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DEFENCE AGAINST TERRORISM**



# **NATO and the Future of International Terrorism and Counterterrorism**

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# NATO and the Future of International Terrorism and Counterterrorism

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## Introduction

The aim of this paper is to critically assess how well equipped NATO is to tackle the threat posed by international terrorism today and in the future. I begin by briefly setting out the parameters of the subject and then proceed to explain why I believe NATO has a role to play in this field. The paper will then analyse how broader systemic technological, economic, political and social factors have shaped the emergence of terrorism today and, more importantly, how these elements will shape the evolution of this strategy in the future. The most important aspect of this analysis will be to identify the principal ways in which violent non state actors (VNSAs)<sup>2</sup> will combine new ideas and capabilities with the strategy of terrorism to challenge both national and international security.

I have adopted the broad term VNSA in recognition of the fact that in the future a range of different groups may opt to employ terrorism either tactically or strategically. This will then allow an informed debate to emerge regarding how NATO has responded to this threat since 2001 and how that response might be refined or improved. The central argument adopted in this paper is that the nature of the terrorist threat facing NATO is evolving along a predictable trajectory in terms of the type of terrorist it is likely to face. It also confirms a wider view which believes terrorism will continue to increase in lethality. However, it is less certain that this effect will be brought about by the acquisition of Weapons of Mass Destruction (WMD) or more prosaically by improvements made to existing capabilities. The paper concludes by asserting NATO will have an important role in both defending and deterring terrorist attacks, but needs to exploit its comparative advantage, which lies in the more effective use of its military assets.

## Scoping the debate

Terrorism is an essentially contested concept, which means there is no agreed definition of who or what a terrorist is.<sup>3</sup> This obfuscation stems from the fact that terrorism is a pejorative term. As such, it is used by national governments and international organisations to delegitimise the actions of certain VNSAs. This is a perception which is frequently challenged by VNSAs and sometimes the states that support them. The convoluted nature of this definitional debate is compounded by those academic sources, in particular critical theorists, who rightly question the prevailing logic used by national governments to distinguish between state sponsored violence and the violence initiated by non-state actors<sup>4</sup>. They also point to powerful vested interests that have framed this debate in a manner that exaggerates the threat posed by terrorism because organisations like the media industry benefit from hyping the menace posed by terrorists.<sup>5</sup> This is a hugely controversial, but vitally important aspect of the terrorism debate because how we define terrorism shapes our response to it. However, this discussion goes beyond the scope of this paper. Having said that it is important to define this term so that a baseline is established which will facilitate a better understanding of what constitutes a terrorist and how it can be countered. The approach adopted in this paper is entirely pragmatic and, given that this is a study of NATO's role in counterterrorism, it seems sensible to use its definition, which is:

*The unlawful use or threatened use of force or violence against individuals or property in an attempt to coerce or intimidate governments or societies to achieve political, religious or ideological objectives.*<sup>6</sup>

Whilst the use of this definition might cause protest, it does capture the salient characteristics which Alex Schmid's exhaustive analysis of the terrorism literature identified as being of greatest importance to academic experts working in this field.<sup>7</sup>

It is also important to recognise that terrorism is real and not just a rarefied debate conducted in dusty classrooms in universities and colleges. According to the available data, since 2000 there have been over 48,000 terrorist attacks claiming the lives of 107,000 people around the world.<sup>8</sup> In 2014, 17,958 people were killed in terrorist attacks, which was a 61% increase on the previous year. Shockingly 82% of all deaths from terrorist attacks occurred in five countries: Iraq, Afghanistan, Pakistan, Nigeria and Syria. Four groups dominated in the initiation of these attacks: the Taliban, Boko Haram, DAESH and Al Qaeda. These groups are linked by their adherence to an extreme interpretation of Salafist Islam which relies heavily on the use of violence. Interestingly, 95% of those killed by terrorism occurred outside the region of the Organisation for Economic Cooperation and Development (OECD).<sup>9</sup>

The key points that need to be emphasised when talking about terrorism are that the violence used cannot be legally sanctioned or justified and breaks with the norms of the society attacked. In addition, it involves attacks on random and or symbolic targets which usually focuses on a segment of the population based on how the terrorist identifies who its enemies are. This in turn will be determined by the political motivation of the terrorist. In general, we can categorise terrorist groups into the following based on their motivation:

- Religiously inspired terrorism,
- Ethno nationalist terrorism,
- Left wing terrorism,
- Right wing terrorism,
- Single issue terrorism,
- State terrorism.<sup>10</sup>

All of these will continue to persist in the future. Indeed it is important to remember that in the case of Europe 90% of all terrorist incidents have been initiated by ethnically motivated separatist groups.<sup>11</sup> However, in looking to the future this study focuses on a specific aspect of terrorism. First, and as the title makes clear, we are interested primarily in international terrorism rather than domestic terrorist activity. According to Brian Jenkins the difference lies in that:

*International terrorism comprises those terrorist incidents that have international consequences: incidents in which terrorists go abroad to strike their targets, stay at home but select victims because of their connections to a foreign state or attack international lines of commerce. It excludes the considerable amount of terrorist violence carried out by terrorists operating within their own country against their own nationals and in many countries by governments against their own citizens.<sup>12</sup>*

Thomas Bady, defined it in these terms:

*The repeated use of politically motivated violence with coercive intent, by non state actors, that affects more than one state.<sup>13</sup>*

Whilst it is possible to challenge the view that in a globalised world the distinction between domestic and international terrorism is meaningless, it is important to maintain such a distinction for the purposes of this study. This is because it helps make clear the line between the role of national government and international organisations like NATO in prosecuting counterterrorism. Limiting the scope of this study in this way also allows us to focus on the most prominent type of international terrorism which, as the data indicates, is currently religiously motivated terrorism and, in particular, the threat posed by Extremists Claiming affiliation with Islam (ECAI) groups. David Rapoport described religiously motivated terrorism as the 'fourth wave' in terrorism's evolution, which followed three earlier stages starting in the late nineteenth century. These were listed as anarchist, anti colonial and left wing or Marxist. Like the current wave, all three displayed an international dimension and each wave lasted approximately forty years before being replaced. This suggests that the age of religious terror is also coming to an end. However, there is little evidence to show this is likely to happen. This is so for the following reasons:

1. There is a proxy war being fought between states in the region of the Middle East and North Africa and religion is being used to rally and mobilise the support of VNSAs to support the interests of these states.
2. The weeping sore that is the Palestinian Israeli dispute shows no signs of abating and, in fact, has over many years drifted from a struggle based on competing secular nationalisms in which religious identity was a component, to a point where religion has come to dominate. We can see this by comparing the ideology of the Palestinian Liberation Organisation (PLO) and HAMAS.
3. The perceived failure of the Arab Spring has empowered and in some cases legitimised certain VNSAs in the region who have made a concerted effort to win the hearts and minds of vulnerable groups struggling to survive.
4. There is little evidence of a new wave emerging. Extreme right wing parties are currently riding a wave of popularity within Europe as a result of recession and the resentment caused by immigration; as such they do not need to resort to terrorism. In the case of the extreme left, it has proved unable to create a coherent ideological message that offers a cogent critique of Liberalism or capitalism and so remains unappealing to many traditional constituencies. Ethno nationalist VNSAs will remain an important constituency, but it is questionable whether the political energy of this movement will be sufficient to create a fifth wave in terrorism.

## What Role for NATO?

According to terrorism expert, Paul Wilkinson, 'terrorism is inherently international.' However, his analysis of the international community's response to this threat centred on the UN and the EU. No mention was made of NATO.<sup>14</sup> Although this omission might seem odd, it is entirely understandable for two related reasons. First, NATO was created to defend Western Europe from possible Soviet military aggression. As such, its primary purpose was to prepare for a possible inter-state war that could quickly escalate to become a nuclear conflict. As a result, even though many NATO states were afflicted by both domestic and international terrorism during the Cold War, NATO remained uninvolved in counterterrorism. However, one or two people did advocate the involvement of NATO in counterterrorism during this period, but little came of this speculative debate.<sup>15</sup> The end of the Cold War and the demise of the Soviet Union effectively forced NATO to rethink its concept of security and to move away from its traditional fear of a conventional war, which seemed increasingly irrelevant in the post-Cold War world. Because of this, NATO needed to find a new role and during this period of contemplation terrorism came to the fore as one area where NATO military power could be used to good effect. This was more than the desperate search for a mission. Terrorist attacks primarily instigated by Al Qaeda and directed largely at the United States caused NATO to consider this security issue more seriously. Consequently it was one of several strands which was highlighted in NATO's 1999 Strategic Concept, but as one analyst put it terrorism 'was not a core focus of NATO policy at that time.'<sup>16</sup>

The second and more profound problem is that a great deal of controversy surrounds the use of military power in counterterrorism; a role which has been challenged by both academics and policymakers who believe terrorism is something best left to the police and intelligence agencies. In those cases where counterterrorism is perceived to have become militarised, the legitimacy of the campaign is believed to suffer.<sup>17</sup> In general, this seems a reasonable proposition and one supported by the prevailing evidence, which shows that, in the majority of cases, terrorism ends as a result of police rather than military action.<sup>18</sup> This conclusion seems particularly apposite in the case of domestic counterterrorism. However, the use of military power in countering international terrorism has also proved controversial. Perhaps the most damning indictment of the military role in this setting was the war on terror. In the view of Bauer and Beyer, the fundamental problem with this war was that it was dominated by military activity. In their view, the US led campaign widened and deepened support for Al Qaeda, whilst leaving the root causes of this conflict in place.<sup>19</sup> It was not simply that the Bush Administration chose to rely principally on military power rather than an array of political and economic instruments, but the culture of the military which made it a blunt and indiscriminate tool. As Gray explains:

*Most of the world's armed forces are not well designed, doctrinally prepared, trained and equipped to wage war against elusive handfuls of religious fanatics. Rather, they are raised and maintained to fight regular enemies who would be approximate facsimiles of themselves.<sup>20</sup>*

NATO's role in helping to stabilise Afghanistan 2006-14 also seemed to confirm the view that the war had become militarised and too great a reliance on the use of force alienated many Afghans who became casualties as a result of the perceived excessive reliance of NATO forces on kinetic rather than non-kinetic means to defeat the Taliban.<sup>21</sup>

In general then it seems that NATO, as it is primarily a military alliance, must play a muted role in conducting its counterterrorism operations, which leads us back to the question of whether this is a function the alliance should invest in in the future. This sense of limitation is compounded by the fact that if a successful counterterrorism strategy relies on an ability to address the fundamental political ills which gave rise to the conflict this is not within the gift of NATO, but remains solely with the national government.<sup>22</sup> However, it is also important to remember that even if the military contribution to counterterrorism cannot address the political causes of the conflict that does not mean its role is unimportant. Traditionally the military fulfils the following functions in counterterrorism:

1. Defending the homeland from a prospective attack,
2. It permits a government to retaliate against a terrorist attack,
3. It allows a government to preemptively remove a potential terrorist threat before it becomes operational,
4. The military can also carry out the targeted killing of the leadership cadre of a terrorist group,<sup>23</sup>
5. The military can protect those national and international agencies whose task it is to address the root causes of terrorism in fragile states,
6. The military can train the security forces of friendly states so they have the means to counter this threat.

Audrey Kurth Cronin also points out that 'removing the causes of terrorism will not always result in the end of the terrorist threat. The motivation and the goals of the terrorist campaign will change over time. 'Understanding the causes of terrorism is no more important to ending most campaigns than understanding the causes of war is to ending them.'<sup>24</sup>

She identifies six paths to terminal decline. These are:

1. Kill or capture the leader,
2. Crush terrorism with force,
3. The terrorist achieves their aims,
4. Moving towards a legitimate political process,
5. Implosion or loss of support,<sup>25</sup>
6. The terrorist group evolves into something else i.e. organised crime.<sup>26</sup>

This suggests military power can play an important role in defeating a terrorist group, especially in the international domain, but it depends on the type of terrorist and the selection of an appropriate counterterrorism strategy. The next section will address the question of what kind of terrorism NATO is likely to face in the future and then consider how well-crafted its response is in terms of addressing this threat.

