## **COMMUNITY TENSIONS**

Evidence-Based Approaches to Understanding the Interplay between Hate Crimes and Reciprocal Radicalisation

Proceedings of the Conference 'Community Tensions: Evidence-Based Approaches to Understanding the Interplay between Hate Crimes and Reciprocal Radicalisation'

**Edited by Jennifer Cole and Raffaello Pantucci** 

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Proceedings of the Conference 'Community Tensions: Evidence-Based Approaches to Understanding the Interplay between Hate Crimes and Reciprocal Radicalisation', 26 April 2013

Edited by Jennifer Cole and Raffaello Pantucci

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#### **Foreword**

#### **Bryan Edwards**

Of all the challenges facing the UK today, few are as demanding as those arising in national security. Some threats to the UK and its citizens are modern variants of those we have faced for many years. Others are entirely new and characteristically different to anything that has preceded them, while some, no doubt, have yet to be recognised, let alone understood and countered.

One feature of this large, complex and constantly evolving array of challenges is that few, if any, lend themselves to single-discipline solutions.

With that in mind, the Science and Technology Facilities Council (STFC) operates a Defence, Security and Resilience Futures Programme. Challengeled, and agnostic with respect to academic discipline, STFC's aim is to identify and facilitate opportunities to engage relevant capabilities of the UK National Laboratories and university research groups with some of the most demanding and highest-priority challenges in national security.

As part of this programme STFC is delighted to fund, and proud to collaborate closely with, RUSI to plan and deliver a series of conferences on topical issues within the domain.

Each meeting is designed to explore the interface between academic research and government policy/operations in order to stimulate debate on how step rather than incremental change in protection of the UK could be achieved. The meetings are strategic in character with contributions from an atypically broad community drawn from universities, industry, government and its agencies and partners. At the forefront of the organisers' minds is a deceptively simple question: what can academic research offer now and in the future that would allow government to further enhance its capabilities in key areas, enabling it either to do significantly different things and/or to do the things it does now but in significantly different and better ways?

The complex nature of the problems in the defence, security and resilience domain is well illustrated by the topic covered in this report; specifically, novel and effective manipulation of data to develop a better evidence base and understanding of community tension, and how this, in turn, translates into threats to UK security.

With the exception of those citizens forced to endure first-hand such community tension, the small (but growing) band of academics who elect to study it, or the law-enforcement and other professionals whose work brings them into contact with it and its consequences, the phenomenon has for

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some time gone largely unnoticed and unremarked upon by the majority of the population.

This changed abruptly with the brutal murder of Drummer Lee Rigby on 22 May 2013.

Since then, other less appalling but perhaps quite telling events such as the spectacular and largely unanticipated success of the United Kingdom Independence Party (UKIP) in the 2014 European elections, or the 2014 British Social Attitudes Survey, point to increasing intolerance within our society. How changing social attitudes with respect to immigration and minority cultures lead to hate crime and radicalisation is incompletely understood. However, there is little doubt that causal mechanisms exist, and *in extremis* these tensions can lead to radicalisation, including violent radicalisation. Given that, at the time of writing, there are an estimated 400 or more UK citizens fighting with ISIS in Iraq (of which an unknown and perhaps unknowable number of whom will ultimately return to the UK), the phenomenon needs to be viewed not just as a social one but as a serious and direct threat to UK national security.

This demands a policy response on the part of government and its agencies – policies that need to reflect the best available evidence, including quantification wherever possible.

This in turn requires accumulation, analysis, and interpretation of large and complex data sets. That much is perhaps self-evident. But which data, and analysed using which methods? Clearly a one-day event is incapable of providing answers to such broad questions, but it can and has expanded our understanding of the challenge; some of which is captured in this report.

I would very much like to acknowledge the generous assistance and support offered by the US Department of Homeland Security, which contributed to making the day a success. Similarly, thanks must also go to the staff at STFC and RUSI for all their extremely hard work, which made this event possible. However, the final word of appreciation and gratitude is reserved for all those who participated so enthusiastically on the day, whether as speakers or delegates.

Anyone wishing to know more STFC's Defence, Security and Resilience Futures programme in general, or these conferences in particular, is invited to contact me using the e-mail address below.

#### **Professor Bryan Edwards**

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#### Introduction

#### **Charlie Edwards**

One of the many key areas discussed throughout this conference was the various components of the government's Prevent strategy after its review in 2011. This review was based on the belief that policies on integration and terrorism have been blurred. It aimed to stop people from becoming terrorists or supporting terrorism. The revision of the Prevent strategy has led to a new focus on all forms of terrorism; the focus is no longer just on Islamist terrorist groups, but also on extreme right-wing, single-issue protest votes and also, in some cases, on Northern Ireland-related terrorism. The number of objectives of the Prevent strategy has been reduced from five to three:

- Responding to ideological challenges
- Preventing people from being radicalised and drawn into terrorist activity
- Working alongside civil society organisations and institutions where a perceived risk of radicalisation already exists.

The Prevent strategy review highlighted that there has been little previous analytical work across agencies analysing domestic ideological trends. The evidence of successful interventions was poor and the data was scarce. The government aims to see outcomes as well as outputs, founded on a basis of robust knowledge. In order for think tanks, academic institutions, local authorities and agencies to provide valuable support for this initiative, there also has to be a detailed understanding of how to manage, collate and analyse data. Through a comprehensive understanding of knowledge and data, reliable analyses can be made, which can be used when drawing up productive policies.

However, knowledge is not always easy to use or digest. The most authoritative advice may be at odds with what the public wants to hear.¹ Furthermore, funding required for most government initiatives is usually strained and does not cover all relevant areas, leaving most people in the dark about issues that should have been readily dealt with. We need evidence to be visible, influential and better used. But anyone promoting evidence needs to be attuned to the subtleties of government and the political appetite for it, and aware that there must be a demand for it. Conferences like this drive that demand, by educating, and informing and sharing information between those in government and others.

The scope of the Prevent strategy was broadened to cover more types of extremist groups, but it also focused more narrowly on intervention, so government representatives made clear what matters to them. In reality, it reflects what is happening at a very local level on three overlapping topics and areas of discussion:

- The radicalisation of individuals, be they Islamist extremists, from the extreme right or others
- The attitudes of individuals within broader society: are we more, or less, tolerant? Are we greater or less extreme in our views on topics like immigration, race and identity?
- The behaviour of individuals, in this case, criminal behaviour.

As well as investigating how these issues converge and overlap, we also should aim to distinguish between them, without talking at cross-purposes. Bringing together people who have experience and expertise in data, evidence and knowledge management with experts on issues of radicalisation and community tensions, be they from government or agencies, is crucial. Sharing experiences on similar issues from extraordinarily different perspectives encompasses the diverse nature of this topic and the broad-scale angles from which we can try to understand and tackle issues of community tensions.<sup>2</sup>

Charlie Edwards is a Senior Research Fellow and Director of National Security and Resilience Studies at the Royal United Services Institute. Prior to RUSI he was a Research Leader at the RAND Corporation and is a former Deputy Director for Strategy and Planning in the Office for Security and Counter Terrorism (Home Office). In the latter role he was responsible for the development of the UK's counterterrorism strategy (CONTEST 2011) and was the official charged with independent oversight of the Prevent Review. He ran the security programme at the think tank Demos for three years where he worked on UK national security strategy and resilience. He has conducted major research and analysis projects for the European Commission, European and Canadian governments, and the US administration. He is a regular commentator in national and international media.

# **Keynote Address: Community Tensions and the Relationship with Reciprocal Radicalisation**

Bernard Silverman, Chief Scientific Adviser, Home Office (on behalf of Siobhan Peters; Director, Prevent)

In this address, the Home Office sets out:

- Our understanding of community tensions and how they relate to radicalisation and the Prevent agenda
- A brief overview of how community tensions relate to the Prevent strategy
- Analytical challenges for understanding reciprocal radicalisation
- Broader analytical challenges for Prevent and what we are doing to address them.

There is a range of behaviours which we know can cause friction in communities, including along ethnic and religious lines. For example, there are hate crimes, of the kind reported to the Community Security Trust (CST) and to Tell MAMA, and reactions to specific events and stories in the media, such as the film *Innocence of Muslims* and exploitation of narratives around child sexual exploitation. In addition there are groups such as the English Defence League (EDL), which try to inflame tensions and spread prejudice.

The concern for counter-terrorism is how all this plays into radicalisation to terrorism, in this context raising a question about the relationship between different strands of extremism – the far right and Islamist extremism.

The relationship between different strands of extremism and how extremist groups use each others' activities has been termed reciprocal radicalisation. There is a growing number of examples that suggest extremist and terrorist groups can potentially destabilise each other, with the presence of one causing a spiralling effect on the other and offering an enemy against which to define itself. One example of this was the reaction to *Innocence of Muslims*.

There are similarities in extremist and terrorist narratives on the far right and Islamist sides. Both intend to engender fear and distrust about large sections of our communities and therefore have the potential to stoke radicalisation. It has also been noticed that the relationship between Islamist extremism and the far right is driving the way in which ideological narratives change, in particular the far right shaping itself as a response to Islamist extremism; for example, EDL rallies and other tit-for-tat activity. At present there is more work to be done to understand this phenomenon. The narrative relationship is clear online, but how this influences offline behaviour is less clear.

The similarities enable us to draw on our understanding of the process of Al-Qa'ida-inspired radicalisation to help us form an appropriate response to the far right. However, we need to be clear about what we mean by the term, far right, in a counter-terrorism context.

#### The Relationship Between Different Strands of Extremism

The label 'far right' has been used to cover a spectrum of groups from the political fringe to those with links to terrorism. Organisations such as the defence leagues and their offshoots have views that are offensive, repugnant even, but they are not terrorist organisations. We count terrorist groups as those that promote violence, or use the threat of violence, in order to influence government or intimidate the public. It is essential to separate counterterrorism from integration work, as previous versions of Prevent have shown.

