# How terrorist groups 'learn'

## Innovation and adaptation in political violence

#### ANDREW MUMFORD

Dr Andrew Mumford is Associate Professor in Politics and International Relations, at the University of Nottingham. He was the convenor of a British Academy Conference held in June 2015, which considered how new approaches to the study of terrorism reveal the processes and outcomes of terrorist 'learning'.

arlier in 2015, Assistant Chief Constable Bill Kerr, the counter-terrorism chief of the Police Service of Northern Ireland (PSNI), warned that dissident republican terrorists in the province had been studying Taliban and Islamic State bomb-making methods as a way of learning how they could enhance their technical skills for the purposes of undertaking a resurgent bombing campaign. Kerr pointed towards the internet as the primary mechanism by which New IRA and Continuity IRA members had learned about Taliban EFPs (explosively formed projectiles) - horizontally fired homemade rockets. This one instance reveals just how two seemingly disparate terrorist groups with different motives and endgames were able to provide platforms of 'learning' for the other. Probing the processes and outcomes of such learning was the purpose of a two-day conference held at the British Academy in June.

The conference explored how terrorist groups have learned from each other and/or from history by mimicking tactics or actively pursuing inter-organisational cooperation. Academic discussion of the phenomena of 'learning' in the realm of political violence has focused almost exclusively on how institutions of the state have responded to terrorism, either in the light of previous experience or as a result of lessons from other military or police forces. This conference aimed to create a distinct new discussion by turning attention towards learning by terrorist groups themselves. By bringing together 12 leading scholars in the field of international relations, security studies and history, as well as four counterterrorism practitioners, this conference pulled apart the notion of 'learning' in a non-state capacity, and addressed a number of the most substantial case studies that showcase the under-analysed process of learning and lesson transferral between and within terrorist groups.

The need to understand terrorist learning is urgent and important. Al-Qaeda's central hierarchy has fragmented into a conglomeration of regional hubs, each one seeking ways to 'learn' how best to adapt to specific regional demands, at the same time as pursuing knowledge exchanges with networked affiliates. At the same time, dissident republican groups continue in their attempts to destabilise the peace in Northern Ireland in ways that reveal a learned understanding of past IRA tactics. Those who carry out so-called 'lone wolf' attacks, like the Tsarnaev brothers who bombed the 2013 Boston Marathon, teach themselves bomb-making techniques over the internet. In short, adaptation and innovation amongst violent non-state actors is prevalent, but significantly under-analysed (and perhaps under-appreciated) by academics and counter-terrorism practitioners alike.

The effective learning of lessons has an impact upon any organisation's ability to adapt and innovate. Government departments and national security forces often undertake lesson-learning exercises after policy launches or military operations, as a means of avoiding past mistakes and maximising the efficiency of action in the future. Terrorist groups are no different. The papers presented at this conference provided a timely insight into the tactical and strategic effect that terrorists have leveraged from learning.<sup>1</sup>

#### Identifying the processes and outcomes of terrorist learning

We can differentiate the different 'spheres' from which terrorists draw lessons: from individual members (particularly leaders); from within their own and/ or other organisations; from the social groups they are located within; and from previous generations of terrorists linked to their cause. A terrorist's own 'learning curve' is both a process and a causal mechanism, but crucially does not have to be synonymous with change. Learning the 'wrong' lessons (such as the quantity or

1. For each conference contribution discussed in this article, the authorship is given in the footnotes.

mixture of explosives put in a bomb that prematurely detonates) is itself still learning. Terrorist learning can therefore be defined as the acquisition of knowledge to inform terrorist-related activities in the future.<sup>2</sup>

Tactical innovation (such as targeting or weapon choice) often does not lead to organisational innovation (such as structure or leadership changes). A key issue we overlook is the role played by luck and chance in terrorist learning. Take, for example, ETA's assassination of the Spanish Prime Minister Luis Carrero Blanco in 1973. The terrorists learned that Blanco went each day to the same church at the same time via the same route. His morning visit to Mass found him at his most vulnerable, and that is why ETA rented a flat on the same street as Blanco's church, burrowed a tunnel underneath the road, and detonated a huge bomb as his car was passing. As the old adage goes, terrorists only need to get lucky once to succeed.<sup>3</sup>