## Will Terrorism Perish or Persist in the Future?

When we look at the history of terrorism we can find evidence of this practice in the distant past, i.e. Zealots, Thugs and Assassins, however, I believe that its rise to prominence is intimately linked with the process of modernity. It is possible to trace this intimate connection in two areas. The first was in the way in which modernity resulted in the creation of new forms of political, economic and social organisation within which terrorism could survive and grow. The second focused on the enablers generated primarily via technological change, which provided the terrorist with the means to amplify the use of violence so that it had a profound psychological effect beyond the immediate range of the victims of this violence. In looking at this issue Martha Crenshaw identified the following trends which she believed shaped the history of modern terrorism. Of particular importance here was improved transport and communications, for example the Narodnaya Volya would have been unable to operate against the Tsarist state without Russia's new rail system and the Popular Front for the Liberation of Palestine could not have secured the attention it did without being able to hijack commercial airliners.<sup>27</sup> Similarly the invention of dynamite and plastic explosives were materials that empowered the terrorist and became vital components in the terrorist's armory.

Urbanisation was also believed to be an important part of the process of modernisation which allowed the terrorist to survive. Cities provided a target rich environment for the terrorist<sup>28</sup> and allowed them to hide amongst a sea of strangers. This is why terrorism experts like Rapoport begin their study of terrorism in the 1880s with the rise of the Anarchists.<sup>29</sup> Indeed, other analysts, such as Bruce Hoffman, believe terrorism came to the fore in the wars of decolonisation after the Second World War.<sup>30</sup> However, according to Crenshaw, the most salient political factor in the category of permissive causes is the government's inability or unwillingness to prevent terrorism.<sup>31</sup> The absence of effective internal security was deemed to be critical because, in her view, terrorism did not occur in authoritarian systems of government.<sup>32</sup>

Actually, the causes of terrorism operated on two levels. The first were what she termed 'preconditions' which represented the systemic forces which facilitated the growth of terrorism, which have already been referred to. The second were 'precipitants', which were the specific events or catalysts which preceded the outbreak of violence.<sup>33</sup> The question why people decide to employ terrorism to achieve their goals is important. However, this issue is only partially addressed in this paper because the perceived breakdown in the social contract between the individual and the state which sometimes leads to violence is something that can only be addressed by national governments, individually or sometimes collectively.

In developing these themes within the context of looking at the future of terrorism I have borrowed Colin Gray's Clausewitzian framework of analysis which he employed to look at future war. As he explained:

*Future warfare can be approached in the light of the vital distinction drawn by Clausewitz, between war's 'grammar' and its policy 'logic'. Both avenues must be travelled here. Future warfare viewed as grammar requires us to probe probable and possible developments in military science, with reference to how war actually could be waged. From the perspective of policy logic we need to explore official motivations to fight.*<sup>34</sup>

In essence, this section will be divided into two parts. The first will deal with the policy logic of terrorism and will look at those factors human, economic social and environmental forces which are likely to influence the evolution of terrorism and in particular the motivation to employ terrorism as a strategy. In exploring the grammar of terrorism I will examine how non-state actors are likely to exploit the latest developments in science and technology to refine the way in which they use violence to achieve their political goals. Through this analysis I hope to show how exogenous and endogenous changes are likely to shape terrorism in the future and, in particular, how the grammar and policy logic of war interconnect.

## The Policy Logic of Terrorism

In looking at the direct causes of terrorism Crenshaw emphasized the importance of concrete grievances among a segment of the population which felt it was being discriminated against by the government. This did not always lead such groups to employ terrorism and the key here was whether the group perceived the discrimination to be unjust. In this case justice rather than deprivation is the crucial variable which could prove decisive in the decision to be a terrorist, especially if the injustice in question is perceived to be orchestrated by the regime. In some instances, the efficiency of the regimes internal security services will prevent the emergence of a significant terrorist threat. Crenshaw also asserts that 'terrorism is essentially the result of elite disaffection employed by a minority on behalf of a wider popular constituency who have not been consulted about, and do not necessarily approve of the terrorists methods.'<sup>35</sup>

If we look generally at the post modern world, many of the enablers which facilitated the growth of terrorism in the twentieth century remain in play in the twenty first century. These forces promote a certain kind of violence which focuses on irregular warfare largely conducted by non state actors which have emerged out of a new political, social, economic and technological context. At the heart of this condition is the perception that we are experiencing a new and more virulent kind of Malthusian crisis in which population growth will outstrip resources and governance will collapse under the pressure caused by the demands of the people and the inability of national government to satisfy these demands.

The United Nation's estimates the world's population will increase by over one billion over the next decade and that by the middle of this century it could be as high as 10.4 billion. Most important, nearly all of this will be located in the developing world. Although this is much less than the 14.5 billion predicted by analysts in the early 1990s, it is still a lot for many states to deal with. Compounding the problem of size is the related difficulty of the composition of this population growth.<sup>36</sup> Of particular importance here is the youth bulge in the demographic profiles of many countries. According to the UN:

*Currently the population of the less developed regions is still young, with children under age 15 accounting for 28 per cent of the population and young persons aged 15 to 24 accounting for a further 18per cent. In fact, the numbers of children and young people in the less developed regions are at an all time high (1.7 billion children and 1.1 billion young people), posing a major challenge for their countries, which are faced with the necessity of providing education and employment to large cohorts of children and youth. The situation in the least developed countries is even more pressing, as children under age 15constitute 40 per cent of their population and young people account for a further 20 per cent. In the more developed regions, children and youth account for 16 per cent and 12 per cent of the population, respectively. Whereas the number of children is expected to change little in the future, fluctuating from 206 million in 2013 to around 210 million in 2050 and then to 202 in 2100, the number of young people is projected to decrease from 152 million currently to 142 million in 2050 and then to 138 million in 2100.<sup>37</sup>*

Such a population profile has tended to coincide with periods of great turbulence, for example, it has been argued that population growth played a key role in causing the Napoleonic Wars and later on the First World War.<sup>38</sup> The connection between a certain demographic profile and war has also been identified in more recent conflicts. A good example is Algeria's civil war in the 1990s. It is claimed the youth bulge in its population in terms of the number of young male graduates with no employment opportunities provided fertile ground for the major Islamist party to first compete and win national elections in 1992 and then when the military intervened to overturn the outcome of this election they provided strong base of support in the resulting civil war.<sup>39</sup> Many of the same arguments were deployed in an effort to explain the Arab Spring.<sup>40</sup>

Linked to the issue of population growth is the lack of resources to sustain more people on the planet. The debate on resources and population inevitably takes us towards projections of a zero sum gain where insufficient resources in terms of food, water and minerals are available to sustain life on the scale projected by population forecasters. Obviously, history shows that Malthus was wrong in that technology resulted in a dramatic increase in the production of basic food stuffs both

in the agricultural and in the industrial domain, but it is argued that this is no longer viable option today. One reason why this has happened is because of the pace of population growth. So, for example in the 18<sup>th</sup> century, the global population increased at a rate of 250 million people every 75 years.<sup>41</sup> In comparison, over just eight years (2005-13) the world's population increased by 648 million.<sup>42</sup> Agricultural production is increasing, but at half the rate achieved during the 'green revolution' (1961-2009) and it is feared we will not achieve the 70% increase in agricultural production required to sustain the global population by 2050.<sup>43</sup> An important constraint is the resource base available to sustain human life is declining. For example, if we look at agriculture it was estimated that nearly 25 million tons of fertile soil was lost annually as a result of anthropogenic erosion.<sup>44</sup> Today it is estimated that 25% of the world's agricultural land is highly degraded. We also face a crisis in the consumption of non replenishable resources, especially in the form of energy. Traditionally resource security has played an important role in both inter and intra state conflict. <sup>45</sup> Even water is in short supply and it is predicted this shortage will get steadily worse not better. According to one source by mid-century over 40% of the world's population could be exposed to water shortages.<sup>46</sup>

Compounding all of these trends is the expectation that by 2050 over 70 percent of the global population will live in cities and that the largest of these urban metropolises will be in the developing world.<sup>47</sup> In 1950 there were just eight mega cities with populations exceeding 5 million people. Now we have 59 mega cities with populations in excess of 20 million. Most important, 48 are located in the developing world. It is expected that these mega cities will not be centres of wealth creation but areas of mass poverty and social collapse providing a breeding ground for criminality, insurgency and terrorism.

Let us try and contextualize these trends by situating them in a geo political environment which demonstrates how terrorism is likely to continue impacting on the security of NATO. Outside NATO's borders these forces are currently affecting the stability of states and cohesion of the region of the Middle East and North Africa (MENA) and Sub Saharan Africa. In the case of MENA, this is a region which has been plagued by social and economic problems and, although many question the linkage between economic and social ills and terrorism, a number of analysts have made this connection in the case of the Middle East.<sup>48</sup> If true, the future social and economic conditions in the region will provide an ideal breeding ground for terrorism in the future. It is estimated that population growth in this region will increase from 230 million to over 670 million by 2045.<sup>49</sup> This in turn will lead to the creation of a large pool of young male labour which will struggle to find employment. In traditionally oil rich states, economic prosperity will continue to rely heavily on the production of energy, which is a capital rather than labour intensive industry, but the economic prospects of many other states in the region look grim. So far governments have sought to pacify the masses through the provision of various economic subsidies, but it is not certain such policies can be sustained in the long term.

At the same time, climate change is likely to affect this region disproportionately as temperatures continue to rise by more than 1.2 times more than the global average.<sup>50</sup> This will lead to less water and increased desertification which will impact on agricultural production. Given these problems the prognosis is not good for the MENA. As such, irregular violence and terrorism will continue to be a persistent feature of the political landscape and a considerable element of this will be directed at the member states of NATO because of their perceived support for Israel or because ECAs employ a narrative which explains the region's plight as a result of European imperialism in the past and Western neo imperialism today.<sup>51</sup> The prospects for VNSAs which draw heavily on Islamist ideology looks promising both now and in the future. It was hoped the Arab Spring would undermine the support for these groups, but in Libya and Syria the political vacuum created by this revolution has provided a fertile ground for such groups to grow and prosper. Even in those countries like Egypt where the revolution enjoyed some success, the overthrow of the elected government in 2013 served to reinforce the narrative that change will only come to the region via 'the barrel of a gun'.

It is also important to recognise that social and political conditions within NATO could, in the future, make them increasingly vulnerable to domestic terrorism. An important aspect of the demographic debate which has not enjoyed as much coverage concerns population trends within advanced industrialised states. There are two related issues here. The first is that many of these states have ageing populations, which brings with it economic problems that relate to the increased pension and health costs associated with an older population. In addition, there is strong evidence of a link between a state's ageing population and economic stagnation, a good example of this being Japan today. Even worse are those who predict that as we move towards bigger and smarter computers and perhaps even artificial intelligence (AI) many traditional areas of middle class employment are likely to be done by powerful computers in the future and this could devastate the employment prospects for a whole generation of workers in advanced industrialised countries. <sup>52</sup>This could lead to the social and economic marginalisation of particular communities and create a large pool of alienated youth looking for a way to vent their anger and frustration.

Some might flirt with certain terrorist groups. Obviously, this aspect of counterterrorism remains firmly in the hands of national governments, but NATO can help indirectly by weakening the ability of those international terrorist groups able to operate globally and looking to exploit this type of discontent within NATO.

## The Future Grammar of Terrorism

In looking to the future there are a host of technologies on the horizon which could have important consequences for the growth of terrorism. These include the development of nano technologies, which are microscopic machines that can fulfil a range of tasks from improved medical care to construction and even cleaning. In the world of information technology it is predicted that computing will not just increase in terms of power, i.e. big computing, but as has been said, we could witness the achievement of artificial intelligence. More mundane are developments in high powered energy packages and the production of cheap fuel cells and micro generators. We might also look at developments in biotechnology, 3D printing and a host of other innovations.