When drawing these lines, one important consideration is the difference between public-order problems and terrorism. Far-right extremist groups (for example, Blood and Honour groups) follow violent far-right extremist ideologies, but tend to operate secretively and so have a limited impact on communities day to day. Defence leagues (such as the EDL) may not have such an extreme ideology, but may have a larger impact on communities because of their demonstrations and creation of public disorder.

Prevent addresses all forms of extremism. CONTEST (the UK's counter -terrorism strategy) is clear that on all issues, including Prevent, it is concerned with all individuals and groups associated with terrorism. However, it is important to prioritise according to risk. There have been a number of cases in recent years (for example, the ricin case) that have been instigated by self-starting groups and individuals, rinstead of being the actions of a centrally directed terrorist organisation. The far-right threat is not as widespread or systematic as the Al-Qa'ida-inspired threat. As a result, Prevent does not focus on those groups such as the EDL whose demonstrations and marches that lead to conflicts on the street between supporters and opponents, and thus to violence. This does not mean that these groups are not of interest to the government, however, and the Department for Communities and Local Government (DCLG) is responsible for the integration agenda.

There are some relationships which can bring these groups into the Prevent space. There are views that groups such as defence leagues can provide 'gateway ideologies' through which individuals may migrate to more extreme organisations. Where these lines blur, from a counter-terrorism perspective, is where the real risk, and our interests, lie. As we have said, we need to understand more about these groups, how they impact on radicalisation and whether activities such as EDL marches act as recruiting grounds for farright extremist groups. There are great difficulties in exploring these issues

because the more extreme groups are extremely secretive and throughout the movements membership is loose.

It is important to bear in mind that what we see online has an impact on what occurs in the real world. There were a number of media reports in recent months about Muslim vigilante patrols, focusing on a set of YouTube videos featuring groups of young men verbally abusing young women and criticising the consumption of alcohol, protesting against a high-street retailer's poster showing underwear, and harassing a young male for his sexual orientation and for being in a 'Muslim area'. Although this gained a great deal of media attention, including wide distribution online among anti-Islamist blogs, including those of the EDL, locals are reported as saying that the patrols failed to spark the kind of intercommunal animosity those who created the videos were hoping to achieve. Three of the individuals involved were arrested under the Public Order Act and the videos have now been removed from YouTube.

This introduction has described our current understanding of the threat and relationship between different strands of extremism. We recognise that this can change and our understanding of the threat is continually under review.

#### The Prevent Strategy

The approach to Prevent is structured around three main areas:

- Ideological challenge
- Support to vulnerable people
- Support to and interventions within specific sectors and institutions (for example, education, prisons, charities, health, the Internet and social media).

You can see that this issue cuts across ideological concerns, the concerns about recruitment of vulnerable individuals, and the role of local institutions in challenging extremist activity in these areas.

We deliver Prevent through a network of local stakeholders and our coordination with other sectors plays an essential part in the response. Key sectors include:

- Health, as there have been examples of people with mental-health issues or learning disabilities who have been drawn into terrorism
- Education, as evidence suggests that sympathy for terrorism is highest among young people and, statistically, both in the UK and overseas, most terrorist offences are committed by people under the age of thirty. Schools can play a vital role in preparing young people to challenge extremism, and effectively rebut those who are apologists for terrorism.

The Function of Research and Analysis in Prevent: Analytical Challenges
In Prevent, as in most policy areas, research and analysis can contribute to:

- Understanding the problem
- Developing robust solutions
- Evaluating policy intervention.

The relationship between community tensions and reciprocal radicalisation is not developed. We are still at the stage of understanding the problem. There are a number of factors in play in radicalisation:

- Ideology: while we have an understanding of the narratives used by radicalisers, in particular about how they justify and oblige violence, we have a more limited understanding of the role that ideology plays in radicalisation and the relationship between extremist and terrorist ideologies
- The role the Internet and new media play in enabling and facilitating radicalisation: again, we know that online activity makes access to extremist messages easier, but what is the relationship between this online activity and offline behaviour?
- Psychological factors: these are also extremely important, especially understanding how they interact with social factors such as peer pressure and group bonding
- Levels of community tension: are high levels of community tension indicative of high levels of radicalisation? If so, how closely are they linked geographically? Is there a causal relationship? Is the reciprocal radicalisation we see in online narratives replicated in offline behaviour?

Attributing impact to a particular intervention or policy is the key challenge for any intervention. In the Prevent space this is especially problematic due to the difficulties with establishing control groups, because of the risk in doing so and the small numbers in the population. In addition there is an inherent issue with proving a negative.

As well as demonstrating impact, it is also important to be able to assess whether that impact is sustained over time.

It is important for policy that we are able to explain how far findings are transferable between projects, areas or individuals. Very localised circumstances may suggest that what works in one local area may not work in another, and it may even be that what constitutes success is one area or situation may differ from what constitutes success in another situation. It is therefore a challenge to find meaningful common measures across Prevent.

We have learned from previous experience that it is essential to consider what the unintended consequences of an approach might be. Currently, we do this in a very qualitative way, by using our network of local stakeholders and coordinators, but in the long term, we would like to use more quantified measures.

It is always of utmost importance to be able to demonstrate value for money. Would anything be different if we did not have Prevent? How can we measure that, especially in the absence of randomised control trials? How can we pull together all of the information from the variety of approaches that form Prevent to enable us to assess whether the whole of Prevent is working?

The main message is that evaluation in Prevent is a jigsaw to be pieced together and our role is to ensure that what we produce is as robust as possible within resource constraints and the time available.

#### Meeting the Challenge

We have several approaches in tackling these challenges and draw on a range of methods and data sets, from large-scale quantitative data to traditional qualitative data and softer approaches that bring fast results. In general, we recognise that mixed methods are the best-practice approach. We use existing polling data to look at trends in attitudes to extremism. Crime statistics may also be useful indicators and these are given additional substance by organisations and projects such as Tell MAMA and the CST.

We draw on the knowledge of local stakeholders and partnerships to understand what is happening in communities immediately after an event occurs. For example, when something happens that we know may cause concern in communities, such as a showing of the film *Innocence of Muslims*, we engage directly with people working in communities such as local authority staff and Prevent co-ordinators to get a speedy insight into how events arise. This can be extremely important in formulating responses, as one of the weaknesses with research is the relatively long time between an untoward event taking place and an analysis of the reasons for it. This is partly why we emphasise the need for mixed-method approaches and draw on as wide a range of information as possible.

We use theory-based approaches in evaluation, such as logic mapping, and carry out process evaluation. We support partners to develop common measures across local delivery projects. We also train partners in self-evaluation, for example, in the use of pre- and post-measures as a minimum. The small numbers involved enable us often to use case-study approaches to provide nuance and deeper insight into the observations drawn from these approaches.

We have also worked hard to develop outcome measures. One example of these is the psychological tools that have been developed for assessing individuals' vulnerability to radicalisation. These are in use in Channel, which protects vulnerable people from being drawn into terrorism and where outcome measures span all kinds of extremism, whether international or far right, and whether the vulnerable person is affiliated to a group or not. Channel picks up members of Al-Qa'ida and the far right, plus lone actors.

Finally, we are interested in innovative approaches to exploring these issues, and partners have carried out feasibility studies looking at whether radicalisation and its processes could be modelled using systems approaches or agent-based modelling. Many of the mathematics-based approaches were assessed to be not viable because of the small numbers involved in radicalisation, and the hidden nature of the population of interest.

#### **How Academia Can Help**

To conclude, there are three main ways in which academia can play a role in this area:

- Capture best practice from around the world, notably in communities and non-governmental organisations. How do we define best practice and robust measures of success?
- Understand the comparative merits of approaches, in particular those related to attitudinal and behavioural change and what works in other fields. It seems likely that there are some useful analogies between preventing radicalisation and early intervention in other fields. An investigation into the extent of those analogies and their applicability to interventions in the Prevent space would be helpful.
- At a community level, we need greater insight into the needs of and challenges faced by communities targeted by radicalisers, and the comparative influence of local and global factors in the radicalisation process and transitions to violent extremism. Part of this understanding is also to explore the role of new communications methods and social media in radicalisation.

Bernard Silverman is the Home Office Chief Scientific Adviser. He is a highly cited researcher whose published work has centred on computational statistics, the new understanding of statistical methods made possible and necessarily by constant increases in computational power. He has held senior academic posts at the universities of Bath, Bristol and Oxford.

### I. A Scientific Approach to Countering the Terrorist Threat

#### Mandeep K Dhami

Prevent forms one part of the UK government's counter-terrorism effort.<sup>1</sup> It aims to stop people becoming terrorists or supporting terrorism (particularly in the UK). The main ways it achieves this goal is by challenging extremist ideology, intervening to prevent 'at-risk' individuals from being drawn into terrorism, and working in partnership with areas vulnerable to radicalisation.

It has been nearly a decade since Prevent was first introduced. Early work involved a range of activities, including debates or discussion forums, general educational programmes about Islamic beliefs and culture, leadership and management activities (for mosques, for example), non-accredited training (for instance, English language training of imams), arts and cultural events raising awareness of extremism, and sports and recreational activities.<sup>2</sup>

However, neither this work nor that conducted in recent years focused specifically on the problem of terrorism or violent extremism. For instance, only 20 per cent of a sample of 220 projects funded under Prevent that were delivered between 2009 and 2011 actually focused on terrorism and/ or targeted the most vulnerable individuals or areas.<sup>3</sup> Most of the work undertaken in these projects involved general cohesion and integration activities around the Islamic faith or Muslim communities, with little or no reference to the problems of terrorism and violent extremism.