But luck is contingent upon the skill of those who terrorists recruit to join their organisations. We need to dispel the notion that terrorist recruits are all either idiots or ripe for radicalisation. Many modern terrorists are high-achieving young people with good levels of education. This is being reflected by the recruitment patterns of groups like ISIS who have made distinct efforts to win doctors and engineers over to their cause in order to fulfil specific highly skilled roles within the self-proclaimed caliphate.<sup>4</sup>

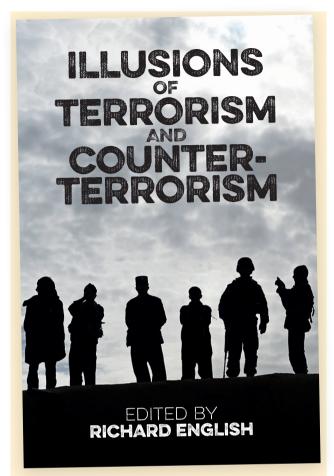
In many ways such recruitment patterns can be seen as a form of social capital accumulation, in which learning to do something well within a terrorist group enhances the social standing of the individual. Learning to *perform* violence is a key group dynamic in terrorist organisations. So an alternative set of dynamics needs to replace violence in societies riddled with violent political conflict.<sup>5</sup>

#### The evolution of IRA 'learning', from 1916 to the present

The year 2016 marks the centenary of the fateful Easter Rising in Dublin and denotes one hundred years of 'learning' within the Irish republican movement. This was the theme of the second of our panel sessions. In an era today when jihadist propaganda newsletters like *Dabiq* and *Inspire* serve as important outlets for disseminating tactical lessons and political messages, we should remember how the internal IRA newspaper *An t'Óglách* ('The Volunteer') acted as a primitive 'distance learning course' for recruits during the Irish War of Independence, by providing articles on military education to those that had none.

Contrary to the impression given by inward-looking republican narratives, the Provisional IRA (PIRA) after 1969 started to learn from other armed conflicts globally. The IRA used numerous analogies to frame their struggle

- 2. Dr Andrew Mumford and Louise Kettle, University of Nottingham.
- 3. Dr Maria Rasmussen, US Naval Postgraduate School.
- 4. Professor Mia Bloom, Georgia State University.
- 5. Dr Jeffrey Murer, University of St Andrews.
- 6. Dr William Sheehan, Open University.



In autumn 2015, the British Academy will publish a volume of essays entitled *Illusions of Terrorism and Counter-Terrorism*, edited by Richard English. The relationship between non-state terrorism and state counter-terrorism continues to shape world politics. These essays by leading scholars in the field analyse this relationship, examining post-9/11 counter-terrorism, the evolution of al-Qaida, challenges to western counter-terrorism, and why terrorist campaigns sometimes endure and sometimes end. This volume (*Proceedings of the British Academy*, 203) will be available from Oxford University Press: http://ukcatalogue.oup.com/product/9780197265901.do

Each year the British Academy holds up to six 'British Academy Conferences' – pivotal events of lasting significance, at which leading-edge research of the highest calibre can be presented and discussed. Typically held over two days, these conferences provide particular opportunities for multidisciplinary or interdisciplinary perspectives.

More information can be found via www.britishacademy.ac.uk/conferences

in order to adapt, including Vietnam, Aden, Palestine and the Congo. Furthermore, the IRA have been not just passive learners but active teachers to terrorist groups worldwide, offering training to organisations like ETA in Spain, FARC in Columbia, and MK in South Africa.<sup>7</sup>

But there was always a link between innovation by the PIRA and adaptations to counter-terrorism procedures by the British security agencies. Despite attempts at tactical creativity, such as using new bomb-making techniques, issues of user safety stifled innovation. In short, creativity was costing the IRA the lives of its own members. Lesson learning came at a high price.8 This is one of the reasons why the IRA moved away from making bombs requiring chemicals held in thin rubber balloons in the 1970s. The terrorists found that the chemicals were burning through the balloons too quickly, leaving them little time to escape. Soon they switched to using condoms, due to the thicker rubber. But, in an ironic twist, IRA men refused to store large numbers of condoms in their homes, citing good Catholic morals and the wraths of their wives and mothers. Bomb-making innovation was thus halted by piety.