Knowing how these technologies will change the face of conflict and terrorism is difficult to predict. This is partly because some technologies are still at an early stage of development and have not matured sufficiently to realise their potential. However, it is also difficult to predict what kind of synergies will be produced by these individual strands of innovation; for example, it has been asserted that developments in AI and robotics will result in autonomous killing machines on the future battlefield.<sup>53</sup> Revolutionary change is usually caused not just by one technology but their combination with others which creates a transformation in all that we do. A good illustration of this kind of change is captured in the current debate about the Third Industrial Revolution.<sup>54</sup>

The aggressive exploitation of technology by terrorist groups in the late twentieth century led to a debate in the policy and academic world as to whether we were experiencing a paradigm shift in the modus operandi of the terrorist. The result was a frenetic discussion of 'new' versus 'old' terrorism.<sup>55</sup> In contrast to old terrorism, which was largely national in focus, was usually driven by a secular political ideology and used violence as part of a carefully calculated campaign in which the 'The terrorists want a lot of people watching, not a lot of people dead',<sup>56</sup> the main characteristics of new terrorism were:

- Terrorists act transnationally and operate in loosely organised networks;
- Terrorists are inspired by religion and are perceived to be fanatics;
- Suicide is often part of the terrorists' operating procedure;
- They seek weapons of mass destruction and to kill as many people as possible;
- Targeting is indiscriminate.<sup>57</sup>

On paper at least, the difference between old and new terrorism appears stark. However, it is important to recognise that there are also some striking similarities between old and new terror. As Duyvesteyn explains, old terrorists also operated transnationally and both the Palestine Liberation Organisation (PLO) and Hizbollah employed loose networks that extended across state boundaries.<sup>58</sup> Mockaitis has also shown that old terrorism has a long history in terms of its international range and connections. Thus the Irish American community provided support to the Irish nationalist cause from the nineteenth century until the end of the troubles in the 1990s. Terrorist organisations also assisted other groups. For example, the Irish Republican Army (IRA) was linked with Euskadi Ta Askatasuna (ETA) and trained in Libya. Germany's Red Army Faction (RAF) units also joined up and received aid from Palestinian organisations. Support from the American Jewish community also helped the Irgun and Haganah against the British. The Liberation Tigers of Tamil Eelam (LTTE) also received money from the diaspora community abroad.<sup>59</sup>

Similarly, suicide terrorism also has a history that precedes new terrorism, the LTTE being one example of a movement that employed this strategy against the Sri Lankan government. It has also been argued that Anarchist attacks in the late nineteenth century were coloured by a sense of martyrdom as those who carried out such attacks rarely sought to escape but accepted arrest, trial, conviction and execution as the price they paid to promote the justness of their cause.<sup>60</sup> This implies that new terrorism was not so new and that many of the policies shaped to tackle it were deeply flawed.

One very important difference between old and new terrorism is new terrorism's actual and potential lethality. Most disturbing here was Al Qaeda's supposed obsession with acquiring weapons of mass destruction (WMD). Although the evidence link-

ing Al Qaeda with WMD is sparse, some documents explaining how to make chemical weapons were apparently discovered by Americans during their operations in Afghanistan in 2001 and there are rumours that Al Qaeda was given a quantity of low-grade uranium 238 by Chechen separatists which could be used as a dirty bomb.<sup>61</sup> In truth, it is not clear that Al Qaeda possessed the means or wherewithal to conduct such an attack, but there is a consensus that the organisation aspired to gain possession of such a capability.<sup>62</sup> The following discussion on those key enablers which will facilitate the effectiveness of terrorism actually reveals little that is new. What is significant is that many of these capabilities which were identified two decades ago are now maturing to a point where a realistic assessment of the extent to which these changes will revolutionise the threat posed by terrorism is possible.

## i. Terrorism Online

As has been said, in looking at the future of terrorism and the challenges it is likely to pose, we need to draw on current trends and explore how these will evolve in the future. The first and most important of these is the information revolution. Rapid advances in computers, communications and in particular the internet led to the emergence of a new virtual domain which was called cyberspace. In the early 1990s analysts began to speculate on the emergence of a new kind of war which would be fought in this domain. Initially, this battle was seen as a struggle between two sets of armed forces trying to dominate the electromagnetic spectrum in the battle space around them. However, its strategic potential to be used to by-pass the enemy's forces and attack a nation state's center of gravity quickly came to the fore.<sup>63</sup>

The prospect of a war in cyberspace allowed for two kinds of conflict: war between nation states and wars between states and non-state actors. In the case of the first of these categories, the fear of a cyber attack by another state caused alarm, particularly in the United States, where fears of an electronic Pearl Harbor more devastating than 9/11 were aired by senior government officials and academics.<sup>64</sup> Similar fears were also expressed over how the information revolution reduced the technical and financial barriers of entry to a point where terrorist groups might obtain the wherewithal to conduct a devastating cyber attack against the critical infrastructure of a nation state. One of the earliest commentators on the potential of the information revolution as a medium through which non-state actors would orchestrate protest were Arquilla and Ronfeldt.<sup>65</sup> At that time they broke down the general category of cyber into two domains, the first was called 'cyber war' and was a dedicated military activity. The second and of relevance here, was called 'netwar' and speculated on how political groups and social movements would use the internet to pursue their political agendas. They defined netwar in the following terms:

*To be precise, the term netwar refers to an emerging mode of conflict (and crime) at societal levels, short of traditional military warfare, in which the protagonists use network forms of organization and related doctrines, strategies, and technologies attuned to the information age. These protagonists are likely to consist of dispersed organizations, small groups, and individuals who communicate, coordinate, and conduct their campaigns in an internetted manner, often without a precise central command.<sup>66</sup> It is feared that these technologies provide non state actors with the means to launch successful cyber attacks at a relatively low cost compared to the defence erected by states to counter these activities.<sup>67</sup> Increasingly, both terrorist and insurgent groups employ the internet and mobile communications technology as a way of sustaining themselves and attacking the state. This has become increasingly possible because this medium of communication is relatively inexpensive, it is easy to use and it is difficult to be detected.<sup>68</sup>*

Our worst fears have been realised and the internet has levelled the playing field between state and non-state actors, generating the following benefits for terrorist groups of all political complexions. First, it has made it easier and cheaper for terrorists to communicate online. Second, the internet offers anonymity to the terrorist, for example it played an important role in the planning and coordination of 9/11 in secret via use of internet cafes.<sup>69</sup> Anonymity can now be preserved through the use of cost free anonymization software which hides an IP address. It is also possible to encrypt emails making it virtually impossible for a third party to read online traffic between terrorists.<sup>70</sup> In addition, the use of multiple gadgets like laptops, tablets and smart phones, which can access the internet using non registered sim cards, makes it easier for terrorists to avoid unwanted attention. More recently, the use of cloud services has also provided terrorists with the means to store their digital data. All of these advantages make it easier for terrorists to plan and initiate attacks. Third, the internet also acts as a vast encyclopaedia providing terrorists with an enormous range of information especially intelligence on a prospective target. For example, a commonly used internet tool is Google Earth which provides detailed images of a host of potential targets. A good illustration of this activity happened during the British occupation of Iraq. Detailed images of British bases were discovered in

the homes of Iraqi insurgents. Similarly, HAMAS have frequently used Google Earth when targeting Israeli towns and those who planned and conducted the Mumbai attacks in November 2008 used digital maps again from Google Earth to navigate their way around the city.<sup>71</sup>

Fourth, the internet also provides a superb platform from which to publicise the cause of the terrorist. The traditional dependency of the terrorist on the media has been weakened in that terrorists now have the means to circulate their message and have full control over what they publicise.<sup>72</sup> This is done by creating their own website, which presents the terrorist's fight as a just and righteous cause. More recently we have seen a significant increase in the use of social media such as Facebook, Twitter, Instagram and other formats in an effort to sell their cause to a wider audience. According to one source, the rise of social media and its exploitation by terrorists has effectively ended their dependency on the mainstream media agenda. In fact, it is claimed that terrorist controlled social media now drives the mainstream media.<sup>73</sup> What is also interesting is the extent to which this activity is regulated and controlled by the leadership of these groups. It seems only trusted members of groups are given the freedom to update their Facebook profiles and Twitter.<sup>74</sup> Also interesting is the limited range of discussion conducted via social media. It appears that Twitter usage is very similar to the way jihadists use online forums, i.e. they spend a lot of time discussing principles of religious doctrine.<sup>75</sup>

A darker aspect of the terrorist's communication strategy focuses on the way in which the internet has been used to cause fear through the promulgation of atrocities against those who it perceives to be its enemies. Salient examples of this activity were the execution of the American journalist Daniel Pearlman in 2002 by Al Qaeda. This pattern was then raised to a new level by Al Qaeda in Iraq when its leader, Musab al Zarqawi, put online a series of executions of American and European prisoners. This practice has since been elevated to an even more gruesome level by DAESH: Whilst these actions seem barbaric it is important to remember they are driven by a rational agenda which is intended to coerce governments and their populations.

Fifth, terrorists have become increasingly adept at using the internet to recruit, radicalise, incite and train others to do violence on their behalf.<sup>76</sup> As the war on terror took its toll on Al Qaeda's capacity to organise large scale spectacular attacks and they lost the training infrastructure needed to create a large enough pool of skilled terrorists/insurgents, they relied increasingly on a new phenomenon in terrorism which was termed the lone wolf, free lance terrorism, or leaderless resistance to carry the war to their distant enemies. The distinguishing characteristics of this terrorism are that the people involved in this activity appear to operate alone, they do not belong to an organised group and the action they take is directed by their preferred modus operandi.<sup>77</sup> In essence, they have become self radicalised as a result of their exposure to the terrorist's propaganda on the internet. Although such attacks appear to be quite amateurish when compared to previous terrorist plots they are extremely difficult to detect and counter because there is little or no warning to indicate a person is contemplating an attack until it happens. A good illustration of this problem was the attack launched by a British Muslim woman in 2009 who attempted to kill a Member of Parliament because he had voted in favour of the invasion of Iraq in 2003. She showed no signs of radicalisation before the attack and her family and friends were all unaware of her increasing sympathies with Al Qaeda.<sup>78</sup>

Although such individuals appear to have self radicalised it is important to recognise the role the terrorist plays in facilitating this process and a significant effort is made to find and then groom potential terrorists on line. A very good illustration of this behaviour is provided by Al Qaeda in the Arabian Peninsula (AQAP). Its online magazine, *Inspire*, is an important tool for identifying and motivating would be terrorists. In one article readers interested in jihad were advised to contact AQAP with their ideas on how to conduct a terrorist attack. AQAP's military committee would then help them to organise and conduct the proposed attack if it seemed feasible and was likely to have an impact.<sup>79</sup> It is also important to remember the training manuals which groups like Al Qaeda have put on the internet to help Muslims who want to take up arms but are unsure how to do this. Apparently many of these training videos have been formatted to be watched on mobile phones.<sup>80</sup> The connection between lone wolf terrorism and the support provided by the international terrorist organisation is important because it suggests that eradicating this problem requires a wider response which goes beyond the domestic counterterrorism of national government.