#### Impact and Performance of the Policy

Prevent work on challenging extremist ideology has suffered from a lack of precision of the concept of ideology. The target audience for this work has also been unclear, and the measures used to evaluate the work have been either indirect or irrelevant; for example, Prevent has previously focused on those who have received the counter-influence message rather than on the effect the message has had on those people's beliefs and behaviours. Evaluations of the work of Channel, which is a multi-agency approach to identifying, protecting and diverting individuals 'at risk' of radicalisation from being drawn into terrorist-related activity, have been similarly limited. Here, evaluations have typically only provided a descriptive account of the inputs (for example, number and nature of individuals being referred to the programme), with little description of the process (nature of the work being

<sup>1.</sup> HM Government, Prevent Strategy, Cm 8092 (Norwich: The Stationery Office, 2011).

<sup>2.</sup> DCLG, *Preventing Violent Extremism Pathfinder Fund Mapping of Project Activities* 2007/2008 (London: Department for Communities and Local Government, 2008).

<sup>3.</sup> HM Government, Prevent Strategy.

done) and no measurement of its outcomes. Thus, the impact of Prevent remains at worst unknown, and at best unclear.

Indeed, the updated CONTEST strategy (the British government's counterterrorism strategy of which Prevent is one important part) states: 'Evaluation of Prevent activity to date has been poor ... In future, the work needs to be ... more rigorously appraised.' Furthermore, the new Prevent strategy document acknowledges that 'evaluation and performance monitoring have been weak and they must now be improved. Data collection has been inadequate. It has not always been possible to understand what funding has been used for, or what impact projects have had.' Finally, Lord Carlile, who provided independent oversight of the government's review of Prevent, said: 'I agree ... that evaluation of these programmes has not been fully effective, and that it should be enhanced.'

#### **Revised Prevent, 2011**

In 2011, a 'new' approach to Prevent was introduced.<sup>7</sup> This emphasised clarity of purpose and methods, value for money, commitment to increased monitoring and evaluation of projects, and precise indicators of success. However, the only indicators of success that have been formally identified are a reduction in support for terrorism and a more effective challenge to extremists and their views, whether offline or online. As yet, there is no definition of the indicators that will enable reliable and valid measurement of success, and little has been said about how data on success ought to be collected, by whom and when.

#### Not All Evidence in Evidence-Based Policy is Created Equally

Some of the counter-terrorism work to date has been informed by theoretical review and empirical data,<sup>8</sup> but this should not be confused with 'scientific evidence'.

- 4. HM Government, *CONTEST: The United Kingdom's Strategy for Countering Terrorism*, Cm 8123 (London: TSO, 2011), pp. 6–7.
- 5. HM Government, Prevent Strategy, p. 9.
- 6. HM Government, 'Report to the Home Secretary of Independent Oversight of Prevent Review and Strategy', 2011, <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/97977/lord-carlile-report.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/97977/lord-carlile-report.pdf</a>, accessed 3 June 2014, p. 9.
- 7. HM Government, Prevent Strategy; HM Government, CONTEST.
- 8. For example, T Munton et al., *Understanding Vulnerability and Resilience in Individuals to the Influence of Al-Qa'ida Violent Extremism* (London: Office for Security and Counter-Terrorism, Home Office, 2011), <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/116723/occ98.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/116723/occ98.pdf</a>, accessed 3 June 2014; A Rabasa et al., *Deradicalizing Islamist Extremists* (Santa Monica CA: RAND Corporation, 2010); Y Suleiman, *Contextualising Islam in Britain: Exploratory Perspectives* (Cambridge: Centre for Islamic Studies, 2009); the Change Institute, 'Studies into Violent Radicalization: The Beliefs, Ideologies and Narratives', a study carried out by the Change Institute for the European Commission Direct General Justice, Freedom

Scientific evidence is that obtained using experimental method in the search for cause—effect relationships. Experimentation essentially involves selecting independent variables or theoretically postulated causes, manipulating them so they vary systematically while holding all other (extraneous and potentially confounding) variables constant or allowing them to vary randomly, and then measuring the resulting changes in the dependent variable(s). This requires clear testing of specified hypotheses; precise definition of variables; randomisation of individuals or matched groups; and objective, reliable and valid measurement of effects.

To date, researchers who have empirically studied terrorism and violent extremism have done so using 'non-scientific' methods, including qualitative and quantitative methods. Examples of qualitative methods used include case studies of terrorist events, ocntent analyses of the offline and online communications of violent extremist groups, and interviews and focus groups with incarcerated terrorists. Although studies using these methods provide rich unstructured data, they are open to subjective interpretation. At most, these studies can provide policy-makers with a description of the problem space, for example, terrorism. These studies do not, and cannot, provide an explanation for why people engage in, or disengage from, terrorism.

Examples of quantitative methods include surveys of the public's attitudes towards terrorism, <sup>12</sup> and analyses of existing statistical data on terrorist attacks. <sup>13</sup> These studies provide numerical summaries of structured data, and can go beyond descriptions of the problem. They can help policy-makers identify the factors that may be associated with involvement in terrorism and those that might predict (dis)engagement. Nevertheless, these quantitative methods cannot provide a causal explanation of the phenomenon. Only the experimental (scientific) method can do this.

Isolating a causal explanation is important because it allows policy-makers to understand why certain individuals are initially attracted to extremist

and Security, 2008 < www.changeinstitute.co.uk/images/publications/changeinstitute\_beliefsideologiesnarratives.pdf>, accessed 3 June 2014.

<sup>9.</sup> M R Haberfeld and H Agostino (eds), A New Understanding of Terrorism: Case Studies, Trajectories and Lessons Learned (Springer, 2009).

<sup>10.</sup> P B Gerstenfeld, D R Grant and C Chiang, 'Hate Online: A Content Analysis of Extremist Internet Sites', *Analyses of Social Issues and Public Policy* (No. 3, 2003), pp. 29–44.

<sup>11.</sup> M Post, E Sprinzak and LM Denny, 'The Terrorists in their Own Words: Interviews with Thirty-Five Incarcerated Middle Eastern Terrorists', *Terrorism and Political Violence* (No. 15, 2003), pp. 171–84.

<sup>12.</sup> C Panagopoulos, 'The Polls – Trends: Arab and Muslim Americans and Islam in the Aftermath of 9/11', *Public Opinion Quarterly* (No. 70, 2006), pp. 608–24.

<sup>13.</sup> A Clauset, M Young and K S Gleditsch, 'On the Frequency of Severe Terrorist Events', *Journal of Conflict Resolution* (No. 5, 2007), pp. 58–88.

influences, how they become radicalised, how they choose to undertake specific terrorist acts, and why they may eventually disengage from violent extremism. Empirical data from non-experimental research revealing who does what in this domain, what their experiences are, and how these may be associated with contextual factors is necessary but not sufficient in developing an effective counter-terrorism response. For counter-terrorism strategies to be effective they must be informed by an explanatory model that reveals the mechanisms underlying involvement in terrorism. These strategies must also be implemented appropriately.

Finally, research ought to be reviewed by independent scientific experts. Internal review processes for counter-terrorism research and evaluations conducted within government are unlikely to meet this standard.

#### Potential for a Scientific Approach to Prevent

A scientific approach can inform counter-terrorism efforts in at least three main ways:

- By determining factors that place individuals at risk of becoming involved in terrorism in order to develop and implement a standardised risk-assessment tool that can be used to target them for intervention
- By informing the development of interventions aimed at such individuals in order to prevent them from being attracted to extremist influences
- By helping shape the methodological design of research evaluating the effectiveness of specific counter-terrorism work.

According to the recent Prevent revision, one might believe that some of the above has already been achieved. The document states that there are potential risk factors such as ideology, personal vulnerabilities and local factors that encourage people to support terrorism.<sup>14</sup> However, we are not told on what basis these risk factors were identified, and there is no standardised risk-assessment tool in this domain currently available for general use. Existing violence risk-assessment tools are not considered to be useful.<sup>15</sup> It is likely that there will be a need to adopt a multifactorial approach, which considers both stable and dynamic risk factors as well as protective factors.<sup>16</sup>

<sup>14.</sup> HM Government, Prevent Strategy.

<sup>15.</sup> J Monahan, 'The Individual Risk Assessment of Terrorism', *Psychology, Public Policy and the Law* (No. 18, 2012), pp. 167–205.

<sup>16.</sup> E Pressman, 'Risk Assessment Decisions for Violent Political Extremism', in *User Report* 2009 – 02 (Ottawa: Public Safety Canada, 2009), <a href="http://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/2009-02-rdv/2009-02-rdv-eng.pdf">http://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/2009-02-rdv/2009-02-rdv-eng.pdf</a>, accessed 24 June 2014.

The Prevent strategy further states that there is evidence that positive interventions relating to individuals with the aim of developing a sense of belonging to the UK and an acceptance of its core values, will be effective in preventing vulnerable individuals from becoming engaged in terrorism, <sup>17</sup> but we are not told what this evidence is, nor given an indication of its quality. Ideally, such evidence needs to be theoretically grounded and obtained using the scientific method, as well as being compatible with other evidence (triangulated).

Although it is outside the scope of the present paper to provide a detailed proposal for the scientific research that ought to be conducted in an effort to develop an effective counter-terrorism response, some relevant research areas that could be addressed using experimentation are outlined briefly below.

The development of a valid risk-assessment tool and effective interventions needs to be informed by theories and research on the causes of terrorist (dis) engagement. One potentially fruitful theoretical perspective is rational-choice theory, which has been used successfully to predict criminal engagement. This posits that an individual chooses to (dis)engage after weighing the importance of the perceived benefits and drawbacks of terrorist activity, weighted by their subjective probabilities of occurrence, and choosing the course of action for which the pros outweigh the cons. Indeed, although terrorism may involve significant self-sacrifice in losing connections with family and wider society, there are also potential rewards for the individual, such as heightened status — including that of a 'hero' or 'martyr' status — gains in prestige, respect and authority, and belonging to a group.