But the costs borne by the PIRA have benefited the post-Good Friday Agreement dissident groups like the Real IRA. We can observe how the dissident violent republicans are 'copying to be different' from their Provisional forebears. For example, the Real IRA has returned to the tactical use of the letter bomb years after it had fallen out of fashion.<sup>9</sup>

### Contemporary political violence and jihadist group learning

The conference also provided an in-depth look at how modern jihadist groups like ISIS and various Al-Qaeda off-shoots have learned from each other and their own past.

The process of Al-Qaeda's gradual devolution from a tightly controlled hierarchical organisation into a myriad of semi-autonomous regional affiliates has meant the group is changing the way it is learning. It is also imperative to note how the rise of the internet has allowed modern jihadists to teach themselves online, meaning that modern violent jihad has become 'virtually mediated'.<sup>10</sup>

7. Professor Adrian Guelke, Queen's University Belfast.

8. Dr Paul Gill, University College London.

9. Dr John Morrison, University of East London.

10. Dr Akil Awan, Royal Holloway, University of London.

On 3 June 2015, Richard Holton, Professor of Philosophy at the University of Cambridge, delivered the British Academy's Philosophical Lecture, entitled ""We don't torture": Moral resolve and the doctrine of double effect. His lecture discussed the philosophical issues behind the use of torture to extract information. An audio recording can be found via

www.britishacademy.ac.uk/moralresolve



An ISIS-run training school, believed to be in Syria, for 'Caliphate Cubs'.

Raffaello Pantucci shared with us the results of a large study he had undertaken of 22 terror plots in the UK, which traced learning amongst British jihadists. He focused on how and why they had learned to change their choice of target and weapon, their recruitment and training patterns, and their communication and funding techniques. Incremental changes have been forced on British jihadists as Al-Qaeda itself has evolved. Increased surveillance by intelligence agencies has made communication between Al-Qaeda leaders and local cell members increasingly difficult, reducing the possibility of large co-ordinated attacks. Jihadist cells have learned to become more autonomous. The most obvious shift has been in weapon choice, with the fixation on explosives giving way to a more noticeable fascination with closeup weapons, such as the knives and machetes used to kill Fusilier Lee Rigby in Woolwich in 2013.11

One thing that modern jihadist groups have picked up on is that technological expertise is easier to exchange and learn than the politico-religious rhetoric that underpins the struggle, because the latter is far more diffuse. But it is noticeable that groups like Hezbollah in Lebanon have learned that social welfare provision can buy them goodwill in target communities, leading to wider public acceptance of their overall goals.<sup>12</sup>

But perhaps the most noticeable and shocking change to recruitment patterns that ISIS has learned to enact in recent years is the deliberate recruitment of children to its ranks. Research into the so-called 'Cubs of the Caliphate' has uncovered how children have been kept in ISIS training camps for up to 45 days, isolated from their families, and socialised into the practices of terrorism through daily rituals and exposure to acts of violence. How and why children learn to adopt ISIS's tactics of terror is a phenomenon that presents us with a darkly pressing need to understand the root causes of learning within and amongst such groups – and presents an urgent challenge to counter-terrorism practitioners.<sup>13</sup>

<sup>11.</sup> Raffaello Pantucci, Royal United Services Institute (RUSI).

<sup>12.</sup> Dr Rashmi Singh, University of St Andrews.

<sup>13.</sup> Professor John Horgan, Georgia State University.