Finally, terrorists use the internet to finance their operations. According to the UN, terrorists employ four activities to achieve this goal. The first is direct solicitation, which refers to the use of websites, chat groups, mass mailings and targeted communications to request donations from supporters. The second is via the sale of merchandise. In this case websites may also be used to sell books, CDs audio and video recordings. Payment is made via credit card, PayPal, Skype or electronic wire transfer. The third way these organisations raise money is through identity theft, credit card theft, stock fraud and intellectual

property crimes. Finally, some terrorist organisations have been known to establish shell corporations, disguised as religious or other charitable foundations. Terrorists have also infiltrated legitimate charities and used this to cover their more nefarious activities.<sup>81</sup>

## ii. Terrorist use of the internet to attack!

In 1999 Terrorism expert Walter Laqueur asserted:

*If the new terrorism directs its energies toward information warfare, its destructive power will be exponentially greater than any it wielded in the past - greater even than it would be with biological and chemical weapons.*<sup>82</sup>

Cyber terrorism was believed to be the next important stage in the evolution of terrorism. This specific activity was defined as:

*premeditated, politically motivated attacks by sub national groups or clandestine agents, or individuals against information and computer systems, computer programs, and data, which result in violence against non combatant targets.*<sup>83</sup>

This unfortunately does not allow us to distinguish cyber terrorism from cyber crime. Dorothy Denning, a recognised expert in this field defined cyberterrorism as follows:

*Cyberterrorism is the convergence of cyberspace and terrorism. It refers to unlawful attacks and threats of attacks against computers, networks and the information stored therein when done to intimidate or coerce a government or its people in furtherance of political or social objectives. Further, to qualify as cyberterrorism, an attack should result in violence against persons or property, or at least cause enough harm to generate fear. Attacks that lead to death or bodily injury, explosions, or severe economic loss would be examples. Serious attacks against critical infrastructures could be acts of cyber terrorism, depending on their impact. Attacks that disrupt nonessential services that are mainly a costly nuisance would not.*<sup>84</sup>

It was assumed that terrorists would seek to exploit the internet as a medium through which to conduct attacks against states and societies. On paper at least, it was considerably easier to orchestrate an attack from the relative comfort of the terrorist's home than more traditional forms of attack which required the procurement of weapons and or explosives, an activity which entailed considerable risk. The terrorist had to get past the physical security surrounding a target before launching the attack and then there was the problem of escaping from the scene of the crime. In contrast, it was assumed a cyber attack was relatively cheap to set up and getting a computer and internet access would not be seen as something likely to provoke the fears of the security services. As such, it offered the terrorist a low cost and low risk means through which to conduct an attack. Equally important, it was feared such attacks would be as harmful as using explosives.<sup>85</sup> As has been said, of great importance here was the belief that cyber terrorists can target the critical infrastructure of a state. The concept of critical infrastructure encompasses a wide array of political, social and economic activities that are deemed vital if a society is to function. It includes the production and processing of food stuffs, the provision of public health and emergency services, power generation and transport and telecommunications.<sup>86</sup>

It is surprising that, given the presumed low cost and risk of initiating a cyberterrorist attack and the potential pay-off in terms of impact, we have not so far seen an attack on this scale. Three reasons have been deployed to explain the absence of such an attack so far. The first is that the threat of cyberterrorism and in fact the whole concept of cyber war has been grossly exaggerated because securitisation of this domain served the interests of the media, academics and other organisations which have a vested interest in maintaining a security industrial complex.<sup>87</sup> Second, others such as Giacomello, questioned the cost benefit calculations surrounding this activity and concluded that bombs, bullets and edged weapons remain effective in the hands of the terrorist and so the incentive to change is not as strong as was assumed.<sup>88</sup> This point is reinforced by Kilcullen who observed that the terrorist assault in Mumbai in November 2008 sustained an attack that lasted over 24 hours and captured the attention of the world's media which watched in horror as the terrorists systematically killed 166 people and wounded 293 in relatively slow time. All of this was achieved by men armed only with small arms, explosives and grenades.<sup>89</sup>

Finally, there is a more basic question of the extent to which terrorists possess the means and the capability to conduct a major cyberattack. The vast majority of cyberattacks are actually conducted by hackers who have no political agenda. In the case of NATO, 95% of the attacks against its information infrastructure were orchestrated by criminals attempting to steal technology and information which could be sold. In essence, most terrorists lack the skill and capability to initiate a cyberattack, especially against the critical infrastructure of a nation state. However, it is assumed that it is only a matter of time before terrorist groups become sufficiently 'web literate' to instigate attacks via this medium.<sup>90</sup>

Fortunately, the barriers which allow entry at this level for terrorists are actually considerably higher than has been assumed. As a result, whilst terrorist organisations have been able to carry out attacks which caused minimal inconvenience, they have not been able to use the internet to carry out an electronic version of 9/11. A recent article sets out three reasons why cyber terrorism has not evolved in the way predicted. Terrorists lack the technical and scientific skills to conduct such an attack, they also lack the intelligence required to know which part of an organisation's information and computer network to target, and finally they lack the operational capability to penetrate the layered defence surrounding such things as critical infrastructure. Consequently, most cyberterrorism has been limited to defacing an organisation's website or causing disruption to services provided by the organisation by saturating a specific part of the network with service and communication requests.<sup>91</sup>

In addition, there is also the cost of 'weapousing' the internet in such a way that an attack can have strategic effect. According to Thomas Rid, these can vary from low cost cyber weapons which are commercially available to expensive cyber weapons, which he compares to high-tech smart munitions, and which require a lot of research and development.<sup>92</sup> A good illustration of this, and a successful example of a cyberattack, was the Stuxnet virus. This was successfully implanted into Iran's computer system at one of its nuclear plants and caused over 1000 centrifuges to spin out of control causing a temporary halt in Iran's enrichment programme. Although successful, Betz points out, the Stuxnet virus was a very sophisticated product developed by a dedicated team of specialists over a prolonged period of time. The successful insertion of this virus also required high grade intelligence on the Iranian nuclear programme. Consequently it was a blending of capabilities, not just the development of a virus, which determined the success of this attack and only the state possessed the means to produce this capability.<sup>93</sup> However, this does not mean that terrorists will not at some point in the future launch a successful cyber attack which paralyses one part of a nation's critical infrastructure. As Siboni et al., point out, it is possible that a national government might choose to launch a cyber attack by using a terrorist group as its proxy. In addition, there is apparently an active black market in the sale of specially designed software which is currently used in cybercrime. It is possible this could be adapted and used to precipitate a terrorist attack.<sup>94</sup> We also need to take into account the possibility that software like the Stuxnet virus, which it is believed was created by the United States and Israel, cannot be un-invented and might be exploited by a terrorist group to carry out similar attacks against another state's nuclear infrastructure. Apparently, copies of the Stuxnet virus have been publicly available for some time now.<sup>95</sup>

Further evidence of the potential of cyber terrorism was demonstrated in April 2012 when the Aramco computer network came under attack and the data on 35,000 computers was wiped out. In addition, an image of a burning US flag appeared on the screens of the computers damaged by the attack. Responsibility for the attack was claimed by a group called the 'Cutting Swords of Justice.' A more recent example in 2013 was the attack by the Syrian Electronic Army against the Twitter Account of the Associated Press. On this occasion they sent a tweet that the White House and been destroyed by bombs and that President Obama was dead. Similar attacks were launched against the New York Times and the Huffington Post.<sup>96</sup> This suggests that terrorist groups remain interested in using the internet as a weapon and the means to break through current barriers to allow them to exploit this capability will increase overtime. Moreover, it is claimed that terrorist groups are building a massive online library which contains training materials on cyber terrorism.<sup>97</sup>

### iii. Terrorism and Weapons of Mass Destruction

The nightmare scenario which confronts national governments is the possibility that a terrorist group will obtain a weapon of mass destruction and use this to instigate a mass casualty attack. Even before 9/11, Walter Laqueur asserted that such an attack was inevitable.<sup>98</sup> This bold prediction was based on a coincidence of two trends which emerged in the post-cold war era. The first was the rise of Rapoport's fourth wave of religious terrorism which has already been mentioned.<sup>99</sup> As Laqueur put it: 'Mao was motivated by a political calculus, whereas members of a new generation of terrorism are driven by nationalist or religious hate, or a mixture of the two.'<sup>100</sup> In the case of the MENA region, the most obvious manifestation of such religious extremism is the concept of Salafist jihad. This ideology not only justified suicide; it also provided the moral justification for fighting an offensive war against the West with any or all means available - including weapons of mass destruction (WMD).<sup>101</sup> It was the latent threat posed by Al Qaeda's possible acquisition of a WMD capability that caused both the United States and the UK the most concern and played an instrumental role in shaping their policy on the war on terror.<sup>102</sup>

The second of these trends was highlighted by Lord Robertson, former UK Secretary of State for Defence and Secretary General of NATO, was the potential dangers caused by the horizontal and vertical proliferation of nuclear weapons.<sup>103</sup> Such potential proliferation stemmed from two sources. The first was the feared loss of control of the Soviet WMD arsenal as its successor,

the Russian Federation, attempted to deal with both economic and political crisis in the 1990s. The second was the emergence of rogue states in the post-Cold War era, which it was feared would supply WMD to their preferred terrorist groups.<sup>104</sup>

The threat posed by WMD terrorism has proved resilient. In 2011 the UK Government's counter-terrorism strategy CONTEST declared: 'Contemporary terrorist organisations aspire to use chemical, biological, radiological and even nuclear weapons. Changing technology and the theft and smuggling of chemical, biological, radiological, nuclear, and explosive (CBRNE) materials make this aspiration more realistic than it may have been in the past.'<sup>105</sup>

These anxieties seemed entirely justified. For example, when Al Qaeda received religious sanction for their mass casualty attacks in 2003, which was provided by Saudi cleric Nasir bin Hamad al-Fahd, he declared that in this fatwa Al Qaeda was justified in using WMD because the US had destroyed countless lands and killed millions of Muslims. Consequently, Muslims were permitted to respond in kind against the US. Most important, given that Muhammad called upon Muslims to perform whatever actions they take, including killing, in the most perfect way, the most straightforward way of achieving this goal was to procure WMD.<sup>106</sup>

There is a broad agreement that Al Qaeda wanted to acquire this capability for some time. Although several terrorist groups have tried to procure WMD only Al Qaeda has pursued this goal so persistently and systematically.<sup>107</sup> According to Williams there is ample evidence linking Al Qaeda to the attempted acquisition of WMD. Documents explaining how to make chemical weapons were discovered in houses used by the highest level of command in Al Qaeda in Afghanistan after the fall of the Taliban. More worrying was the discovery that Al Qaeda possessed a quantity of low-grade uranium 238 which could be used as a dirty bomb.<sup>108</sup> He also claimed that the Chechen rebels sold twenty nuclear suitcase bombs to Al Qaeda for £30 million and two tons of opium with a street value of £700 million,<sup>109</sup> but the existence of these weapons has been contested. Chechen rebels and Al Qaeda were closely linked following their involvement in fighting Azerbaijan in 1993-94 in support of Azeris seeking to break away from Armenia Nagorno Karabakh. He also cites evidence given by Hans Blix, former Director General of the International Atomic Energy Agency, who told his colleagues in 2004 that the accounts regarding the sale of twenty nuclear suitcase bombs to Al Qaeda were accurate. This comment was made after a meeting with Russian officials who had investigated the theft of the weapons and after speaking to Chechen leaders who witnessed the transaction.<sup>110</sup>

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There is also an audit trail that links Al Qaeda with the A.Q. Khan network in Pakistan. Khan played a key role in the development of Pakistan's nuclear programme, but subsequently sold this technological knowhow to Iran, North Korea and Libya. A.Q. Khan was a supporter of an extremist party called Lashkar-e-Toiba (the Army of the Pure). This is the armed wing of a Wahhabist party called Markaz Dawa-Wal-Irshad. In 2003, Lashkar-e-Toiba changed its name to Jamaat-ud-Dawa and became the coordinating agency for bin Laden. A.Q. Khan was often joined at meetings of this party by a close associate, Dr Sultan Bashiruddin. On 23 October 2001 US military and intelligence officials discovered records of meetings between Dr Bashiruddin and Al Qaeda officials including Zawahiri in Kabul.<sup>111</sup>

Larssen provided a chronology of Al Qaeda's activities in this area which demonstrates the seriousness of their intent. This narrative reveals four basic points.

