders in the tribal areas. At the same time, the process was changed so as not to require advance notice to be given to Pakistan before carrying out an action, thus reducing from several hours (and even days) to 45 minutes the time interval between target localisation and missile launch, which also helped prevent the risk of leaks.[24] The decision was made in Washington after months of wrenching debate about the growth of militancy in

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[21] Greg Miller and Julie Tate, 'CIA shifts focus to killing targets', *The Washington Post*, (1 September 2011).

[22] For a review of drone casualty estimates provided by various organizations: Human Rights Clinic, *Counting Drone Strike Deaths*, (New York: Columbia Law School, 2012).

[23] The Bureau of Investigative Journalism web site:
<http://www.thebureauinvestigates.com/category/projects/drones/>

[24] Mathew Aid. *Intel Wars. The Secret History of the Fight against Terror*, (New York: Bloomsbury Press, 2012) 109.

Pakistan's tribal areas; a CIA internal assessment had likened it to al Qaeda's safe haven in Afghanistan in the years before the 9/11 attacks. The classified CIA paper, dated May 1, 2007, concluded that al Qaeda was at its most dangerous since 2001 because of the base of operations that militants had established in North Waziristan, South Waziristan, Bajaur, and the other tribal areas. That assessment became the cornerstone of a yearlong discussion about the Pakistan problem.[25]

From then onwards, until the handover to the Obama Administration, the CIA carried out around 30 strikes, compared to just 6 during the first half of the year. The early days of the Democrat presidency did not bring a change in trend. Quite the opposite: in 2009 the number of drone strikes (53-54) in the tribal areas of Pakistan exceeded the entire number for the period 2004-2008. The following year the figure once again surpassed the total for all previous years, peaking at 117-122 depending on the source consulted.

Why did Obama continue the policy inherited from Bush? After the handover of power, the new Administration's security chiefs realised that the only way to continue harassing the Taliban and Al Qaeda in their FATA refuges was through drone strikes. At the same time, they realised also that the Pakistani government and military leadership were incapable of exercising effective control over the most troublesome tribal area provinces, particularly North Waziristan.

The Pakistani army carried out various military operations during the previous years with inconclusive results. Deals were reached allowing sharia law to be applied by the Pakistani Taliban in areas under their control. In April 2009, the faction led by Baitullah Mehsud broke the ceasefire and launched an offensive in the district of Swat. It extended its control eastwards and came to within just over a hundred kilometres of the capital. The Pakistani army responded by counter-attacking with its own offensive in South Waziristan, although the aim was not to establish political and administrative control in the zone or engage other Taliban factions except that led by Mehsud. Given the circumstances, an offensive against North Waziristan, a sanctuary for prominent Al Qaeda leaders, was not even seriously considered. Moreover, once the threat was brought under control, the Pakistani security forces continued to support the Afghan Taliban and other extremist groups in the country to use them as a strategic counterweight to India.[26]

It became clear, therefore, that Pakistan was not going to eject the Taliban insurgents (who attacked coalition forces across the border daily) or Al Qaeda (who continued to train foreign volunteers and plan terrorist attacks against Europe and the United States) from the FATA.[27] In view of the situation, the Obama Administration and the Congress and Senate Intelligence Committees agreed on the need to step up air attacks. This situation persisted until 2011, an *annus horribilis* for US-Pakistan relations which saw serious clashes between the two countries, including the Raymond Davis case, the military operation against Bin Laden and the mistaken air strike on an army border post which

[25] Mark Mazzetti. *The Way of the Knife: The CIA, a Secret Army, and a War at the Ends of the Earth*, (New Yor: The Penguin Press, 2013) 145.

[26] Mathew Aid, *Intel Wars,* 124.

[27] Seth Jones, *Hunting in the Shadows: The Pursuit of al Qa'ida since 9/11*, (New York: W. W. Norton & Company, 2012) 223-32.

killed 28 Pakistani soldiers. Following a series of lulls, the drone attacks were renewed, albeit in lesser numbers than previous years. This situation continues today.