The goals of research testing rational-choice theory, therefore, should be to first identify the benefits and drawbacks that specific groups (for example, male youth) perceive of various levels of (dis)engagement in terrorism or violent extremism.<sup>21</sup> This should be followed by research examining the

- 17. HM Government, *Prevent Strategy*.
- 18. M Dhami and D R Mandel, 'Crime as Risk Taking', *Crime and Law* (No. 18, 2012), pp. 389–403.
- 19. J Horgan, 'From Profiles to Pathways and Roots to Routes: Perspectives from Psychology on Radicalisation into Terrorism', *The Annals of the American Academy of Political and Social Science* (No. 618, 2008), pp. 80–94; J M Post, 'When Hatred is Bred in the Bone: The Sociocultural Underpinnings of Terrorist Psychology', in J J F Forest (ed.), *The Making of a Terrorist: Recruitment, Training and Root Causes* (London: Praeger Security International, 2006), pp. 13–33.
- 20. J Bartlett, J Birdwell and M King, *The Edge of Violence: A Radical Approach to Extremis* (London: Demos, 2010); T Precht, *Home Grown Terrorism and Islamist Radicalisation in Europe* (Danish Ministry of Justice, 2007).
- 21. M K Dhami and J Murray, 'The Pros and Cons of Violent Extremism: Towards a Test of Rational Choice Theory', manuscript submitted for publication in 2014.

validity of these benefits and drawbacks on an individual's support or (past and forecasted) engagement in specific forms of terrorist or extremist activities. Finally, research should measure the effects of specific factors or interventions on these perceived benefits and drawbacks. For instance, Monahan suggests that intervening factors might include ideologies, grievances, affiliations and moral emotions.<sup>22</sup>

Evaluations of specific counter-terrorism work should also be informed by the experimental method. Evaluation studies should compare the effect an initiative has on individuals against a comparison group that does not experience the initiative. Individuals should be randomly assigned to these so-called 'treatments' and comparison groups or matched according to relevant factors such as age. These evaluation studies may also include a pre-test measure in addition to the post-test measure. Finally, it is advisable for these studies to measure the durability of any observed effects.

Those unfamiliar with the scientific method or those sceptical of its application in this domain may claim that it is impossible or extremely difficult to conduct experiments in terrorism. They may argue that the problem space is too complex to be reduced to its component parts ready for experimentation; that it is impossible to manipulate potential causal variables and/or reliably measure dependent variables; that it is unethical to assign individuals to intervention and comparison groups; and that such a reductive and indirect approach threatens the generalisation and external validity of the research findings.

Fortunately, these remarks can be easily rebutted when one considers what the scientific method has revealed about complex systems such as the universe and living organisms. For example, physicists have successfully employed a reductive approach and used indirect measures, relying on mathematical models. Biologists did not resort to simply relying on individuals' self-reports about how their bodies function or even by simply observing the human body 'at work'. Rather, they take physical measurements and manipulate environmental conditions. Significant medical advances have been made while accommodating ethical concerns. Finally, it is worth noting that the experimental method has sophisticated variants, which can enhance the representativeness and external validity of social-science research findings.<sup>23</sup>

#### **Limits of Consultation**

Another source of 'evidence' that is problematic, but on which policy-makers have relied when considering their counter-terrorism efforts, is the

<sup>22.</sup> Monahan, 'The Individual Risk-Assessment of Terrorism'.

<sup>23.</sup> M K Dhami, R Hertwig and U Hoffrage, 'The Role of Representative Design in an Ecological Approach to Cognition', *Psychological Bulletin* (No. 130, 2004), pp. 959–88.

consultation process. In November 2010, the UK government launched a three-month consultation on its Prevent strategy.<sup>24</sup> This involved eliciting written responses in an online questionnaire and via e-mail and post, conducting focus groups and holding regional events. Respondents included the general public, local authorities and councils, academics, police forces, prison and probation services, community and religious groups, local partnerships and networks, and special interest-groups.

There were thirteen questions on the consultation document. Four were questions that one might expect could only be answered by scientific data. Specifically, question 3 asked respondents to state what sorts of programmes and projects might help to address violent extremism; question 5 asked how effective they thought Prevent interventions were and how they could be improved; question 7 asked how they thought the most 'at-risk' individuals should be identified; and question 10 asked what criteria respondents thought might be used to identify an 'at-risk' area.

In response to the above questions, respondents suggested that the factors increasing vulnerability or risk of areas for terrorist influence were separation from mainstream society (including where there is a large Muslim population), actual and perceived deprivation, perceived discrimination and a lack of sense of belonging, and community conflict (including generational and according to different viewpoints).<sup>25</sup> Respondents also recommended that resilience to terrorist messages could be achieved through education, services enabling safe discussion, and cohesion and integration activities focusing on Muslims or Islam. They advised that institutions combatting terrorist messages could be supported by guidance on practice, training, input into educational strategies, regulation and monitoring, funding, and complementary educational and media messaging. Respondents also provided some anecdotal support, based on their personal experiences and views, for the effectiveness of Channel.<sup>26</sup> Finally, respondents recognised the importance of evaluating Prevent activities, although they preferred non-scientific methods, and a qualitative approach in particular. Of most concern is the fact that respondents pointed to the difficulties in conducting evaluation studies, and they warned against over-emphasis on evaluation at the expense of doing Prevent work.

<sup>24.</sup> HM Government, *Prevent Review: Summary of Responses to the Consultation* (London: TSO, 2011), <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/97978/prevent-summary-consultation.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/97978/prevent-summary-consultation.pdf</a>, accessed 4 June 2014.

<sup>25.</sup> Ibid

<sup>26.</sup> HM Government, Channel: Preventing Vulnerable People from Being Drawn into Terrorism, A Guide for Local Partnerships, (London: TSO, October 2012) <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/118194/channel-guidance.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/118194/channel-guidance.pdf</a>, accessed 3 June 2014.

However, consultation should not be confounded with scientific research and evaluation. The vast majority of respondents are not academic experts in the domain of interest. Those who may have some expertise do not necessarily provide scientific data to support their opinions. Contributions may be biased. Finally, it is unclear to what extent the opinions of some respondents (for example, the public, criminal-justice and law-enforcement representatives, and politicians) are confounded by the 'official' messages they have received on the terrorist threat and the UK government's counterterrorism strategy. Indeed, responses to the four questions listed earlier largely reiterate and support current policy and practice.

#### An Old Approach to the New Prevent

The Prevent strategy launched in 2011 may have hailed a new stance in the UK's counter-terrorism efforts, especially given the critical reflection in recent official reports on the failures of Prevent since its inception to demonstrate impact.<sup>27</sup> One would be disappointed therefore to learn that the annual report on CONTEST has little to say about the effectiveness of the new Prevent,<sup>28</sup> providing only a brief, descriptive account of the Prevent work undertaken in 2012.

We are told that over eighty community-based projects were funded; over 4,000 URLs to websites that break UK terrorism legislation have been removed since 2010; nearly 2,500 referrals were made to Channel, with over 500 people receiving support since 2007; education programmes on radicalisation risk awareness and mitigation have been carried out; and National Offender Management Service (NOMS)<sup>29</sup> programmes have been implemented to help prisoners disengage from terrorism. However, beyond expressing a desire to see 'tangible results' of community-based projects,<sup>30</sup> there is no mention of the evaluation of Prevent work beyond a remark about how the introduction of vulnerability assessments for those referred to Channel might be useful for the future evaluation of this aspect of the Prevent Strategy.

#### **Summary and Conclusion**

The paper has proposed instead that issues in terrorism and violent extremism be examined using the scientific method. It has discussed how the findings of research using this method can inform more robust risk assessments, more effective interventions and more rigorous evaluations. Social scientists, on whom policy-makers call for an improved understanding

<sup>27.</sup> HM Government, 'Report to the Home Secretary of Independent Oversight of Prevent Review and Strategy'; HM Government, *Prevent Strategy*; HM Government, *CONTEST*.

<sup>28.</sup> HM Government, CONTEST: The United Kingdom's Strategy for Countering Terrorism, Annual Report, Cm 8583 (Norwich: The Stationery Office, 2013).

<sup>29.</sup> Ibid.

<sup>30.</sup> Ibid.

of terrorism and violent extremism, need to acknowledge the inherent limitations of 'non-scientific' methods. They also need to consider applying experimental design to this domain, and they need to set aside personal methodological preferences and undertake a scientific study of terrorism and violent extremism. Policy-makers must encourage and support their efforts in doing so.

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# II. Social Science, Evidence-Based Data Metrics and Evaluation: A Methodological Partnership

#### Laura Zahra McDonald

This paper introduces some of the methodological challenges to developing evidence-based understandings of community tension, and calls for a partnership approach within and between disciplines and sectors to enhance research, policy and practice.

#### **Understanding Community Tensions**

The British context of contemporary community tensions is marked by complex, politicised and historically situated social and political dynamics. The aftermath of the murder of Fusilier Lee Rigby in Woolwich on 22 May 2013 exemplified the interplay of factors and connectedness to deep discourse; these factors are also identifiable in many other cases in which community difference has defined crime, including terror attacks, hate crimes and instances of social unrest. Each discrete event is experienced against a backdrop of messy human experience and communal memory, whether it be a history of migration and the politicised framework of British 'race relations', looking into issues of economics, class, gender and faith, or the multiple intersections of state, community and individual identities. The emotive nature of crimes and their associated sentiments add to the power of perception and subjectivity.