1. Al Qaeda's top leadership demonstrated a sustained commitment to buy, steal or construct WMD. In 1998 Osama bin Laden declared that acquiring a WMD was a religious duty.
2. Al Qaeda was prepared to expend significant resources to cultivate a WMD capability even during the planning phases of 9/11.
3. Al Qaeda used parallel paths to procure these materials to ensure that failure in one area did not mean the collapse of the entire programme.
4. Al Qaeda took part in the joint development of WMD with other terrorist groups and this demonstrated that interest in WMD extended beyond Al Qaeda.<sup>112</sup>

Larssen warned that we should not see Al Qaeda's rhetoric as an empty threat. WMD was one way Al Qaeda could challenge American hegemony. An interesting observation was his belief that the nature of Al Qaeda's cause meant that it was not really interested in tactical WMD such as dirty bombs or chemical weapons, crude toxins and poisons. This was an activity undertaken by groups operating in Al Qaeda's name but not with the sanction of the core leadership within the movement. Examples included Midhat al Mursi's basic training for operatives in the Al Qaeda training camps before 9/11; the Abu Musab al Zarqawi network's plot to use ricin and cyanide in multiple attacks in Europe in 2002-03; and the Bahraini terrorist cell plot to use cyanide on the New York subway system.<sup>113</sup>

Certainly Al Qaeda's leadership asserted that, although it was not a nation-state, it had the right to acquire these strategic capabilities. In March 1998, bin Laden quoted a passage from the Koran that declared there was a binding religious duty to acquire and use all weapons against those he depicted as Crusaders. However, his reasoning for wanting this capability differed little from the reasons used by all governments to justify their nuclear weapons programmes.

To seek to possess the weapons that could counter those of the infidels is a religious duty. If I have indeed acquired these weapons, then this is an obligation I carried out and I thank God for enabling us to do that. And if I seek to acquire these weapons I am carrying out a duty. It would be a sin for Muslims not to try to possess the weapons that would prevent the infidels from inflicting harm on Muslims. But how we would use these weapons if we possess them is up to us.<sup>114</sup>

In an interview with *Al-Jazirah* bin Laden said:

Israel is stocking hundreds of nuclear warheads and bombs. The Christian West is largely in possession of such weapons. Hence, we do not regard this as a charge [i.e. seeking CBRN weapons], but rather as a right. We do not expect to see anybody level charges against us in this regard. It is as if you were accusing a man of being a courageous knight and fighter. It is as if you were denying him this. Only a man who is not in his right mind would level such accusations. We supported the Pakistani people and congratulated them when God was gracious enough to enable them to acquire the nuclear weapon. We regard this as one of our rights, our Muslim rights. We disregard such worn-out U.S. charges.<sup>115</sup>

Fortunately, our worst fears have not yet been realized and we have not witnessed an example of catastrophic terrorism caused by a nuclear device. Analysts such as John Mueller point to the huge opportunity cost involved in developing a WMD capability, particularly nuclear terrorism.<sup>116</sup> Wirz and Egger also expressed considerable skepticism that terrorists could build their own nuclear bomb because of the difficulty of acquiring the expertise and the lack of material.<sup>117</sup> Others such as Bergen and Hoffman question whether any state would give such a capability to a terrorist group, even if the country was governed by extremists, which government for example, would trust Al Qaeda?<sup>118</sup>

A technically less ambitious project might be to build a radiological weapon or dirty bomb designed to contaminate as wide an area as possible. Such an act is more feasible because low grade radioactive material can be obtained from a variety of sources. The first incident of radiological terrorism was apparently conducted by Chechen rebels in Moscow in 1995 and involved the deposit of a small amount of radioactive material in Moscow's Izmailovsky Park. In the case of Al Qaeda there have been claims that it obtained nuclear materials but no evidence has surfaced to support these assertions. However, Joseph Padilla, who was arrested on terrorism charges in the US in 2004, confessed that during his time at an Al Qaeda training camp, he tried to persuade its leadership to let him build a nuclear weapon and detonate it in the US. After some consultation it was decided this was too ambitious and so the project was scaled back to the detonation of a dirty bomb. Eventually this too was discounted in favour of a more traditional means of attack. London was also targeted for a radiological attack, which was to be organized by Dhiren Barot, but he was arrested whilst planning the operation.<sup>119</sup>

The threat of a terrorist nuke persists today. The latest manifestation of this threat has been articulated by IS. They have boasted that they might acquire a nuclear weapon via weapons dealers with links to corrupt officials in the Pakistan government. If successful this weapon would then be transported to America and detonated there.<sup>120</sup> Although many questioned whether IS has the money or the capability to acquire and then use such a weapon, very real concern was expressed over IS obtaining radiological material gained as a result of its conquest of Mosul in 2014, which it was feared could be used to make a dirty bomb.<sup>121</sup>

Al Qaeda also sought to acquire chemical weapons and in the late 1990s established a chemical weapons project called Al-Zabadi based in Jalalabad in Afghanistan. Further evidence of Al Qaeda's interest in chemical weapons was found in one of its training camps in Kandahar and Khost. They also produced manuals which were circulated on the internet showing how to make toxic substances. However, these weapons were not intended to cause mass casualties but mass disruption.<sup>122</sup> To achieve the goal of mass casualties, terrorists need to obtain more sophisticated chemical agents which are notoriously difficult to develop and use because of the lack of a delivery system capable of dispersing the toxin so that it was sufficiently refined to be absorbed via inhalation or the skin. Alternatively, a terrorist group could use toxic industrial chemicals, as in the case of Aum Shinrikyo in their attack on the Tokyo train system in 1995. The opportunity to conduct a chemical attack remains feasible and it has been pointed out that the basic ingredients, ammonia, hydrogen cyanide and chlorine can be found in chemical plants and it is believed that the security at these sites can be breached relatively easily.<sup>123</sup>

It is also claimed that Al Qaeda showed a key interest in the acquisition of biological weaponry. Those who have sought to make a connection point to the comments made by one of Al Qaeda's leaders Abu Geith who declared:

*We have the right to kill 4 million Americans, 2 million of them children ... and cripple them in the hundreds of thousands. Furthermore, it is our obligation to fight them with chemical and biological weapons, to afflict them with the fatal woes that have afflicted Muslims because of their chemical and biological weapons.*<sup>124</sup>

In addition, materials were found in Afghanistan showing that Al Qaeda had dabbled in this area of research.<sup>125</sup> Biological terrorism includes two broad categories of disease. The first are pathogen viruses such as smallpox and high fever viruses such as Ebola and Marburg. The second are pathogen bacteria such as anthrax, cholera, botulism and plague. Biological warfare has a long if not illustrious history. However, because of the contagious nature of diseases like bubonic plague or small pox the use of this weapon was just as likely to cause harm to friendly forces as the enemy. Until a way could be found to weaponise this capability and allow it to be delivered over sufficient distance to the enemy, so the reducing the chances of contamination, its utility was limited.<sup>126</sup> Biological weapons assumed a renewed importance in the twentieth century when long range artillery, aircraft and missiles all provided a way of delivering viruses. However, even though advances in technology have made the use of these weapons easier the actual use of biological weapons in war has been rare.<sup>127</sup>

On paper biological weapons represent a cost effective way of waging war. A 1969 UN report on bio weapons concluded that the cost of causing one casualty per square kilometer was \$2000 with conventional munitions, \$600 with chemical weapons and \$1 with biological weapons.<sup>128</sup> There are also over thirty pathogens a terrorist can choose from. Biological weapons are also difficult to defend against. Such measures include vaccines early warning systems and physical protection. To be effective such measures require time to develop the correct response and are also very costly to implement because action could require action which entails the protection of the entire population.<sup>129</sup> As important, samples of these viruses are stored in laboratories in most countries around the world and the security that surrounds them is variable. For example, samples of bird flu virus (HN51) went missing from labs in Cairo during the riots in 2011.

It is also very difficult to control the proliferation of potential bio weapons because the technology and materials used are frequently dual use which means that the same facilities can be used to produce biological products for both peaceful and violent purposes. However, it is feared that a terrorist group will at some point gain access to this capability and use it. In 2006, the UN General Secretary, Kofi Anan declared:

*The most important under addressed threat relating to terrorism, and one which acutely requires new thinking on the part of the international community, is that of terrorists using a biological weapon.*<sup>130</sup>

According to Koblenz, the threat posed by biological weapons may not be as severe as we feared. Few terrorist groups have tried to develop a biological weapon and virtually all have failed. Prior to the anthrax letter attacks in 2001, only one group managed to cause casualties with a biological agent. In this attack a cult called the disciples of guru Bhagwan Shree Rajneesh based in a small town in Oregon contaminated food with salmonella and caused 750 people to become ill. Those groups such as Aum Shinrikyo and Al Qaeda which have demonstrated a determination to acquire this capability have struggled to weaponise either a viral or bacterial pathogen.<sup>131</sup> But he also stresses that rapid developments, especially in biomedical research and the diffusion of new knowledge globalisation is generating could be used to produce biological weapons in the future.

However, Koblenz believes that the threat posed by recent innovation in biomedical research has been exaggerated and three reasons are cited to support this position. First, terrorists do not have the resources and facilities to conduct this kind of capital intensive research and it seems unlikely they will be able to genetically modify a virus to enhance its virulence and lethality.<sup>132</sup> Second, there is no evidence that terrorist groups are interested in developing this capability and it seems that existing methods of causing panic and fear work well enough. Third, many of the enablers required to create modifications to existing viruses require interdisciplinary teams with a deep expertise in specific subject areas and terrorist groups will struggle to find and then bring this expertise together. Most important, this critical mass of information has not been captured by the internet and so it is of limited use in allowing terrorists to learn the science needed to weaponise this capability.<sup>133</sup>

Unfortunately the pace of innovation in biotechnology may force us to revise Koblenz's upbeat assessment because of the rise of synthetic biology which came to the fore in 2010. This process entails the crafting of DNA by computers to create artificial bacterial cells, which contain a man made DNA genome inside. Once created these cells behave like any other cell and move, breathe and replicate.<sup>134</sup> As a result, it is now possible to use artificially created DNA to make manmade cells for specific purposes, which raises important concerns over how this technology could be used by VNSAs to design artificial viruses.

A good illustration of the potential lethality of this process was demonstrated in 2011 when Ron Fouchier of the Erasmus Medical Center, announced that he had found a way to modify the bird flu virus so that it could spread beyond the bird population and infect other animals including humans. To put this into perspective the 1918 influenza virus had a lethality rate of only 2.5% but killed 40 million people. HN51 in its unmodified state killed 59% of the people it infected.<sup>135</sup> If a genetically modified version of this flu virus was released the results could be catastrophic. The big fear is how this field of research will develop in the future and how will we attempt to regulate and control it. At the moment there seems to be little in the way of public control of this area of scientific research and it is interesting to note that in spite of the efforts of the US government to prevent the publication of Fouchier's work on how he modified HN51, it was still released in *Science and Nature* in 2012.<sup>136</sup> The problem is that this is potentially a lucrative area and could become the driver of the next wave of innovation and wealth creation. In the US, for example, genetic engineering and synthetic biology are growing at a rate of 12% per annum.<sup>137</sup> However, a heavy regulatory regime could jeopardise this growth and with it the prosperity generated by such research.