#### Tackling today's terrorists: the challenge for national security

At an event held at the British Academy on 18 June 2015, Sir David Omand, former Director of GCHQ and the first national Security and Intelligence Coordinator (above, left), talked to Richard Aldrich, Professor of International Security and Director of Research in Politics and International Studies, University of Warwick (above, right) about how security services had to react to evolving terrorist threats. Sir David stressed the importance of working out what the terrorists were trying to achieve, so that those intentions could be frustrated. 'We are talking about groups that have an agenda: they want to achieve something. The first glimmering of wisdom on the part of the authorities is: can we deny the terrorists what they are most seeking?

'After 9/11, Al-Qaeda had their own agenda – the caliphate. But in order to achieve that, they had to achieve significant disruption of our society. They had to put the public in fear. They had to gather recruits by showing their own prowess in committing atrocities. If they fail in that objective and we are not intimidated – and this was at the heart of our own approach to counter-terrorism – then they are not actually progressing their objective, so we are prevailing, and they are losing. That still means that they are dangerous – they are still around, they are still occasionally capable of mounting an attack – but in strategic terms, we are prevailing.

'If you take that approach with a group like the jihadist terrorists, the key concept is normality. If there is normality, if foreign visitors still come, if we all use the London Underground without fear, if there is inward investment in the country, and the country is stable, then they have manifestly failed in their objective of destabilising.

'One of the key things that terrorist groups do is to try and provoke the authorities into overreaction. It is a tactic that is as old as history. If the terrorist rhetoric is that we are an oppressive, authoritarian regime, and they then commit an atrocity and we overreact, then they can point and say, "Look, we told you they were oppressive and authoritarian". That then helps them in their recruitment of more people to fuel the cause. Again, if the authorities really understand that dynamic, then it is much more likely that the sort of policies being followed will eventually lead to the end of the terrorist campaign.'

A video recording of the whole conversation is at www.britishacademy.ac.uk/tacklingterrorists

### Staying ahead of the terrorist learning curve: the challenge for counter-terrorism

The interaction between terrorist groups and state counter-terrorism bodies is of heightened importance given the interactive lesson-learning going on between terrorist groups themselves. This is the task facing our police, intelligence agencies and military today. This challenge was discussed under 'Chatham House rules' by three high profile counter-terrorism practitioners in the final session of our conference, including: Lord Carlile, the former independent reviewer of government counter-terrorism legislation; Tim Wilsey, the former Director of the Foreign and Commonwealth Office; and Alan Judd, a former member of the government's Joint Terrorism Analysis Centre (JTAC).

It is clear from a look at Britain's recent history of counter-terrorism policy that security agencies make most of their mistakes about terrorist groups very early on. Emergent threats thus pose the greatest danger to national security, even if much time and energy are exhausted tracking new threats that burn out very quickly. Although terrorists might be learning to adopt new tactics (as we can see from the latest fad for marauding urban attacks as seen in recent years in Mumbai, Nairobi and Paris), we must ask ourselves whether terrorists are learning the biggest lesson of all: terrorism rarely works.

The public event on the evening of the first day of our conference allowed us to get an acute sense of how those charged with preventing terrorist attacks on our soil were trying to stay ahead of the terrorist learning curve. In conversation with Richard Aldrich from Warwick University was Sir David Omand, the former head of the Government Communication Headquarters (GCHQ) and the first UK Security and Intelligence Coordinator. responsible to the Prime Minister for, amongst other things, national counter-terrorism strategy. Reflecting on his own career, Sir David recalled how it became clear in the aftermath of the bombing of the British consulate in Istanbul in 2003 that jihadist use of vehicle-borne suicide bombs had shifted from the use of a single vehicle to the use of multiple vehicles, as terrorists learned that one bomb usually affected perimeter areas, whilst following vehicles could then penetrate deeper into secure zones. He acknowledged that there was an implicit awareness within the security services that terrorist groups are learning, but that the onus must be on understanding what terrorist lesson-learning is ultimately used for. Realising the end-game of such learning will ultimately help frustrate their intentions.

The shocking attacks on the tourist beach in Tunisia occurred two weeks after our conference. It served as another cruel reminder of the need for states to understand the learning process that grants terrorists like Seifeddine Rezgui and his accomplices the knowledge to carry out such brutal acts of political violence.