A common strand in the development and continuation of tension is the competing sense of victimisation on a group level, where brutality and violence are committed in the name of revenge on behalf of a communal identity. The Woolwich attack itself had such a narrative, as did the anti-Muslim hate crimes and counter-attacks that came in its aftermath, with perpetrators claiming to act in response to the fear and victimisation of whole communities. We were able to see how quickly binaries came into play, with competing narratives that exploited those aforementioned dynamics: a besieged white working class against a besieged Muslim minority; racists against Muslims; extremist Muslims against benign 'hosts'. In the grand scheme of things, binaries regularly feed the wider public narrative, particularly from within the media and political sphere, which pathologise communities as locations of self-induced tension, and as problem out-groups.

Attempting to develop an accurate understanding of these dynamics through evidence-based analyses is not just an academic exercise, but can contribute to equally evidence-based policy and practice, and eventually provide ways in which to identify, predict and potentially prevent the escalation of tension into violence. Many questions require careful research: from learning how

to identify and define the links between voicing tension, dissent and hate speech or acts of physical violence, to the ways in which we may understand the relationship between 'marginal' or 'extremist' thought and behaviour against the 'norm'. The methodology of research in this area thus requires particular consideration.

#### **Data Interpretation**

The nature of understanding data, in any form of science, requires a framework and method of interpretation. In controlled studies, within a defined academic discipline, this may be clearly achievable, but in the realm of the social, which by its definition must be expressed by subjective perception as well as the momentarily situated, relational experience of individuals, interpretation becomes increasingly complicated, and is in itself located in the context of the researcher and research aims. It does not require descent into post-modern fragmentation to appreciate the challenges. For example, the reporting of hate crime as a tool for understanding acts, victims and perpetrators remains subject to multiple fluid variables as to why, where and by whom reports are generated and to whom reporting takes place. Similarly, we might ask how recorded reports reflect the experiences of the community in which a hate crime took place, or a broader range of communities. Does the act of reporting reflect better collection and analysis, more confidence by victims to report hate crime, or an increase in hate-crime events? The complexities of online radicalisation similarly present a range of interpretive challenges, which have a direct impact on community tension. Looking at this phenomenon beyond one of academic interest, we need to ask questions such as how might we identify and evaluate the connections between online radicalisation, hate speech and action on the ground.

These questions seek to account for the changing nature of social reality – the contexts, power dynamics and relationships between individuals and groups, across communities, and between the grassroots and the state.

#### **Mixed and Multiple Methods**

Understanding community tensions is an exercise in recording, quantifying and interpreting numerous intersecting social factors and events, and creating a multidimensional picture in which numerous perspectives are taken into account. Traditional academic research requires a form of methodological partnership that embraces the inter- and intra-disciplinary nature of the phenomena under scrutiny. This is beyond the division between quantitative and qualitative, and involves engaged, collaborative approaches through which new methods may evolve. This demonstrates the value of patterns and trends of statistics, data scraping and predictive computer modelling, alongside the detailed snapshots of human experience that in-depth qualititative work can create.

Academic research that combines such potentially radical and innovative mixed-method approaches also requires a 'cultural bridging' and reflexivity, to understand not only the role of research in defining and framing social tensions, but also the responsibilities inherent in the aims and ethics of the work. For example, from a community perspective, particularly in this sensitive context, the idea of data-mining and the scraping of monitoring online forums, or geo-tagging, may appear at best intrusive; and at worst part of deep state intervention, which undermines rather than protects or supports communities. Related to this is the relationship of research to policy and practice: they can inform and complement each other, and might form 'alliances' in reality or within the perceptions of a wider public. The emotional intelligence of this type of endeavour thus becomes crucial to our understanding of the subject itself, and to the impact and effect of research.

#### **Cross-Sector Partnerships**

This multidimensional, socially situated idea of community tension requires the development of new research methodologies and partnerships between institutions and civil society. An understanding of how communities, practitioners, policy-makers, academics and researchers interact, alongside wider connections to politicians and the media, is key to the dissemination and impact of these methodologies. These partnerships will bring about practical benefits, including multiple perspectives and skills that can define the subject itself, as well as the challenges and opportunities, and it will ensure that communities are not simply objects and objectifiers, but active participants whose varying knowledge bases enhance research, policy and practical implementation, and demonstrate that we all have a stake in the process as well as the outcomes.

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www.connectjustice.org

### III. High-Performance Computing and Data Storage at STFC: An Introduction for the Social-Science Community

#### **Adrian Wander**

This paper describes the activities undertaken by the Scientific Computing Department of the Science and Technology Facilities Council (STFC), and the computing resources available within the department. Within the academic and policy community that looks at community tensions, there has so far been relatively limited use of the types of computing power that is now available, but these technologies can have a real impact on the problems the UK is facing.

The STFC Scientific Computing Department is probably the biggest scientific computing department in the world, with 180 staff working under the director, many of whom are experts in a variety of areas within scientific computing. There is a division of systems administrators – staff who run computer systems and who can also build a computer system and run it for researchers from other disciplines who may not know how to do this themselves. Approximately forty-five people run systems for the STFC, internal clients and external clients.

There is a data-services division, whose staff look at the 'middleware' for data, deciding how to store, catalogue and archive it, and serve it to the community. Again, approximately forty-five people work on such challenges, which are likely to increase as more and larger data sets are generated.

Just over forty staff write applications or software packages; these are developed in support of the UK academic community, typically concentrating on the engineering and physical sciences, which has historically been the STFC's mission. There are staff skilled in software development and software engineering within the department. Social scientists and policy analysts need software: it is not their job to write and develop it, but when they work together with computer scientists, it is more likely that the software that will be developed will meet researchers' needs.

Working in the technology division are experts in porting (transferring) existing software to new platforms and optimise it in order to achieve peak performance. They take existing code – existing pieces of software that are already in use – and port them to the highest-performance computers available. The STFC can take code and make it run on faster systems. Its staff can also help with parallel programming. They take software, make it run faster, port it onto normal architecture systems, and help researchers

achieve what they need. There is also a software-engineering support service whose staff help to write good-quality code – code with longevity that can be maintained.

The Numerical Analysis Group works on how data is analysed and understood. A team of mathematicians works on the development of new methods of numerical analysis – that is, new ways of analysing data.

#### **How the Department Manages Data**

The Scientific Computing Department stores over 14 petabytes of unique data. A typical external hard drive is 1 terabyte: 14 petabytes require 7,002 terabyte external hard drives. This is a lot of data: for example, the European Bioinformatics Institute stores all the bioinformatics data generated around the world, including all of the genome data, and this amounts to 4–5 petabytes of data. The STFC is storing three times that amount.

What does this consist of? All the data that comes off the Large Hadron Collider – indeed, all the data that comes from the European Organization for Nuclear Research (CERN) – is stored on the STFC machine rooms in Harwell, including all of the data on the Higgs Boson. The STFC stores all the data that comes from the UK's national facilities, such as Diamond Light Source, the UK's synchrotron (a giant microscope that harnesses the power of electrons to produce bright light that enables scientists to study everything from fossils to vaccines), and a complementary neutron source used to provide detailed information on the atomic structure of a wide range of materials. The STFC stores all of the data and meta-data from those sources, making it available to the scientific and academic community. When users want to use this data, simple web portals provide seamless access to what can be huge quantities of data.

The STFC is able to move large quantities of data, and can move data offsite at 60 gigabits per second. But for some of its applications, that may not be enough, so there are dedicated light paths into a number of the STFC institutes that enable the movement of even more data. A dedicated light path directed to CERN enables large amounts of data to be streamed. Over 100 gigabits per second are regularly driven out across the network. There is a lot of expertise in working with large amounts of data – moving data, storing data and serving data out to communities.

Activity in 'big-data science' is growing. Data by itself is completely useless. It can be stored, but what is it being stored for? Research Councils UK has an open-access policy for data, which insists that all research data is archived and available through open access for ten years. Many universities are either unable or unwilling to store all the data they have collected, perhaps because it is not entirely clear what is research data and what is not. More

importantly, storing the algorithms that extract meaning and knowledge from the data sets is at least as important as storing the data itself. The data in and of itself is worth nothing; it is the knowledge that data contains that is valuable. The STFC can generate algorithms and methods that allow knowledge to be extracted from data.

The STFC wants to bring about a step-change in accessibility and usability. Historically, high-performance computing has been extremely difficult, but the STFC is attempting to make it easier. Most people are happy to sit using a laptop or a desktop computer: part of the STFC's job is to make high-performance computing as easy as the type of computing most people do every day.

An example of how this can be achieved is a project being undertaken with Unilever, for which the project team has designed an iPad interfaced with one of the STFC's codes, which is simple and very easy to use. Users are not aware whether the actual work has run on the iPad or on a massive computer halfway across the world: they just want an answer. They do not care about the mechanics that went into generating that answer.

The STFC has various systems, including a BlueGene/Q, the fastest computer in the UK at the moment and the largest computer in the world dedicated to software development. It has a speed equivalent to 1 million iPads. This system can process in ten minutes something that would take nineteen years (or half a career) on a desktop.

Think of what it might be possible to do with such a system. With that much computing power, what possibilities are opened up? What impact will it have to make these sort of resources available to researchers and help them exploit such technology?