Effects on hierarchy, qualified human resources and material resources

As noted above, Al Qaeda Central requires three key sets of elements to be able to carry out continuous attacks in the United States and Western Europe: 1) a hierarchical command and control structure; 2) qualified human resources; and 3) material resources in the form of money, sanctuary, training camps and weapons.

These three sets of factors, which are the intervening variables in the proposed model, are interrelated and the prolonged drone strikes campaign (independent variable), based on on-the-ground informants (HUMINT) who enable Al Qaeda leaders to be located and killed and on signals intelligence (SIGINT) to intercept communications to identify and locate potential targets, is contributing to deplete the operational capabilities of the terrorist organisation (dependent variable). The manner in which the campaign would impact on the three sets of factors is outlined briefly below:

Effects on the hierarchical structure of Al Qaeda Central

Continuous targeting of Al Qaeda Central leaders forces them to devote substantial attention and energy to self-protection rather than to coordinating the organisation.

The permanent presence of drones and the fear of discovery would aggravate the communication problems between the different network nodes, especially among those forming part of the command and control structure. An indication of this can be seen in the month and a half it took Al Qaeda to publicly announce the appointment of Ayman Al Zawahiri as its leader following the death of Osama Bin Laden. Such a delay is hard to explain in an organisation in which the designation of a new commander in chief needs to be swift. The security measures recommended by Bin Laden in his letters are useful for self-protection but make management of the organisation extremely difficult in the tribal territories and, in particular, outside these areas.[28] The diminished contact between nodes at the core of the hierarchy, and between these and the nodes abroad, also reduces the possibilities of executing complex attacks requiring coordination between the different network components.

The coordination problems can undermine the internal cohesion of the organisation. Centrifugal forces are more likely to be triggered when central leadership is weak. The lack of face-to-face meetings to identify and resolve misunderstandings also contributes to an aggravation of internal strife. Written messages conveyed by whatever means and telephone conversations (particularly if very brief for reasons of security) lack the contextual information and human touch needed to generate trust and cohesion, especially in situations

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[28] Liam Collins, 'The Abbottabad Documents: Bin Ladin's Security Measures', *CTC Sentinel* 5/5, (May 2012) 1-4.

of internal crisis. Physical distance debilitates the solidity of clandestine networks and makes them vulnerable to infiltration and betrayal from within.[29] A *Newsweek* report dated January 2012 reflected the opinion of one young militant: "Al Qaeda was once full of great jihadis, but no one is active and planning operations anymore. Those who remain are just trying to survive".[30] According to a Pakistani intelligence agent who works in the tribal territories, Al Qaeda leaders used to visit the camps to offer encouragement to their followers but they have virtually ceased doing so now.[31]

Thus, the CIA drone campaign would be forcing Al Qaeda to switch from being an organisation in which its leaders exerted control at strategic, operational and, to a lesser degree, tactical levels to an increasingly decentralised organisation, whose leaders seek to influence strategy through public communiqués but have very little operational capacity and practically none at tactical level beyond its Afghanistan/Pakistan operations area. The correspondence seized in Abbottabad indicates that Osama Bin laden continued to issue general instructions to his lieutenants for transmission to cells in other countries and to Al Qaeda's regional affiliates. However, due to the debilitated central core, the latter received increasingly less support from the parent organisation.[32]

Effects on qualified human resources

Drones have killed approximately 60 leaders and middle-ranking members of Al Qaeda Central.[33] Since its creation, Al Qaeda has had a total membership of a few hundreds, even during its period of refuge in Taliban Afghanistan[34]. According to US intelligence reports, in 2008 Al Qaeda Central had between 100 and 150 foreign militants in tribal areas of Pakistan who had pledged allegiance to Bin Laden and could therefore be considered members of the organisation. To these one has to add around 200 militants (mostly Arabs and Uzbeks) who did not swear allegiance and who, in practical terms, could be considered personnel in the service of Al Qaeda.[35]

The number of individuals killed by drones is therefore a very high percentage of its command cadres, most of whom were veterans, including some first-generation members of the organisation. Following the Al Qaeda Central

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[29] Mette Eilstrup-Sangiovanni and Jones Calvert 'Assessing the Dangers of Illicit Networks. Why al-Qaida May Be Less Threatening Than Many Think', *International Security* 33/2 (2008) 29.