But so far our fears relating to the likelihood a CBRN terrorist attack have proved too pessimistic and indeed the claims made regarding the likelihood of WMD terrorism have been contested. It is also noticeable that most of the existing literature on the subject of WMD terrorism has tended to focus on Al Qaeda. However, we continue to speculate on the prospect of such an event as technological changes appear to make this domain more and more accessible to terrorist organisations. Of particular interest is the extent to which the internet and other sources of information have made it possible for a lone wolf to conduct a WMD attack.<sup>138</sup> According to Ackerman and Pinson lone actors or small groups are actually more likely to employ some form of WMD than other established terrorist groups who are perceived to be more conservative in the weapons they use and are more confident of achieving their aims via traditional forms of action. In contrast the lone actor has no other way of achieving such a dramatic impact at such a low cost. In addition, such individuals or proto terrorist groups are not reliant on particular constituencies of support and are therefore less risk averse when contemplating using CBRN.<sup>139</sup> The feasibility of a CBRN attack by a lone terrorist or small cabal of terrorists has been challenged on the grounds that whilst they possess the motivation they lack the capability to actually build and use these weaponised materials.<sup>140</sup> However, Ackerman and Pinson argue that it is the psychological not physical effect of the attack that is most important and that even a low level CBRN terrorist action would cause significant disruption.<sup>141</sup> The available evidence suggests that these lone wolves or small groups do calibrate their ends and means carefully and tend to focus on the less ambitious end of the spectrum when contemplating a WMD attack. Thus, in contrast to large terrorist groups like Al Qaeda who aspired to acquire a nuclear capability, lone wolves aim for nothing more ambitious than radiological dispersal devices. They will also tend to employ the less dramatic or sophisticated delivery of CBRN agents. As such, they will rely on passive exposure to an agent, for example leaving radiological material in a public area over a prolonged period of time, or by contaminating food and water.<sup>142</sup> A good example of this kind of possible attack is the right wing extremist Anders Brevik who killed 77 people in in 2011. Before embarking on his killing spree, he published a 1500 page manifesto online, which included a section on the use of radiological weapons. The available evidence suggests that such attacks are unlikely to produce mass casualties. For example, if we focus on the use of radioactive materials, it is estimated that even the detonation of a dirty bomb is likely to cause only one or two fatalities.<sup>143</sup> One interesting aspect of the study of lone wolves who seek out radiological and nuclear materials is that, until now, they have tended not to be driven by a religious or ethno nationalist agenda, but 'are more likely to be driven by idiosyncratic or purely pecuniary criminal motives.'<sup>144</sup> Equally important, the available data also shows that the most likely WMD attack by any non state actor, small or large, is likely to employ a chemical agent.<sup>145</sup> One concern in the future is that ongoing technological evolution could lead terrorists to embed high yield explosives to cause greater psychological and physical destruction.<sup>146</sup>

What then of the CBRN threat? In truth it is difficult to assess how credible this threat is. Although the literature suggests this form of attack could be less dramatic than has been assumed in the past it seems unlikely states which feel vulnerable to terrorism will be prepared to take any risks. As such, this is likely to remain an important aspect of both member states and NATO counterterrorism policy. With regard to NATO it needs to acquire a better intelligence picture of potential groups who might employ this capability and perhaps help reinforce the security of its member states' borders. But most important, is the capability it has to deal with a WMD terrorist attack. This asset can be used to supplement and reinforce national capabilities and helps affect the calculations of the terrorist by demonstrating that even if an initial attack is successful, the effects will be extremely limited and hardly worth the effort. In sum, the creation of an effective defence will help deter terrorism.

## The Hybrid Nature of Terrorism in the Twenty First Century

If we attempt to extrapolate from the technological, political, economic and social trends set out above what kind of terrorist will NATO encounter in the future? Based on the available evidence there is ample scope for both domestic and international terrorism. In the case of the latter, according to John Mackinlay, Al Qaeda represented the vanguard of a new way of war and other violent non states actors would emulate many of the practices it established, even if the political motivation of the group in question was fundamentally different. With this in mind he set out the concept of 'post Maoist insurgency'. The characteristics of this form of insurgency are as follows:

- The involvement of multiple populations which challenged the concept of a campaign,
- Mass communications and connectivity,
- The migration of a clearly identifiable group into the western world,
- The centrality of the propaganda of the deed in the insurgent's concept of operations,
- The bottom up direction of activist energy,
- Absence of plausible end state objectives in the insurgents manifesto.<sup>147</sup>

In practical terms we are facing an entity which, whilst similar to its predecessors, does represent something new, but recognising and understanding the nature of threat posed is difficult. One of the big criticisms of the early years of the war on terror was that the US thought it was fighting a counterterrorist campaign when, as others pointed out, Al Qaeda was fighting a global insurgency.<sup>148</sup> Actually, Al Qaeda was conducting both a terrorist campaign and an insurgency. This is not new and in fact Carlos Marighela advocated the use of terrorism in support of an insurgent strategy in his manual on urban guerrilla warfare which was written in the 1960s.<sup>149</sup> However, whilst we accept that insurgent groups did use terrorism this was generally envisaged as a tactical activity which facilitated the insurgent campaign. Thus, in the case of Marighela, terrorism was to be conducted in the urban areas of Brazil in an effort to force the government to disperse its forces and to provide time and space for the rural insurgency to grow to the point that it could challenge the Brazilian military. Since then the importance of terrorism in an insurgent's strategy has grown and if we look at the Tamil Tigers in Sri Lanka and Hizbollah in Lebanon it is clear both insurgent groups employed and used terrorism in a strategic context in which the terrorist act was designed to produce a decisive political effect. Whether or not terrorists can adopt the tactics, techniques and procedures of insurgents is open to question. In the view of Morris this was unlikely because for terrorists violence tended to replace rather than compliment a political programme. However, Khalil challenges this and argues organisations like HAMAS invested heavily in welfare programmes which were intended to win the hearts and minds of the Palestinian population even before they won the election in 2006.<sup>150</sup> Consequently, in his view, the distinction between insurgency and terrorism has always been contrived. Indeed, UK military doctrine assumes that terrorists can evolve to become insurgents if and when they achieve a certain size.<sup>151</sup> However, this assumption has been challenged and Wilkinson for example has argued that no evidence has been found to support this assertion.<sup>152</sup>

According to Metz, this evolution or morphing of insurgency and terrorism was reinforced by the changing nature of conflict in the post Cold War world. In a report which was published in 2007, he asserted:

*Insurgency matters today because it is linked to the phenomenon of transnational terrorism. Insurgents have long used terrorism in the operational sense, deterring those who supported the government and creating an environment of violence and insecurity to erode public trust in the regime. But now terrorism plays a strategic role as well. Insurgents can use terrorism as a form of long range power projection against outsiders who support the government they are fighting. This could deter or even end outside assistance... Even more important, an insurgent movement able to seize control of a state could support transnational terrorists.<sup>153</sup>*

It is this evolution which has witnessed the fusion of terrorism and insurgency and which makes NATO an indispensable part of each member state's counterterrorism strategy. In the past each state had the means to deal with the threat posed by domestic counterterrorism and in the case of international terrorism, cooperation between national intelligence and police agencies was usually sufficient to neutralise the threat posed by such groups. Analysts, such as Mackinlay, have argued that this remains so today. He believed that, even in an age of global jihad, the threat was at home in the form of radicalised first, second and even third generation migrants living in Europe. Defeating this kind of threat required an effective domestic counter terrorism strategy rather than the global counterinsurgency strategy that was being implemented.<sup>154</sup> This echoes the arguments cited earlier in this paper by Sageman who argued that this evolution meant that the threat increasingly moved away from Al Qaeda's core leadership to a multitude of informal groups trying to emulate their predecessors by conducting attacks

in their own countries without any external support or assistance. In his view, these 'home grown' militants living in the West are now the main terrorist threat facing the Europe and America. The Madrid bombings in 2004 and the London bombings on 7 and 21 July 2005 were seen as evidence that people with no affiliation with the original Al Qaeda network, made up of individuals who never attended a formal terrorism training camp were planning and conducting attacks spontaneously, without orders from a member of the known Al Qaeda leadership.<sup>155</sup> If true, then it suggests the need for NATO involvement in counterterrorism will be limited. However, Peter Bergen contested this view. He believed that Al Qaeda played an important role in making leaderless jihad into a more a potent threat. He pointed out that in many of these so called examples of attacks organised by self starter groups there was in fact a strong connection to what he terms Al Qaeda central either in the provision of money, training or advice, which proved that Al Qaeda continued to maintain organisational control over the strategy if not the tactics of the war.<sup>156</sup> Radicalisation might take place independently outside the control of Al Qaeda, but such groups only became a real threat to the state if they linked up with Al Qaeda or its affiliates usually in Pakistan.<sup>157</sup> There are numerous examples of Al Qaeda directed attacks, including the failed bomb plot to bring down seven passenger jets in 2006. The ringleader was twenty-five year old Abdullah Ahmed Ali. He had made numerous trips to Pakistan including a six month break there in 2005. Had the planes plot succeeded 1,500 people might have been killed.<sup>158</sup> The Kouachi brothers' attack against the French satirical magazine, Charlie Hebdo in January 2015 also supports the view that the most effective domestic terrorist attacks represent a combined effort on the part of the terrorist and an external supporter. In the case of the Kouachi brothers they had both been trained by AQAP and it claimed responsibility for the attack.<sup>159</sup>

One of the assertions made in this paper is that IS is following a similar path to Al Qaeda. This might be contested on the grounds that IS is very much the product of the political crisis in Iraq and Syria and as such it is a regional not a global phenomenon. However, whilst I agree its focus is very much on the 'near enemy', i.e. the Arab world, its military success precipitated external intervention from the far enemy, i.e the West and this has caused it to focus at least some of its energies on deflecting this unwanted intervention. As such, mobilising and rallying the domestic Muslim populations in the West is one important way of hitting back. It is also important to bear in mind that IS is also a strong supporter of the brand of global jihad which Al Qaeda propagates. Take for example the case of Italy, which has not played a prominent role in the international coalition to defeat IS, but that has not prevented IS calling for every Muslim in Italy to wage jihad against the infidels and declared their aim to conquer the Vatican; indeed the IS propaganda machine fabricated pictures of the black flag of IS flying over the Coliseum in Rome.<sup>160</sup>

The fusion of domestic and international terrorism and insurgency represents one of the more significant changes in the character of war and is the most easily captured in the literature on Asymmetric Warfare and Fourth Generation Warfare<sup>161</sup>. These concepts which largely describe the same thing entail weaker non state actors using unorthodox multi dimensional forms of violence to defeat a stronger opponent. According to Schroeff and Kaufman the increased complexity of asymmetric warfare since the end of the Cold War has resulted in the use of the term hybrid warfare.<sup>162</sup> This concept includes conventional and unconventional forms of warfare including terrorism and is used by both state and non state actors to achieve victory in a conflict.<sup>163</sup> Whilst I think it is possible to question the extent to which groups like Al Qaeda, the Taliban or indeed DAESH possess the capacity to conduct conventional warfare, Hizbollah and, in the past, the Tamil Tigers suggest insurgent/terrorists can adapt and fight in this way. However, the important point is that the threat posed by violent non state actors is increasing to the extent that they are sometimes perceived as an existential threat. This perception stems from the fact that such groups possess the means to challenge the interests of NATO states both in the terrorist's country and region and, more importantly, within the 'metropolis' of NATO itself. If we take IS as an example, it threatens NATO because it is challenging their key interests in Iraq and Syria and the stability of the Gulf monarchies and Israel.<sup>164</sup> At the same time its efforts to deter and compel NATO have caused IS to mobilise terrorist attacks within NATO states.

If each NATO member relies solely on its own domestic counter terrorism measures to deal with this hybrid threat then in it is merely attacking the symptom rather than the cause of internal violence within its sovereign territory. The salience of the connection between the domestic and international domain of terrorism increased as a rising number of men and women from NATO countries have elected to become 'foreign fighters' in ongoing conflicts in Syria and Iraq. The notion of foreign fighters is not new and in the case of the Muslim world this has been a prominent feature of conflicts in Islamdom since 1980. Hegghammer defines a foreign fighter as a person who has joined and operates within the confines of an insurgency, lacks citizenship of the state in which the conflict is taking place, is not connected to a military organisation and is unpaid.<sup>165</sup> According to one estimate, over 20,000 foreign fighters from over 90 countries have joined various groups which are fighting in Syria and Iraq. Approximately 3,400 of these people came from Europe and 150 from the United States.<sup>166</sup> This compares with an

influx of 30,000 foreign fighters into various Muslim wars from 1980-2011 and highlights the significance of current trends.<sup>167</sup> It could be argued that it is better to let those living in NATO countries and who want to fight in these wars go and fight rather than taking the risk they could conduct a terrorist attack within their home country. Indeed there are cases of foreign fighters who fought in conflicts such as Bosnia in the 1990s and then returned home to lead normal lives. However, foreign fighters today are mobilized and inducted by groups like IS or Al Qaeda off shoots such as Jabhat Al Nusra and it is believed this exposure acts as a stepping stone in some cases for individual involvement in more extreme forms of violence.<sup>168</sup> Exactly the same dynamic was seen to be at work with the flood of foreign fighters to Afghanistan in the 1980s, albeit under the sponsorship of the US and its regional allies.<sup>169</sup> It is feared that veterans who return from the current conflict in Iraq and Syria will carry out a terrorist attack in their home state. This remained a largely hypothetical question until a foreign fighter linked to IS conducted an attack on a Jewish museum in Brussels in May 2014. It has also been claimed that a further six IS linked terrorist attacks had been attempted in Europe by September 2014<sup>170</sup> and more recently, IS claimed responsibility for an attack carried out in US in May 2015.