The STFC has 5 petabytes of high-speed spinning disks, 15 petabytes of tape store and a further 100 petabytes of tape store at Harwell, so big data is no problem. If this amount of data were stored on DVDs, which hold about 8 gigabytes of data and are around 1 mm thick, the stack of DVDs required would be 1,800 metres high: higher than Mount Snowden. The amount of potential insight contained in data sets of that scale is huge, and offers huge opportunities. Large, shared memory systems are available to analyse large memory sets, as are visualisation capabilities. The STFC has four very high-quality visualisation power walls, an SGI UV, which is a large-memory system, and the largest graphics processor installation in the UK. This is a partnership between the STFC, University College London, Oxford University, Southampton University and Bristol University. The STFC is a 10 per cent

<sup>1.</sup> SGI UV is a product name – see <a href="https://www.sgi.com/products/servers/uv/">https://www.sgi.com/products/servers/uv/>, accessed 21 July 2014; for further information.

partner in the Emerald System, the largest GP-GPU-based system in the UK (General Purpose computing on Graphics Processing Units, which increases computers' processing power by enabling graphics-processing units to handle computation functions traditionally only handled by the central processing unit), providing more than 100 petabytes of storage and direct access to high-speed academic networks.

High-speed computing can do things cheaper, faster and easier, providing the potential to evaluate workloads on different architectures, and offering advice to partners on what computers to buy.

#### **The Hartree Centre**

The Hartree Centre, based in Daresbury in Cheshire, is named after Douglas Rainer Hartree, who was one of the founders of mathematical physics, and a physicist at the University of Manchester. He was something of a visionary in 1936, when he built a mechanical computer, Hartree's Differential Analyser( the prototype of the system was actually built using the model construction system Meccano).

The Hartree Centre provides the STFC's business outreach activity. Since it opened on 1 February 2013, it has been funded from £56 million of capital investment by the UK government, to invest in computer systems. The centre takes high-performance computing into new communities — those which have not traditionally been concerned about high-performance computing — and demonstrates to them that it can make a significant difference to their activities, potentially making it much easier for researchers and analysts to do their jobs.

The rationale explained in the section on managing data above is the business case the STFC put forward to the Cabinet Office, which released its capital funding. Some of these points are key to the security community and others. The STFC aims to lever new collaborations that bring together communities from academia, government and industry to develop multidisciplinary programmes and projects, which focus on efficient and effective modelling of simulation software. The STFC's job is to make new partnerships with a diverse range of end users, take what it can do to new communities to demonstrate its value, and create projects that can benefit the UK. By working together, researchers from very different disciplines can increase their impact dramatically.

#### **Other Outreach Activities**

On the same day the Hartree Centre opened, the STFC signed a major research agreement with Unilever. The STFC specialises in engineering and physical sciences; Unilever makes shampoos. The STFC can help Unilever to design better shampoos because its scientists understand binary phase separation in liquid mixtures. Unilever mixes two liquids together to produce a shampoo, but what happens to these two liquids after they are put in a bottle and left on a shelf for six months? Do they stay mixed? This is a fundamental question for Unilever. Historically, the company would have tested this by putting the liquids in a bottle, mixing them, putting them on a shelf and coming back six months later to see if they had separated. This can be predicted within a few minutes on a suitable computer, accelerating the speed at which new products can be developed. Such technology can increase the speed with which data sets can be analysed and expand the range of data sets it is possible to look into.

The STFC has staff skilled in paralysation, porting and optimisation of codes, and their expertise in big data is growing. Staff are interested in analysing large data sets, including data 'at rest', and data mining. In particular, work is ongoing into bioinformatics – looking at how genomes can be reassembled. It is important to frame a question and then collect the data, but after the data has been collected there may be correlations that are not immediately apparent; data mining enables these correlations to be identified and analysed. The question does not have to be framed beforehand; a big data set can be searched systematically to extract those correlations.

Data in motion is a growing area of interest; it includes streamed data and surveillance data, such as the information coming from the Large Hadron Collider — a huge amount of data. There is also the Square-Kilometre Array (SKA), a big radio-telescope being built in South Africa and western Australia, which will produce huge amounts of this type of data. SKA will collect an amount of data equivalent to that of the entire Internet every day, which will be streaming continuously via the detectors. This needs to be stored and processed, and analysts are required to extract meaning from it.

Expertise in mathematics is needed so that ways to extract meaning from the data can be designed, and the STFC has some expertise in agent-based modelling. An agent-based model takes agents, which are individual objects, defines interaction rules and then lets a model run. If the interaction rules are designed correctly, it is possible to model crowds or communities. The STFC is not in the position to define those interaction rules: that expertise needs to come from the social sciences – from behavioural psychologists, sociologists and criminologists, for example. What can they do with agent-based modelling?

The STFC has a network of key external collaborators, of which IBM is one. IBM has the biggest corporate research lab in the world, and much expertise in some areas that may not be obvious, for example, the chess-playing computer that beat Garry Kasparov, Deep Blue – a relatively straightforward computer. After proving the capacity of Deep Blue, staff at IBM set themselves

a much harder challenge: to win the US television game show *Jeopardy*. They built a machine called Watson, which won *Jeopardy*, thanks to its ability to analyse the show's context. It is relatively easy to search large data sets of text for keywords. The security community may want to search keyword texts for the word 'bomb' but unless the context in which that word is used is understood, thousands of false positive hits will be generated, such as 'bath bombs'. Contextual text mining is essential and IBM has a lot of expertise in this area.

Data Direct Networks (DDN) is another collaborator with the STFC, having expertise in storage devices and ways to store large amounts of data. The STFC also works with NVIDIA, whose work is explained in Chapter IV; with INTEL; and with the company Mark Logics, experts in searching the unstructured data on non-SQL databases. The STFC also has a large network of university collaborators comprising virtually every university in the UK, which can help with networking researchers who require specific expertise.

The STFC also has syndicate collaborations with partners such as Lawrence Livermore in the US.

In summary, the Scientific Computing Department has the skills and resources to be a key partner in addressing the issues and challenges of community tensions and enabling researchers working in this area to consider state-of-the-art solutions to solving these problems by providing access to data, data storage, data analysis, data analytics and very high-speed computer systems.

Adrian Wander was appointed the first Director of Scientific Computing at the STFC in July 2012, having worked for the STFC and its predecessor organisation since 1999. Since authoring this paper he has left the STFC. Anyone interested in knowing more about computing, data processing and storage capabilities at the STFC, or discussing how these or other facilities could support social-science research, should contact Professor Bryan Edwards at bryan.edwards@stfc.ac.uk.

# IV. Faster Processing and the Future of Computing

#### **Jeremy Purches**

NVIDIA is a technology company that makes processors, found in everything from smartphones to PCs, laptops, small servers and large servers — even many new cars feature NVIDIA processors. When NVIDIA was originally founded in 1993, a significant amount of its customers originally came from the gaming industry. Even today, the younger generation is most familiar with NVIDIA's products, which consist of games consoles such as PlayStations, but nearly all PC owners use NVIDIA cards.

One of NVIDIA's primary brands is the GPU (graphics processing unit). This was the name given to the product in 1993 when the company started; today that name is not fully applicable, as a lot of what is done with GPUs no longer relates to graphics. Over the years, it was discovered that GPUs can be used not only to produce high-quality graphics, but also for parallel processing.

Parallel processing is the way in which all computing is going. The computer chips that are present in most personal computers today cannot get much faster, so the only way to get computers, iPads, and the big super-computers to run faster is to have more of these chips. And the only way to actually utilise all of these processors is to parallelise applications.

Fortunately, data analysis is usually inherently parallel and multiple searches can be carried out at the same time; this type of technology therefore works very well for data analytics. Other uses range from mapping the human genome, to fluid dynamics and working out car and aeroplane aerodynamics, all of which are applications that do not necessarily use the graphic functions of GPUs. GPUs are therefore now occasionally referred to as general purpose GPUs (GPGPUs), although GPU is the most common term. We will hear it much more in the coming years, because it is one of the new technologies that will make this parallel world work, and work at the 'right price'.

A typical GPU has around 7 billion transistors on it, and sits alongside the central processing unit (CPU) or 'brain' of a computer. The CPU passes information to the GPU, accelerating the parallel parts. In layman's terms, it is similar to the turbochargers found in cars in the 1970s and 1980s, which could be put into cars and suddenly they would go faster. Similarly to the way in which these eventually became mainstream – turbochargers are now part of the package in most diesel cars bought today – so too are GPUs becoming part of the package.

The variety of areas in which these types of systems are employed demonstrates the increases in speed associated with incorporating GPUs, which can be many hundreds of times faster, depending upon the data sets. In particular, they are used in any 'numerical-intensive' computing dealing with very large data sets: gaming, ultrasound, face recognition, stabilising images (for unmanned aerial vehicles, for example) and movie editing (especially graphics films), all of which rely on the speed generated by GPUs. GPUs are everywhere.

Like GPUs, supercomputing — which requires a substantial computer to process large amounts of data — is today used in a variety of different contexts. Similar to the Top 500 'Rich List', every year a Top 500 list of the world's top supercomputers is published. At the time of the conference in Oct 2013, the paper was given the top computer was Titan, located in Oak Ridge, Tennessee, which contains 18,000 GPUs (and is essentially just a GPU system, since 90 per cent of the performance of the computer relies on the GPUs).

A word that we are likely to hear more frequently in the future is 'FLOPS' (floating-point operations per second), a way of measuring computer performance. A FLOPS could simply add or multiply two numbers together in order to measure how quickly a computer can perform that calculation; comparing FLOPS allows one to measure how fast one computer is compared to another. Currently, computer speeds can reach petaflops – 10<sup>15</sup>, or a '1' with fifteen zeros after it – in terms of the number of these operations it can do in a second. Titan can reach somewhere in the region of 27 petaflops. For example, if you gave all 7 billion people on the Earth a hand-held calculator and asked them to add two numbers together every second, it would take 456 years to complete the same calculation that Titan could achieve within one hour.

Approximately 20 per cent of the Top 500 computers are currently accelerated, and this figure will increase with time. Soon, everyone is going to know about GPUs and parallel programming; it is just the way that things are going. But how can we provide access to these systems to more people?