[30] Sami Yousafzai and Ron Moreau, 'Al Qaeda on the Ropes: One Fighter's Inside Story', *Newsweek* (2 January 2012).

[31] Michael Georgy and Saud Mehsud, 'Al Qaeda down, but not out in Pakistan', *Reuters* (10 June 2012).

[32] Inkster, 'The International and Regional Terror Threat', 141-66.

[33] For actualized list of Al Qaeda and Taliban leaders killed by drone attacks: National Security Studies Program, *The Year of the Drone*; Bill Roggio and Alexander Mayer, 'Senior al Qaeda and Taliban leaders killed in US airstrikes in Pakistan, 2004 – 2013', *The Long War Journal*: <http://www.longwarjournal.org/pakistan-strikes.php>

[34] Barbara Sude, *Al Qaeda Central an Assessment of the Threat Posed by the Terrorist Group Headquartered on the Afghanistan-Pakistan Border*, New American Foundation (February 2010) 2.

[35] Peter Bergen, 'Afghanistan and Pakistan: Understanding a Complex Threat Environment' Testimony before the House of Representatives, Oversight and Government Reform Committee, (March 04 2009) 17

organisational structure described by Gunaratna and Oreg[36], the drone attacks killed three successive incumbents of the position of chief executive of the organisation (Mustafa Abu Al Yazid, Atiyah Abd Al Rahman and Abu Yahya Al Libi), 3 members of the advisory council (Abu Jihad Al Masri, Abdul Haq Al Turkistani and Abu Miqdad Al Masri), 1 member of the military committee leadership (Khalid Habib), 1 of the religious committee (performed also by Abu Yahya Al Libi), 2 of the financial committee (performed as well by Mustafa Abu Al Yazid and Abu Zaid Al Iraqi), 1 of Al Shabab (propaganda wing) (Abu Jihad Al Masri), 17 of the external operations unit (responsible for preparing terrorist strikes abroad) including 2 unit heads (Abu Hamza Rabia and Saleh Al Somali), 25 members of the unit with responsibility for operations in Afghanistan and Pakistan, 4 members of the training unit and 1 of the unit tasked with WMD development (Abu Khabab Al Masri).[37]

In addition to the above figures, account must also be taken of the hundreds of alleged Al Qaeda members and collaborators handed over by Pakistan to the United States during the 6-year period following 9/11. These included Khalid Sheikh Mohamed (head of external operations and the brains behind the Washington and New York attacks); Abu Zubaydah, a key logistics figure in Al Qaeda; Walid Bin Attash, who took part in the attack on the USS Cole; Ahmed Khalfan Ghailani, who is believed to have been involved in the US Embassy bombings in Kenya and Tanzania; and Abu Faraj Al Libi, head of external operations following the capture of Khalid Sheikh Mohamed. To these one has to add others who died of natural causes (for example, the head of external operations Abu Ubaidah Al Masri, who died in 2006, possibly from hepatitis) and those killed in other operations, including Osama Bin Laden in May 2011. Viewed from this perspective, the toll is staggering.

Even Bin Laden himself voiced concern in one of the letters seized in Abbottabad at the loss of expert command cadres. The letter is dated 21 October 2010, the year in which the highest number of drone strikes was carried out:

> It is important to have the leadership in a faraway location to gain expertise in all areas. When this experienced leadership dies, this would lead to the rise of lower leaders who are not as experienced as the former leaders and this would lead to the repeat of mistakes.[38]

Although not preventing them completely, the presence of drones in the skies jeopardises the activities of the camps, which can easily be targeted by signature strikes, thus hampering the level of training of new members. The account given by North African members of a cell arrested in Belgium in December 2008 after returning from the FATA reflects the suspicions they encountered in seeking to make contact with Al Qaeda, as well as the constraints imposed by the presence of the drones once they did manage to access the terrorist training infrastructure: frequent changes of location, splitting into small groups, hiding

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[36] Gunaratna and Oreg, 'Al Qaeda's Organizational Structure and its Evolution', 1055.