## What kind of counterterrorism strategy should NATO adopt?

It is not clear that in the immediate aftermath of 9/11 much thought was given to the strategic principles that should govern the creation of NATO counterterrorism strategy. As Santamato points out, there was no agreed policy in place to define NATO's new role in the war on terror or the scope of its legal mandate.<sup>171</sup> As a result, NATO's involvement in this domain has been characterised by a series of pragmatic but ad hoc measures driven by the fear and vulnerability of the Alliance to a mass casualty terrorist attack. Consequently, NATO defence ministers tasked NATO to prepare a military concept for defence against terrorism. This concept was approved by the NATO Council and then endorsed by national governments at the Prague Summit in November 2002. One of the most important aspects of this concept was the recognition that: 'any NATO counterterrorism operation must conform to the relevant provisions of the UN Charter and all relevant international norms, including those concerned with human rights and humanitarian requirements.'<sup>172</sup>

The principal aim of NATO's counterterrorism policy was to help: 'deter, defend, disrupt and protect against terrorist attacks or threat of attacks, directed from abroad against populations, territory, infrastructure and forces of any NATO member state.'<sup>173</sup> NATO's military concept for counterterrorism rested on four related pillars of activity. The first was called 'antiterrorism' and entailed the use of defensive measures to: 'reduce the vulnerability of forces, individuals and property to terrorism'. Whilst it was recognised that this activity lay primarily with national governments, NATO could enhance the capacity of its member states through the provision of intelligence. This required improvement in the generation and sharing of information and allocation of military assets to help secure NATO's land, air and sea space.<sup>174</sup> The second was consequence management and explored how NATO might support member states which had suffered a large scale terrorist attack. NATO's role in this domain was to provide certain military assets which mitigated the worst effects of such an attack, for example the deployment of NATO's CBRN capabilities, the coordination of other allied capabilities and the creation of a register showing which state possessed what skills needed to address this threat. In addition, NATO could help and facilitate multi-national training. The third was counterterrorism and focused on offensive military action designed to reduce the terrorist's capabilities via military action by attacking them and those state and non state actors who provide these groups with sanctuary. This required a full spectrum of capabilities.<sup>175</sup> The fourth area was military cooperation with other international and national agencies. This recognised the basic maxim in counterterrorism that military action was not enough on its own if terrorism was to be defeated, but required other agencies to address the political, economic and social causes of this phenomenon.<sup>176</sup>

NATO also supported the development of capabilities and innovative technology that specifically addressed the threat of terrorism. The aim of this activity is to protect NATO forces, the civilian population and critical infrastructure against terrorist attacks. It appears that a significant effort has been invested in the Defence Against Terrorism Programme of Work. This was instituted by the Conference of National Armament Directors (CNAD) in 2004. This focuses primarily on developing technological solutions to mitigate the effects of a terrorist attack. These technological solutions are grouped under three capability umbrellas: incident management, force protection/survivability, and network engagement. An area that remains salient in the NATO counter terrorism field is the need to prevent the use of WMD by terrorist organisations. To this end NATO places a great deal of importance on the need to prevent the proliferation of WMD and implementing measures which are designed to ensure NATO members have the capacity to deter and defend against such an attack.

Another important area of investment was the need to improve NATO's intelligence and information sharing capabilities. As a

result, the Intelligence Unit was created within NATO headquarters. This facilitates the sharing of intelligence within the Alliance and increased the linkages between civilian and military agencies. In addition, intelligence sharing between NATO and other international organisations is facilitated through the Intelligence Liaison Unit at NATO headquarters in Brussels and an intelligence cell at Allied Command Operations in Mons, Belgium.

These measures reflected the challenges of trying to achieve meaningful political compromise between NATO's member states when there was no clear consensus on the threat posed by terrorism or how to respond to this challenge. Perhaps the best illustration of these tensions came to the fore in the run up to the US led war against Iraq in 2003. NATO remained divided on the threat posed by Iraq, the existence of its WMD programme and its links to Al Qaeda and leading members of the alliance were openly critical of both US and British insistence that Iraq represented a clear and present danger to the international community. As a result, NATO played no direct part in the invasion and occupation of Iraq.<sup>177</sup>

Obviously, NATO did play a robust role in the stabilisation of Afghanistan, but this mission had the blessing of the UN and there was clear evidence which linked Al Qaeda and the Taliban government as co-conspirators in orchestrating and facilitating terrorist attacks. Equally important, its successor, the neo Taliban, sought to return to power after the defeat of its predecessor in 2001 through a combination of insurgency and terrorism. In this sense, Afghanistan fitted neatly into NATO's military concept which aimed to prevent terrorists from using the ungoverned spaces that lay within failed and failing states as a base from which to attack NATO's member states. Three observations follow from this. First, even though legally and even ethically NATO's military campaign in Afghanistan was perceived to be legitimate, there was only minimal political support for this mission within NATO nations and had a profound impact on the conduct of the war. Second, de Nevers noted in 2006 that the nature of the terrorist threat was changing and in particular the importance of failed and failing states as safe base areas for international terrorists was declining as the threat mutated towards 'leaderless jihad' which was now taking place within NATO states.<sup>178</sup> In sum, the threat is at home not overseas and therefore one could argue this is largely the responsibility of domestic counterterrorism agencies. Finally, the huge cost of NATO's war in Afghanistan was politically disastrous and there is no appetite to repeat this experience. All of this brought into question the viability of one of the central pillars of NATO's counterterrorism strategy to break the connection between weak governance and terrorist safe havens.

A more contentious problem concerned the issue of intelligence. This is a vital component of any counterterrorism strategy and key to preventing terrorist attack. However, NATO relies heavily on its member states, particularly the United States, to provide information relevant to the threat. Whilst there is nothing wrong in this dependency, it does raise a number of legal and ethical issues in terms of how each state goes about acquiring this intelligence and the extent to which these methods of extraction comply with the legal and ethical norms of other allies.<sup>179</sup> Clearly this has proved a divisive issue within the context of the war on terror and both the United States and UK have been heavily criticised for their policies and actions in this domain.

A further criticism raised about NATO's counterterrorism policy was that it was not sufficiently robust in stopping terrorists from acquiring WMD. It is not clear what role, if any, NATO has in reinforcing the non proliferation of WMD at the state level and there is little on how it intends to address the terrorist threat of acquiring this capability.<sup>180</sup> In truth, most of what NATO offers here deals with the consequences of a WMD attack rather than its prevention. There is also some debate over NATO's role in supporting member states which have suffered a large scale terrorist attack. In Europe it is asserted that the European Union is probably better placed to address this challenge than NATO.

The next important evolution in NATO's counterterrorism strategy was the publication of *NATO's Policy Guidelines on Counterterrorism* in 2012.<sup>181</sup> This document acknowledged that NATO's counterterrorism policy had largely been shaped by 9/11. The document reaffirmed the importance of counterterrorism and the role that NATO had to play in both deterring and defending against terrorism, but sought to refine an approach which was set out a decade ago. However, this is a policy which is more modest than its predecessor and recognises the real political constraints that exist if NATO is to play a central role tackling counterterrorism in the longer term. It acknowledges that counterterrorism remains very much under the control of national governments. As such, the role of NATO is to support each member state's counterterrorist policy. The emphasis here is on helping to prevent terrorism and dealing with the consequences of a terrorist attack, as well as coordinating the efforts of the alliance as a whole and avoiding, where possible, the problem of duplication of effort.<sup>182</sup> In addition, it declared NATO remained committed to working within clear legal constraints. As such its counterterrorism policy operates in accordance with international law, the principles of the UN Charter and the Universal Declaration of Human Rights, the UN's *Global Counter-Terrorism Strategy* and all international conventions and protocols against terrorism.<sup>183</sup> According to Santamato, this is a positive evolution because it expands on the concept of how to conduct counterterrorism through its inclusion of prevention and resilience

in addition to deterrence, defence, disruption and protection.<sup>184</sup>

Within this context, NATO's activities focus on three areas which support the wider goals of preventing terrorism and dealing with the effects of a terrorist attack. The first is the promotion of 'Awareness'. Within this context, NATO will make greater efforts to share intelligence across the alliance so that all its members are kept abreast of the latest threat analysis. The second is capabilities and focuses on exploiting the expertise that NATO has in areas such as airspace security, air defence, maritime security, dealing with CBRN and protection of critical infrastructure. Ongoing research and investment was to be made in all these areas via the Defence Against Terrorism Program of Work. The third is engagement, which essentially recognises that counterterrorism requires a holistic approach that exploits of the levers of power: political, economic and military. In an effort to achieve this goal NATO aimed to work with national governments and other international organisations.<sup>185</sup> The Policy Guidelines sets out where NATO possesses a comparative advantage in counterterrorism and 'anchors NATO's counterterrorism activities to its stated core tasks of collective defence, crisis management, and collective security.'<sup>186</sup>

Unfortunately, it is not clear that NATO's policy guidelines actually represent an improvement on its earlier efforts to counter terrorism. Creating a successful counterterrorism strategy within the context of a military alliance, which was not designed to fulfil this mission, was always going to be a challenge. What makes this task even more demanding today is that a NATO wide counterterrorism strategy needs to address the threat posed by multiple actors rather than just one, i.e. we need to look beyond Al Qaeda, which raises questions about understanding your adversary, which is a key aspect to formulating a good strategy. It also means NATO cannot develop a bespoke strategy which addresses the threat posed by a key group. Instead we have generic capabilities which it is hoped will prevent and deter terrorism, but as the deterrence literature demonstrates abstract models based on deductive logic which anticipate rational behavior are no substitute for the kind of understanding which stems from scrutinising a real enemy.<sup>187</sup> In addition, because NATO is a coalition achieving a consensus on what the object or goal of the strategy is can also be challenging, as is how the burden of resourcing this strategy is to be shared across the alliance. Similarly, we also need to give thought to how the risks of confronting this threat are to be shared and which nation's armed forces are going to be put in harm's way.<sup>188</sup>

Addressing these questions is vital if the ends, ways and means analysis is to produce the right answers and the best counterterrorism strategy is to emerge. Finally, and perhaps most importantly, we come back to the question posed earlier in this paper: why NATO rather than national government or the UN or EU? What exactly is NATO's comparative advantage in terms of tackling international terrorism? The answer to this last question is relatively straightforward. The UN provides an overarching legal and political framework which empowers its member states to take action against those states that are believed to be supporters of terrorism or facilitating the proliferation of WMD to both state and non state actors. It also provides the legal instruments states can use to undermine the efforts of VNSAs to operate transnationally. It makes clear its willingness to delegate to regional and or national organisations responsibility for imposing UN resolutions.<sup>189</sup>

In the case of the EU and NATO by accident or design, both have counterterrorism strategies that complement rather than conflict. In the case of the EU, its focus has been very much on the harmonization of the criminal and legal prosecution of terrorists and addressing the root causes of the terrorist threat via its efforts to promote counter radicalization programmes across the union.<sup>190</sup> In contrast, NATO efforts in this domain have focused largely on how its military capabilities can be employed to best effect in countering the terrorist threat.