In fact, people have more access to significant processing power than ever before. A current iPhone would have appeared in the Top 500 list (it would have been considered a supercomputer) in 1994. A current top-of-the-range laptop would have been the fastest supercomputer in the world when the list started in 1993, and would have continued to appear on the list until 2001. One GPU — without the machine that it will actually run on — can currently reach 1.3 teraflops. It would therefore have been at the bottom of the 2004 or 2005 list; it would have been the fastest computer — just that one small

box – back in 1993, and would have remained at the top of the list until about 1998 or 1999.

This illustrates that normal computers today can do a huge amount of processing; office or home computers now have the capability of the supercomputers of ten years ago, and computers are only going to get more and more powerful. Take for example, the app Shazam, which allows users to use their phone to listen to music and identify the song playing. Although it is a worldwide service, its servers are based in the UK. Information is sent from all over the world to these UK servers; the system compares it and sends the information back within seconds. Another example is the use of GPUs for real-time face recognition; putting to one side the ethics of the issue, it is now possible to use a camera to record people's faces and match them against a database in real time. This facility could be used to measure the profile of people who shopped at a particular supermarket.

A recent phenomenon is the analysis of Tweets to measure what people are talking about online. One company using this is Salesforce, specialising in sales data; staff are able to analyse 500 million tweets for over 1 million different variables (for example, mention of the word 'Coca-cola'), all in under five minutes. This is the strength of the GPU system and parallel programming: being able to perform lots of comparisons, all at the same time.

Elsewhere, an individual at Massachusetts Institute of Technology used tweets during the Arab Spring to find out what people were tweeting about in certain neighbourhoods, and mapped this information (he made a similar study following the Boston Marathon bombings). He was able to do this on two GPUs, for which he paid around \$5,000, and which use approximately the same amount of electricity as five light bulbs. Previously, such an analysis would have taken forty days to complete; it now takes under a second. If you know how to do this the technology is there waiting for you.

The bottom line is that data is there – in huge volumes and growing all the time – and the technology is there. We need to bring people and the technology together to make sure everyone has access to it and that it gives them the right information. We are currently in the era of 'accelerated' computing, using GPUs, but that does not just apply to supercomputers: Super-computers have come to people, they're under desks, they're on iPads and we can do all of our processing on them today.

Jeremy Purches has a background in computer science. He examined forthcoming technologies – in particular around parallel computing – which the audience could potentially apply to their own fields. He gave some details on NVIDIA and then provided information on graphics processing units (GPUs), supercomputing, and big data and analytics.

## Case Study 1: What Can Internet Analysis Add to the Study of Extremism?

#### **Matthew Elworthy**

Reworking methods for Internet research since 2007, the Digital Methods Initiative (DMI) is a collaboration of the new media TEMLab, University of Amsterdam, and the Govcom.org Foundation, Amsterdam, with founding support from the Mondriaan Foundation. It is a new media PhD (training) programme as well as a new media research group in media studies, University of Amsterdam. DMI participates in Mapping Controversies on Science for Politics (MACOSPOL) and Electronic Maps to Assist Public Science (EMAPS), the EU projects led by Bruno Latour. The DMI holds annual summer schools and winter schools, supported by the Center for Creation, Content and Technology (CCCT) at the University of Amsterdam.

In recent months, much research by the DMI at the University of Amsterdam has been dedicated to the phenomenon of anti-Islamism (that is, counterjihadism), and its online study. In particular, the focus has been on what Internet analysis adds to the picture. 'Going native' (embedding researchers in counter-jihad groups), surveying experts, eye witnessing, recording demonstrations and marches, analysing manifestos, interviewing former extremists and imprisoned ones, and surveying current members and sympathisers are often the methods employed to study extremism. The DMI convened a workshop in January 2013 to address the question of new media methods for the study of extremism, and in particular how to capture, analyse and visualise online data. The efforts commenced with presentations by renowned researchers and scholars of extremism, in which the current analytical needs were presented. Thereafter, teams of Internet researchers and web analysts spent a week online, analysing extremism networks and social-media use, striving to meet the analytical needs presented by the scholars of extremism (in part) through online data analysis.

To date, two new media research methods that have proven useful for the study of extremism online are longitudinal analysis of archived websites and digital forensics. The study by Joep Dohmen of the *NRC Handelsblad* some years ago falls into the first category. Examining ten years' worth of data, he found that right-wing websites increasingly employed the language of extremist sites, thereby concluding that Dutch culture was affected by a turn to the right and was, in fact, hardening.¹ He analysed some 100 archived websites for word use and sentiment, raising the question of whether a special collection (of extremist and right-wing websites) may be made and query

<sup>1.</sup> Joep Dohmen, 'Opkomst en Ondergang van Extreemrechtse Sites', *NRC Handelsblad*, 25 August 2007.

machines developed to analyse its contents. The second area of Internet analysis that has proven useful is digital forensics or e-discovery, where means of detection and diagnosis are undertaken, for example to determine a fake account or a bot network. Here the effort is to unmask. The investigative and evidentiary use of Internet data are two areas of interest, though other techniques and data sets are also worthy of exploration, including extremist search queries or Tweets, and the places of those expressions. Are we able to geolocate pockets of extremist speech through online analysis? Also of interest are Wikipedia articles that are edited and maintained by extremists, located perhaps through links from dedicated Facebook pages and groups or other referencing.

During the course of our study, our work turned more and more towards social media. We developed a method of Facebook analysis, employing the Netvizz software. We analysed pages and groups, beginning by 'liking' or joining them, and then harvested the data. One avenue of analysis is to determine what animates extremists, studying their 'liking', sharing and commenting behaviour on Facebook. On Twitter, one would locate follower—following networks, studying central and peripheral users (or activists and supporters), together with the content that has been retweeted, URLs referenced, hashtags employed, and certain relationships of the network and content, including which extremists are central and retweeted by others. Again, we would like to know what the Internet and Internet analysis add to the analysis of extremism.

The analytical undertaking assumed the format of a 'data sprint', a shortform method of data collection, analysis and reporting. The outputs were media lab reports in the style of wiki pages. Each media lab report contains a title, introduction, set of questions, methods, findings as well as discussion, which could include limitations as well as prospects for further work and other avenues of inquiry. For the purpose of publication, these reports have been reworked into short chapters, each discussing a particular project undertaken at the data sprint and workshop. Many projects relied on the creation of a research account on Facebook, followed by 'liking' pages and joining groups, and finally gathering the data for further analysis – for example of the difference, if any, between the extremist leaders found through standard methods, discussed above, and new-media methods, such as determining the networkedness (betweenness centrality) of page or group administrators. Who are the online leaders, especially those who have not, as yet, been identified as such? Twitter analysis was also performed, with subjects of the analysis including Geert Wilders, the populist right-wing Dutch politician. All of his Tweets prior to January 2013 were collected and categorised so as to gain a sense of the new populist right issue composition (and distribution), which includes counter-jihadism, but also other sentiments such as being anti-European and pro-Israel. In another project, the question was posed

as to the relationship between counterjihadism and proIsraeli stances, through the study of US-based pages and groups, including Stop Islamization of America. Through the study of collections of anti-Islam and pro-Israeli pages, the researchers were able to find that counter-jihadists 'like' pro-Israeli pages far more frequently than pro-Israelis like' counter-jihadist. Thus the relationship between the two was nuanced through analysis of directionality. (Also of interest, more generally, was the presence of women in the space, which appeared to be greater than one would expect in more extremist environments.) The other analyses concerned content, such as the narrative of the counter-jihadists.

Crucially, the data sprint and the larger new-media lab work are directed at the analytical needs of the subject-matter experts, scholars and analysts of extremism, seeking to find out not only what the Internet can add, but also what animates Internetrelated research, and digital methods as an approach. How to diagnose societal condition through the Internet? May one monitor extremism through online measures? What form would a global extremism monitor apparatus assume? Which inputs would it take, and would the outputs satisfy extremism scholars? These are some of the larger issues that also inform our inquiries.

In early 2013 a number of experts on extremism were invited to present and open an international workshop and data sprint – a shortform research method also known as a 'hackathon', 'hackweek' and 'culture hack' – was held by the DMI at the University of Amsterdam. The subject-matter experts were asked to provide an overview of the latest advances in extremism studies, specifically of the growing and largely underresearched counter-jihad movement. Perhaps most importantly, these experts were also asked to summarise the state of the art of their field, and to describe their current analytical needs, providing a suitable starting point for the data sprint that followed. The question that animated the data sprint was what Internet analysis could add to the study of counterjihadism, and whether it at least in part, could meet some of the current analytical needs.

The output of the data sprint took the form of distinct research projects, written up as reports on the DMI wiki at digitalmethods.net, many of which have been included in this publication. First, the starting points imparted by the subject-matter experts, as well as those gained from an accompanying reader (of scholarly texts), are outlined. What is distinctive about counter-jihadism within the study of extremism, and does that distinctiveness relate in part to the Internet? Subsequently, the projects are discussed one by one. How close is hate, and extremist content, to the top of search-engine returns – also in different local domain Googles, such as google.co.uk – and google. fr, when making queries related to Islam? Here the contents of the search-engine returns for such generic (or underspecified) queries as burkha are

characterised according to the content's extremism. The second project also assesses online content, and more specifically that of perhaps the most wellknown populist right-wing politician in Europe, Geert Wilders. Considered a counterjihadist, or anti-Islamic populist, Wilders also Tweets. All of his Tweets (over 500 at the time of research) were captured, and categorised for the anti-Islamic or other targets of his ire and humour. Most of his Tweets are not anti-Islamic, it was found, and the project is able to carry out research on issues related to counter-jihadism, or more specifically those populist rights issues that co-mingle with counter-jihadism. Wilders also has begun to Tweet in English, which is a sign that he has an audience outside the Netherlands. Indeed, counter-jihadism is often thought to be global, with major US-based Facebook pages (such as Stop the Islamization of America) referenced by European groups, and European groups interlinked (to take the subjects of other projects from the data sprint). The report published by HOPE Not Hate in London in 2012 included a list of the major groups per European country, and also the leaders.<sup>2</sup> The data sprint researchers created a research account on Facebook, sought these group names, and asked to join them. Of some forty-five groups found, over half accepted the membership requests, whereupon the researchers downloaded the data, and located connections between the groups. How pan-European are these groups, or are they regional or perhaps national, like their extremist, right-wing counterparts? Additionally, do these online groups have the same leaders as those identified through other techniques? Are the online administrators of the groups more networked than the known leaders? Can Internet analysis identify an online leadership, perhaps an emerging new guard?