[37] Roggio and Mayer, 'Senior al Qaeda and Taliban leaders killed in US airstrikes in Pakistan, 2004 – 2013'; National Security Studies Program, *The Year of the Drone.*

[38] Don Rassler, Gabriel Koehler-Derrick, Liam Collins, Muhammad al-Obaidi, Nelly Lahoud, *Letters from Abbottabad: Bin Ladin Sidelined?*, Combating Terrorism Center at West Point, Document SOCOM-2012-0000015 (2012) 2.

out for most of the day in small mountain huts, use of human couriers to avoid electronic communications, etc.[39]

Constant harassment by the drones also restricts recruitment given that new volunteers, who often arrive without vetting (due to the damage suffered by the recruitment structure in Europe), are looked upon with suspicion in case they might be spies. A decade ago, infiltration of training camps in Afghanistan by an intelligence agency informer would probably have led to the break-up of a cell somewhere in the world at a later date. Today, it is more likely to produce a Hellfire missile attack during the night. Mohamed Merah (perpetrator of the Toulouse and Montauban shootings in March 2012) was greeted with suspicion even though their commitment to jihadism was genuine.[40] After arriving in Pakistan in mid-2011, Merah managed to make contact with the Taliban, who in turn put him in touch with a small jihadist group in North Waziristan called Jund Al Khilafah. This was a Kazakh group linked to Al Qaeda which began to issue press releases towards the end of 2011. The group offered Merah ultra-rapid training lasting barely two days, after having vetoed him initially due to fears that he was a spy. His training consisted solely of instruction in how to handle a gun, which is how he later killed three soldiers belonging to the French parachute regiment and four members of the Jewish community in Toulouse, three of them children. It is significant that Merah ended up in the hands of an unknown group such as Jund Al Khilafah, which later claimed responsibility for his attacks on Internet, rather than be recruited directly by Al Qaeda Central.

It is worth recalling that, years earlier, the organisation founded by Bin Laden showed keen interest in training volunteers from Europe and then returning them to their countries. In the case of Merah, it is possible that Al Qaeda preferred not to run the risk of welcoming in their midst an individual about whom they knew nothing and decided to leave the job to a group of minor importance.

Mistrust of new volunteers is also a consequence of Al Qaeda Central losing, if not all at least a significant part of, its recruitment infrastructure in Europe. In the years leading up to 9/11, it boasted an extensive network of contacts and cells who recruited, vetted in situ, and arranged travel to training camps in Afghanistan for hundreds of jihadist sympathisers. Once in the camps, Al Qaeda cadres would select those for participation in terrorist plots.[41] This was how they put together the *dream team* that carried out such a sophisticated and ambitious operation as 9/11. Although there are still individuals who recruit volunteers for training in Pakistan - for example, the group that planned to storm the main offices of the Jyllands-Posten, the Danish newspaper that published the Mohammed caricatures, in December 2010 and execute hostages or the Pakistani cell arrested in Birmingham in September 2011 - the activity of

[39] Paul Cruickshank, 'The 2008 Belgium Cell and FATA's Terrorist Pipeline', *CTC Sentinel* 2/4 (2009) 4-8.
[40] Paul Cruickshank, 'Investigations Shed New Light on Toulouse Terrorist Shootings', *CNN,* (13 June 2012).
[41] Gunaratna, *Inside Al Qaeda,* 117.

channels for recruitment and access to Al Qaeda training camps has fallen considerably compared to the period up to the middle part of the last decade.[42]

In tandem, police and intelligence service pressure on cells linked to Al Qaeda in Europe has taken a heavy toll on the organisation's infrastructure. According to Europol, a total of 1,139 individuals with alleged links to jihadist terrorism were arrested between October 2005 and December 2011, and the figure does not include police operations in the United Kingdom (several hundred more arrests).[43] Many of those detained were members of independent cells, lone wolves or cells linked to other organisations, such as Al Qaeda in the Maghreb or in the Arabian Peninsula. However, among the groups broken up were some with links to Al Qaeda Central.[44]