NATO correctly places a great importance on the defensive component of counterterrorism. This is made clear in its literature which asserts:

*Terrorism poses a real and serious threat to the security and safety of the Alliance and its members. As NATO's work on counter-terrorism focuses on improved threat awareness and preparedness, developing adequate capabilities and enhancing engagement with partner countries and other international actors.<sup>191</sup>*

As such there is considerable focus on the prevention and resilience of its members to cope with a terrorist attack. The salience of this area of counterterrorism has steadily increased since 9/11. That event caused a catastrophic loss of confidence in the ability of states to deter terrorism. This was based on a perception that Al Qaeda and other extremist groups were driven by a religious ideology which induced fanatical commitment to the cause which glorified violence. This, it was assumed, resulted in actions that made no sense in helping to achieve their goals. Indeed in the view of Gearson terrorists could not be deterred precisely because their only aim was to use violence to punish.<sup>192</sup> As a result, the US and others came to believe the only way of dealing with such groups, especially those linked to weapons of mass destruction, was pre-emption, which entailed attacking a latent rather than actual threat. Such thinking was discredited as result of the war in Iraq, but as important was

the renewed interest taken in deterrence in the post-Cold War era. Whilst the notion of deterrence by punishment was unlikely to work it was believed there was scope and potential for states to promote deterrence by denial.<sup>193</sup> This effectively focused on the defensive measures both states and collective security organisations like NATO could implement to shape and influence the terrorists perception and calculation of the probability of success to the extent they might conclude an attack is doomed to fail. According to Koenig and Pavel, the key to deterring terrorism is to break the organisation down into its component parts and then identify the weak link. In their view: 'a comprehensive counterterrorism strategy aims to disrupt and deter activities in all the key parts of the terrorist network'. So, for example, you might not be able to deter a suicide bomber but you might be able to coerce those who play a role in getting the bomber to a point where he or she can conduct their attack, for example the financier or person responsible for the logistics of the attack.<sup>194</sup> This is a view shared by Alex Wilner who argued there is an important role for deterrence in counterterrorism in helping to prevent terrorist attacks and the acquisition of CBRN. What matters is that we focus on what is most valued by the terrorist. This could be achieving operational success, denying them publicity or challenging their religious legitimacy. In his view, even fanatics are often rational and which means they can be deterred.<sup>195</sup> Viewed in this way efforts made by NATO to improve member states' defensive capabilities enhances deterrence because it reduces the terrorist's chances of conducting a successful attack.

But is this sufficient to deter an attack by Al Qaeda or a similar type of terrorist movement? Although controversial because it challenges the policing and criminal justice model of counterterrorism which prevails in Europe, I believe there is scope for NATO to make greater use of its military assets in an offensive role that promotes deterrence by punishment, which will serve to reinforce deterrence overall. Obviously this is not a politically popular course of action within NATO currently. A good illustration of this attitude can be seen from NATO's efforts to engage and neutralize the threat posed by IS. NATO's approach to the latest crisis was set out at the end of the Wales Summit in September 2014. Their communication served to warn IS that if it threatened any NATO ally in the region it would trigger the activation of the alliance. Little was said about how NATO would seek to deal with the wider threat posed by terrorist attacks carried out in Europe in its name.<sup>196</sup> In December 2014, NATO issued a formal offer to assist the Iraqi government in the reconstruction of its military so that it was able to challenge IS.<sup>197</sup>

What NATO lacks is the legal provision to act pre-emptively in dealing with a counterterrorist threat which emanates from beyond the borders of the alliance. Article 5 only allows collective military action when one or more members have been attacked. As a result, NATO's counterterrorism has largely focused on reactive and defensive measures in this domain. Thus, although NATO created what was termed the NATO Response Force (NRF) it is severely limited in terms of what it can actually do in reacting to the threat posed by terrorism overseas. The Prague Summit (2002) which created this force delegated authority to use this capability to the North Atlantic Council (NAC), which is the principal political decision making body within NATO.<sup>198</sup> As such, the interests of each member state will have an important bearing on whether and how NATO should respond to the threat posed by a terrorist group. Inevitably there are bound to be important differences over how members of the alliance perceive this threat and this will largely be determined by how the actions of a particular non state actor impacts on the interests of each member.<sup>199</sup> This divisiveness was clearly demonstrated in the case of NATO's intervention in Afghanistan; an event which has made member states wary of becoming embroiled in such an operation ever again.<sup>200</sup> However, this has weakened its ability to deter transnational terrorist groups by limiting its freedom of action. Although controversial there is a school of thought which believes this iteration of deterrence does have a limited role to play in counterterrorism. This requires NATO to conduct offensive military options against a terrorist group which will facilitate the disruption and partial destruction of the threat. There are two component parts to this action which serves to reinforce the ability of NATO to deter terrorism. The first is to punish terrorist leaders for transgressing. According to Wilner there are assets that terrorists value and wish to preserve and by threatening their destruction we might coerce and limit their actions.<sup>201</sup> The second effect is created by demonstrating a willingness to use force frequently but at a low level so that this eventually alters the terrorist's calculus and causes them to think about the costs of their actions.<sup>202</sup>

A recent article by Kurth Cronin highlights traditional forms of counterterrorist action are of limited utility against an entity like IS, even though terrorism is one of its core activities and it has been labelled as such.<sup>203</sup> In truth, IS more closely approximates an insurgency: it controls a defined territory which it defends with a military force which numbers in the tens of thousands and possesses the resources to wage war on a scale which dwarfs that of most terrorist groups. This makes it more resilient to the effects of a traditional counterterrorist strategy. Ironically, IS represents the type of adversary that conventional military power should be able to deal with, which is why Kurth Cronin recommends the United States should not employ a classic counterterrorism strategy to defeat IS, but rely instead on what she calls 'offensive containment', which entails a combination of military diplomatic activity that is designed to bring about a halt in IS's expansion.<sup>204</sup> It is possible to infer from

this that NATO too has the capability to play a more substantial and meaningful role in this conflict, what is lacking is the political will to do this. Moreover, its current efforts to help build the military capacity of the Iraqi state whilst welcome are not likely to produce significant dividends because of the absence of legitimacy in the current Iraqi government which is struggling to deal with the legacy of ethnic conflict left by Malaki. This leads to a more general point regarding NATO and its involvement in counterterrorism, the need to deter via punishment as well as denial. NATO is good on the latter but could do more to develop a military concept which allows its military power to be used to threaten to destroy those things both terrorist leaders and state sponsors value most.<sup>205</sup>

It is also important to remember that future terrorist groups will not see a war in terms of distinct theatres of operation or domestic versus international activities. Indeed, recent conflicts in both Iraq and Afghanistan have demonstrated how certain VNSAs have sought to challenge a military intervention by attacking the intervener's homeland and not just the forces involved in the intervention. So pernicious is this problem that it is causing the military to rethink its traditional understanding of what constitutes a theatre of operations. In the past we tended to think of this as a geographically distinct area containing both friendly and enemy forces who are embroiled in battle over who controls this physical space. However, as Kilcullen asserts, this concept has been eroded in recent conflicts. In part this has been caused by the increasing range of modern weaponry, for example cruise missiles, but most important from the perspective of VNSA has been their ability to exploit the global communications infrastructure to attack their enemy's homeland. This has resulted in the spatial collapse of a distinct theatre of operations. As a result, the notion that there is clear distinction between a war zone and a zone of peace is becoming increasingly blurred.<sup>206</sup>

It is within this context that NATO continues to have an important role to play in counterterrorism in the future. In that only it has the means to reach out and attack the source rather than just the symptom of the problem confronting the member states of NATO. In essence, NATO needs to focus on insurgent groups which also seek to use strategic terrorism to deter and coerce the West into accepting a new political order in which these groups emerge. This does not mean NATO states can shift the burden of their national counterterrorism to NATO; instead we need a dual track strategy which provides the means to fight terrorism at home and overseas. In this way NATO will address both the domestic as well as the global forces shaping the future of terrorism.

## Conclusion

This study has explored the evolution of international terrorism and the role of NATO in tackling this threat. The first and most important point to emerge from this debate is that terrorism will persist in the future. The prevailing demographic, economic and social trends are likely to combine to create a fertile breeding ground for future terrorists seeking to address the injustice the broad mass of people will be forced to endure in many parts of the world in the future. If these trends prove accurate then NATO will be confronted by increased instability and violence on its southern flank as states in the Middle East and North Africa struggle to deal with the Malthusian crisis facing them. This problem boils down to too many people and not enough food, water or economic opportunities to meet the needs of a population which is growing exponentially. The resulting deprivation is likely to translate into a political crisis as post-colonial states in the region, which are largely dominated by kleptocracies, prove incapable of resolving these structural economic and demographic imbalances. As a result, the gap between the rich and the poor will widen leaving many to conclude that violent action is the only solution. One component part of this violence could be an increase in terrorism as disaffected elements of the elite seek to fight for justice on behalf of the impoverished masses. Compounding and reinforcing this will be the increasing incidence of state failure as regimes prove unable to resolve their internal problems and this too will facilitate terrorism in the region. In sum, structural and systemic conditions both nationally and internationally will create a permissive environment within which terrorism will grow, but what we cannot know is what precipitants will cause people to follow this path.<sup>207</sup>

However, in the MENA region it seems likely this violence will be articulated within a radical political programme which draws heavily from certain strains of Islam. Whether this has been caused by the effects of globalisation<sup>208</sup> or more specific factors such as the Iranian revolution and the legacy of Muslim resistance to Soviet occupation of Afghanistan is open to debate, but religion remains a powerful ideology.<sup>209</sup> Certainly, it appears that most, if not all, politically motivated VNSAs have rejected secular politics and have resorted to older types of political identity in the form of Sunni and Shia interpretations of Islam. Looking at how quickly extremist groups have filled the political vacuum created in Lebanon, Palestine, Libya and Syria, Yemen and in Iraq it seems reasonable to assume that religion will continue to be an important intellectual and ideological theme. The political manifestos of some, but not all of these groups, will present a challenge to the wider international order and the interests of regional and global powers whose interests, and those of their local allies, will be affected by the proposed changes envisioned by VNSAs operating in this region. This suggests conflict between NATO and these VNSAs is likely. If so, then it is also possible that such groups will follow the path of Al Qaeda and seek to promote terrorism in the heartland of its enemies, whilst at the same time employing both conventional and insurgent forces to expand their territorial control within the region. It is also important to note that if such groups are able to carve out a territory for themselves, this might provide a safe haven for other terrorist groups and these might also constitute a threat to NATO states.

The exploitation of technology will also be a vital enabler in allowing these VNSAs to prosecute their war against their distant enemies. In this sense, the internet will continue to play a vital role in mobilising support for their cause. It is also important to note how the falling cost of many technologies is providing VNSAs access to technologies that were assumed to be so expensive that only states could afford them. For example, Singer points out that, organisations such as Hizbollah and HAMAS already have their own drones.<sup>210</sup> He also mentions the case of Rzwon Ferdus who was arrested in 2011 after it was discovered that he planned to use a large drone filled with C4 to attack the Pentagon.<sup>211</sup> Less certain is whether our fixation with WMD terrorism has been justified, but it seems that most states and NATO will assume the worst and plan for this outcome as part of its efforts to reduce risk.

Although it is accepted that counterterrorism was and continues to be something conducted largely by national police forces and the judiciary, the central argument developed in this paper is that the nature of the terrorist threat posed by transnational VNSAs such as Al Qaeda and now IS is fundamentally different. The issue here is not how irrational or violent these groups are or how many suicide terrorist attacks they carry out, but how developments in economics, society, politics and in technology will allow them to employ a range of stratagems simultaneously in time and space to challenge their enemies at home and stymie the efforts of powers outside the region to prevent them from altering the political landscape in the region. The use of NATO's military power could prove an important force multiplier in disrupting such VNSAs from conducting their operations in this way.

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