Moreover, the serious deterioration suffered by the Al Qaeda network in Europe has meant that operatives arriving in Europe after stints in training camps in the tribal areas of Pakistan cannot avail themselves of the support of logistics cells in their new posting or of coordination by Al Qaeda's resident cadres in Europe. The available information indicates that Al Qaeda Central lacks infrastructure anywhere close to the level which was in place prior to 9/11 and consisting of, for example, the trans-national networks of Abu Doha, Djamel Beghal or Ben Khemais. In the current situation, the capabilities of cells sent by Al Qaeda from Pakistan depend largely on the qualification and resources of the cell members once they arrive in Europe.[45] The same can be said of the Al Qaeda Central infrastructure in the United States. As the failed plots by Najibullah Zazi and Faisal Shahzad (the latter linked to the Tehrik-i-Taliban Pakistan, TTP) show, these two individuals had to fend for themselves on their return from Pakistan and they received no support from other Al Qaeda cells in the United States.[46]

Effects on key material resources

According to Pakistani intelligence officials, the pressure caused by the drones would be affecting the flow of money to Al Qaeda as transfer channels are shut down or compromised, thus worsening the organisation's financial problems[47]. In this regard, the death of Mustafa Abu Al Yazid (also known as Sheikh Saeed Al Masri) in May 2012 was a major blow to Al Qaeda's fund-raising and financial management. The 9/11 Commission Report identified Abu Al Yazid as Al Qaeda's 'chief financial manager'.[48] In this role, Al Yazid was responsible for disbursing Al Qaeda funds from what is known as the Bayt Al Mal, Al Qaeda's

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[42] Magnus Ranstorp, 'Terrorist Awakening in Sweden?', *CTC Sentinel* 4/1 (2011) 1-5; Duncan Gardham, 'Suicide bomb plotter' told wife it was best they split up', *The Telegraph* (16 November 2011).

[43] Europol, *TE-SAT EU Terrorism and Trend Report*,
<https://www.europol.europa.eu/latest_publications/37>.

[44] Javier Jordan 'Analysis of Jihadi Terrorism Incidents in Western Europe, 2001–2010', *Studies in Conflict and Terrorism* 35/5 (2012) 391-392.

[45] Raffaello Pantucci, 'Manchester, New York and Oslo: Three Centrally Directed Al Qa`ida Plots', *CTC Sentinel* 3/8 (2010) 10-3.

[46] Mitchell D. Silber, 'Al-Qa`ida's Center of Gravity in a Post-Bin Ladin World', *CTC Sentinel* 4/11-12 (2011) 1-4.

[47] Georgy and Mehsud, 'Al Qaeda down, but not out in Pakistan'

[48] The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States, (22 July 2004) 251

treasury. This responsibility made Al Yazid one of the most trusted and important Al Qaeda leaders.[49]

Similarly, and even though the information may be purely anecdotal, one Taliban chief has indicated that a sizeable number of Al Qaeda militants have sold their weapons and sought financial donations to enable them to return to their countries of origin.[50]

On the other hand, drone strikes are depriving Al Qaeda of the sanctuary it had secured for itself in North Waziristan following the loss of its Afghan protection. Various testimonies from Al Qaeda express discontent at the worsening situation. In the Bin Laden letter referred to above this aspect is also mentioned.

> Regarding the brothers in Waziristan in general, whoever can keep a low profile and take the necessary precautions, should stay in the area and those who cannot do so, their first option is to go to Nuristan in Kunar, Gazni or Zabil. I am leaning toward getting most of the brothers out of the area. We could leave the cars because they are targeting cars now, but if we leave them, they will start focusing on houses and that would increase casualties among women and children.[51]

According to estimates in June 2012, only 8 high-level Al Qaeda leaders remained in the area due to the constant harassment by drones, a dramatic fall in numbers compared to the dozens who operated in the region just a few years earlier.[52]

Finally, with regard to training camps and weapons, the training difficulties mentioned in the previous section impact negatively on the capacity of Al Qaeda Central operatives to make home-made bombs once they depart for the West. As mentioned above in reference to Mohamed Merah, it appears also that the constant drone presence is reducing the duration of training courses and, consequently, the level of training. During the Afghanistan years and early years in Pakistan, Al Qaeda devoted at least one month to the training of explosives experts. However, when Faisal Shahzad - who attempted to detonate a car bomb in Times Square (New York) in May 2010 - trained with the TTP, he was given an intensive course lasting a mere five days. This was probably a contributing factor to the failed bomb attempt.[53]

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[49] Bill Roggio, 'Top al Qaeda leader Mustafa Abu Yazid confirmed killed in airstrike in North Waziristan', *The Long War Journal* (31 May 2010).
[50] Georgy and Mehsud, 'Al Qaeda down, but not out in Pakistan'
[51] Ibid. 1
[52] Warren Strobel and Peter Cooney, 'Strikes on al Qaeda leave only 'handful' of top targets', *Reuters* (22 June 2012).
[53] Aaron Y. Zelin, 'Dodging the drones: How militants have responded to the covert US campaign', *Foreign Policy* (31 August 2012).
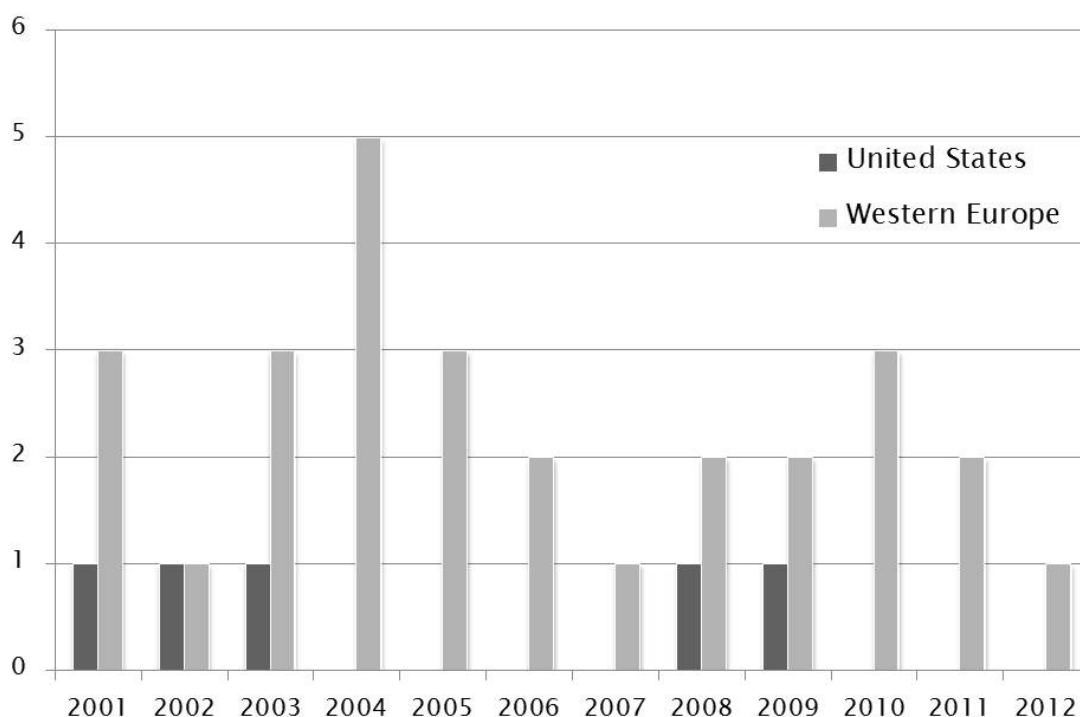
Al Qaeda Central terrorist activity in the United States and Western Europe

To say that Al Qaeda Central has repeatedly tried to strike in the United States and Europe over the past twelve years is stating the obvious. To determine patterns in its terrorist conduct requires a more detailed analysis. To that end, we have collected information on a total of 36 jihadist terrorist incidents in the United States and 100 in Western Europe during the period from 1 January 2001 until 31 December 2012. The resulting data base includes plots which were broken up, as well as failed and successful attacks. Attacks carried out on the same day against different targets have been counted as a single incident.

Al Qaeda Central has taken active part in 33 of the 136 incidents referred to above, 5 in the United States and 28 in Western Europe. Figure 2 shows the distribution of the incidents by year.

Figure 2

Terrorist incidents involving Al Qaeda Central in the United States and Europe, 2001-2012[54]

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[54] This Figure and Tables 1 and 2 have been elaborated with information compiled by the author and based partially in Javier Jordan 'Analysis of Jihadi Terrorism Incidents in Western Europe, 2001–2010'; Risa A. Brooks 'Muslim "Homegrown" Terrorism in the United States. How Serious is the Threat?' *International Security* 36/2 (2011), 7-47; Erik J. Dahl, 'The Plots that Failed: Intelligence Lessons Learned from Unsuccessful Terrorist Attacks Against the United States', *Studies in Conflict and Terrorism* 34/8 (2011) 621-48.

The first half of the period was the more active, with 20 incidents compared to 13 in the second half (2007-2012). This latter period, particularly from July 2008 onwards, has seen a stepping up of drone strikes against Al Qaeda Central in Pakistan.

However, the difference between the two halves of the time-frame is most clearly seen in the dependent variable analysed in the present article, namely, the lethality of Al Qaeda Central actions in the West. Between 2001 and 2006 it perpetrated three successful terrorist operations (9/11, the Madrid train bombings and the London bombings), causing a total of 3,220 fatalities. Between 2007 and 2012, however, the 13 incidents did not result in a single successful attack or any deaths. In other words, the complexity and lethality of Al Qaeda Central's terrorist actions on American and European soil have fallen dramatically.

A broader consideration of the figures (examining all 136 incidents, not just the 33 involving Al Qaeda Central) reveals that cells linked to "parent organisations" are more dangerous than those without links (independent cells and lone wolves). At first glance, the percentages shown in Table 1 appear to indicate greater efficacy of lone wolves in comparison to cells with links in terms of successfully completed actions (11% and 15% of successful attacks, respectively). However, Table 2 shows clearly that the most deadly attacks are closely associated with groups possessing links to bigger organisations. In the United States and Western Europe only groups with such links have succeeded in perpetrating complex and highly lethal terrorist operations. Despite the difficulties in detecting lone wolves and stopping them in time (as Table 1 shows), their lack of professionalism and lack of expert support severely limits the lethal effectiveness of their actions.[55] This circumstance considerably diminishes the profile of the strategic threat posed by independent cells and lone wolves, notwithstanding the fact that some can be successful and attract media attention, as occurred in Boston and London in April and May 2013 respectively. In order to raise the threat profile they would need to be able to cause a high number of deaths and perpetrate attacks repeatedly to trigger a permanent sense of insecurity.

Table 1 Degree of successful completion of terror incidents, according to the category of terrorist, in the United States and Western Europe, 2001-2012

	Disrupted	Failed	Executed
Linked cell	77%	12%	11%
Independent cell	83%	13%	4%
Lone wolf	52%	33%	15%

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[55] Raffaello Pantucci, *A Typology of Lone Wolves: Preliminary Analysis of Lone Islamist Terrorist*, (London: The International Centre for the Study of Radicalisation and Political Violence 2011) 35-6.

Table 2 Break-down and number of victims of terrorist incidents with fatalities successful executed in the United States and Western Europe, 2001-2012

Linked terror attacks		
Description	**Link to organization**	**Fatalities**
New York, Washington, Pennsylvania (USA). 11 September 2001	Al Qaeda Central	2.977
Madrid bombings (Spain). 11 March 2004	Al Qaeda Central, Moroccan Islamic Combatant Group	191
London bombings (UK). 7 July 2005	Al Qaeda Central	52
Toulouse (France), perpetrated by Mohamed Merah. 11 March 2012	Jund al Khilafah	1
Montauban (France), perpetrated by Mohamed Merah. 15 March 2012	Jund al Khilafah	2
Toulouse (France), perpetrated by Mohamed Merah. 19 March 2012	Jund al Khilafah	4
Overall linked terror attacks		**3.227**
Non-linked terror attacks		
Theo Van Gogh's killing. Amsterdam (Netherlands), 2 November 2004	Hofstad Group (independent cell)	1
Little Rock recruiting office shooting (USA), 1 June 2009	Lone wolf	2
Fort Hood shooting (USA), 5 November 2009.	Lone wolf	13
Frankfurt Airport shooting (Germany), 2 March 2011	Lone wolf	2
Shi'a Mosque attacked. Brussels (Belgium), 12 March 2012	Lone Wolf	1
Overall non-linked terror attacks		**19**

Lastly, in 3 of the 136 incidents making up the study sample (all three in the United States), one of the motivations was revenge for the drone strikes in Pakistan. In one case, the cell was linked to Al Qaeda Central (Najibulah Zazi), in another the individual (Faisal Shahzad) had received help from Tehrik-i-Taliban Pakistan (TTP), while the third involved a lone wolf (José Pimentel). However, in none of the three cases did the terrorists manage to complete their action successfully. Until now, operational constraints have made it extremely difficult for Al Qaeda Central to avenge in the United States or Western Europe the harassment suffered as a result of the drone attacks.

Conclusion

As noted at the beginning, the topic addressed in this article poses various obstacles in terms of investigation. To begin with, insufficient information is available on drone strikes in Pakistan and their effect on Al Qaeda Central. A

second problem is the difficulty in isolating the influence of the independent variable 'drone strikes' from the influence exerted by other independent variables (associated with border controls and the police/intelligence operations that have broken up a large number of terrorist plots in the United States and Western Europe in time) on the intervening variables and the dependent variable of the model proposed here.

Nevertheless, the study undertaken in this article offers sufficient reasons to believe that the effects of the independent variables are complementary and tend to mutually strengthen each other. Without each other, the variables would be much less effective. Were it not for the drone strikes in Pakistan, Al Qaeda recruits who manage to reach the tribal areas would enjoy greater possibilities to receive training and to act in a coordinated manner. Similarly, without border controls and law enforcement pressure in the United States and Europe, drone strikes alone would be insufficient to eliminate the threat posed by Al Qaeda Central on western soil: information on terrorist incidents shows that, for all its difficulties, Al Qaeda Central has managed to maintain contact with cells willing to carry out attacks in the West. A more detailed investigation of the interaction between the drone strikes in Al Qaeda Central's remote sanctuary and the domestic actions undertaken by Western security forces would be of interest therefore.

The article also shows that the effectiveness of drone strikes is not due solely to the fact that targeted killings have neutralised leading members of the organisation. The model proposed here presents three sets of intervening variables (hierarchical structure, qualified human resources and key material resources) bound by a systemic relationship, which is seriously damaged by drone attacks against specific individuals (HVT) and signature strikes. The longer the campaign (it commenced in June 2004 and has been stepped up considerably since July 2008), the greater the number of strikes and the better the intelligence, the greater will be the impact of this independent variable on all the other variables (intervening and dependent). Applying the model to the available information from open sources on the effects of drone strikes against Al Qaeda Central in Pakistan, there is good reason to believe that the CIA campaign is achieving its purpose. In other words, it is making it difficult for Al Qaeda to operate under a hierarchical organisational structure, while also depriving it of qualified human resources and restricting its access to key material resources. Consequently, its capacity to carry out highly lethal strikes in the United States and Western Europe is being seriously impaired.

This article has focused, logically, on a very specific but essential aspect of the use of combat drones against Al Qaeda. There are other related issues - the number of non-combatants killed in the strikes is a very remarkable one - which are of crucial importance in judging whether the campaign is proportional and corresponds to legitimate self-defence. Similarly, the target selection method, transparency and political accountability with respect to the effects of the campaign, and unsought side-effects such as violent radicalisation or the undermining of the legitimacy of American foreign policy are other aspects that require careful consideration before a global appraisal of the pros and cons of

the use of armed drones in attacks on trans-regional terrorist organisations can be reached.[56]

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[56] Raffaello Pantucci 'Deep Impact: The Effect of Drone Attacks on British Counter- terrorism' *RUSI Journal* 154/5 (2009) 72–6.

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