Facebook use fluctuates per user, page and group, of course, yet a particularly active counter-jihadist page may provide insight into the types of content generally that animate its users. Which content prompts the most engagement among its users on a Facebook page, where engagement is thought of as the activities one can do on a page: 'like', share, comment and 'like' comments. Cross-page engagement is also of interest. Counter-jihadists join so-called Stop Islamisation groups and 'like' their pages on Facebook, making it possible to track engagement with the content; their liking of other groups and pages provides data on other relationships. One research project took up the question of the relationship of counter-jihadists with pro-Israeli pages in Facebook, so as to explore alliances, supposed or actual. Exploring the relationships between counter-jihadists and other sympathisers was of interest to HOPE Not Hate, which was interested in the extent to which pro-Israeli pages and groups connect to counter-jihadists. Do those who like counter-jihadism (pages) also like pro-Israeli pages and vice versa? Finally, the counter-jihadist literature was analysed so as to distill the narratives, and perhaps consider counter-narratives. Jihad Watch, among other US-

<sup>2.</sup> HOPE Not Hate, *The 'Counter-Jihad' Movement: The Global Trend Feeding Anti-Muslim Hatred* (London: HOPE Not Hate, 2012).

based counter-jihadist organisations, has a literature list, which was queried in Amazon. Those in ebook formats, read by Kindle users, have highlights (made by readers) that may be mined. The research project studies the most-highlighted passages in counter-jihadist literature.

#### **The Counter-Jihad Movement**

Perhaps one of the best known experts on counter-jihadism is HOPE Not Hate's director Nick Lowles, who opened the data sprint with a summary of what he refers to as an extremist movement. As he explained, counterjihadism is an anti-Islamic and Islamophobic movement that represents 'the new face of the political right'. He explained that the old rhetoric of neoNazis and traditional far-right parties has in many ways been superceded by that of counter-jihadism. This new movement can be characterised by its diverse alliance of people, including neo-conservatives, Christian evangelicals, hard-line racists, right-wing populists, football hooligans as well as small constituencies of pro-Israelis, Sikhs and Hindi. There is even some former leftist support. Central to the group's ideology are a number of 'theories' that have their origins in Bat Ye'Or's book Eurabia, according to Lowles.4 Essentially, counter-jihadists believe that there is a concerted and deliberate attempt to impose Islam on Europe, and that European leaders are passive in allowing 'Islamisation' through immigration law and multicultural policy. Contrary to that of many of the old racist nationalist parties, the rhetoric of counter-jihadism appears to be mainstream and popular, garnering broader support from the populations of countries such as Denmark, Norway, Switzerland and the Netherlands.5

The movement assumes a variety of forms. These manifestations include political parties (such as the British National Party), street gangs (such as the English Defence League), websites and blogs (such as JihadWatch.org.), bestselling books (such as Ayaan Hirsi Ali's book *Infidel*, which was a *New York Times* bestseller for more than half a year), and acts of terror by so-called lone wolves (such as the atrocities carried out in Norway by Anders Breivik on 22 July 2011). While many of the key players and organisations have never met, they often provide support and funding for each other; they also may sit on one another's boards and co-host events.<sup>6</sup>

<sup>3.</sup> Nick Lowles, 'Introduction' to HOPE Not Hate, *The 'Counter-Jihad' Movement: The Global Trend Feeding Anti-Muslim Hatred*, <www.hopenothate.org.uk/counter-jihad/>, accessed 4 June 2014.

<sup>4.</sup> Nick Lowles, 'The Counter-jihad Movement: What Does the Internet Add?', lecture, Studying Counter-jihadism and Extremism Online, Digital Methods Initiative, University of Amsterdam, 14 January 2013.

<sup>5.</sup> Lowles, 'Introduction'.

<sup>6.</sup> Ibid.

#### **Extremism and Counter-Jihadism Online: Current Analytical Needs**

Internet studies on the online activity of extremists may contribute to the study of counter-jihadism, particularly with regard to how social-media platforms allow engagement among local as well as far-flung users. Social media such as YouTube, Facebook and Twitter foster real interactions and discussions, and contribute materials that feed the radicalisation process.<sup>7</sup> On Facebook they may be studied as a set of active followers or a group of members who in turn source, spread and comment on counter-jihadist content. Investigation into these pages and groups provides information about the supporters, their size and popularity, and the content they are sharing and engaging with. The insights also may be employed for monitoring purposes, presenting insights into the workings of the counterjihad movement online and more generally. In this way, social media are effective tools for the analyst, in order to read and watch the content and the comments, and view the conditions and overall environment for recruitment. Always available, social media are also used to make promises of friendship and acceptance.8 While less visible to the analyst than 'liked' and shared content, platforms are used extensively to make personal contact, and are thus considered a site of radicalisation.9 Contact is made in a workflow that includes the widespread dissemination of materials (videos and texts), together with the comment culture, which not only imparts information but also connects people phatically through the online equivalent of small talk.

Although the relevance of the Internet as a space and a medium has increased significantly over the past decade, it should be noted that the Dutch General Intelligence and Security Service, Algemene Inlichtingen en Veiligheidsdienst (AIVD), has found that as the process of violent radicalisation progresses, the virtual activities gradually shift to hidden websites that cannot be publicly accessed, also known as the 'dark web'. <sup>10</sup> Thus the analysis here is partial, and does not rely on chat logs or other online data privy to intelligence agencies, and the companies that provide the data. The online materials under study could be seen as those encountered by sympathisers and activists in the early stages of possible radicalisation.

According to the political scientist Allard Feddes, social media perform three functions that aid the development of extremism online: ideological support, networking, and the dissemination of information and education

<sup>7.</sup> It should be noted that some of the counter-jihad figures in our research might use aliases on Facebook and Twitter.

<sup>8.</sup> Robin Thompson, 'Radicalisation and the Use of Social Media', *Journal of Strategic Security* (Vol. 4, No. 4, 2011), p. 168.

<sup>9.</sup> Bibi van Ginkel, 'The Internet as Hiding Place of Jihadi Extremists', International Centre for CounterTerrorism, 12 March 2012, <www.icct.nl/publications/icct-commentaries/the-Internet-as-hiding-place-of-jihadi-extremists>, accessed 4 June 2014.

<sup>10.</sup> Ibid.

without the need for physical meetings.<sup>11</sup> Furthermore, he argues that any identity – whether extremist or typical – can only sustain itself if it can cultivate and express thoughts and ideas specific to its cause, which creates important considerations regarding the accessibility and space provided by the Internet. Thus, as Feddes states, the Internet presents a powerful site for 'deindividuation', whereby people encounter niche content (and meet others with similar views), without the noise of critique and counterweight. The dynamics of these spaces when used by extremist and hate groups are of concern, as are their rules. Peter Knoope, director of the International Centre for CounterTerrorism (ICCT) in the Hague, observes that there is an absence of governance within online forums and other platforms, which allows extremist and hate content to be shared, and comment culture to thrive. The restraints are provided by the forum moderators, who are in most cases extremist and supportive of the cause themselves. Thus, extremist and hate-related content is supported, and only more is sourced.<sup>12</sup>

Counter-jihadism is online; many hate groups or personalities have Facebook pages and Twitter accounts. YouTube videos are embedded and shared as are pictures, all with comments, with text and emoticons, which themselves may in turn be 'liked'. Much may be found through search, too. As a result, the Internet may be considered an essential space for the analysis and monitoring of these extremist formations. Key areas to be addressed regarding Internet research are an understanding of the scope of the networks surrounding the counter-jihad movement (how large?). There is also the question of the distinction, made by Knoope, of the sympathisers, supporters and activists or leadership. May the Internet be used to pinpoint bursts of hate and activity by monitoring online 'hotspots'? Finally, there is the story that attracts sympathisers. How is it possible to distill the narrative, and perhaps join the conversation so as to counter it?

Matthew Elworthy represented the Digital Methods Initiative (DMI) of the University of Amsterdam at the RUSI/STFC conference 'Community Tensions: Evidence-based Approaches to Understanding the Interplay Between Hate Crimes, Serious and Organised Crime and Reciprocal Radicalisation'. He is an MA New Media and Digital Culture student at the university and shared recent student research on the role of Internet analysis in the study of extremism. Specifically, he discussed work on a selection of projects that focus on counter-jJihadism — a growing phenomenon and defining trait among

<sup>11.</sup> Allard R Feddes, 'Studying the Radicalisation Process in Social Media: What Does the Internet Add?', lecture, Studying Counter-Jihadism and Extremism Online, Digital Methods Initiative, University of Amsterdam, 14 January 2013.

<sup>12.</sup> Peter Knoope, 'Radicalisation and the Internet: What Does the Internet Add?', lecture, Studying Counter-Jihadism and Extremism Online, Digital Methods Initiative, University of Amsterdam, 14 January 2013.

<sup>13.</sup> *Ibid*.

<sup>14.</sup> Ibid.

many right-wing movements – and its corresponding online presence. The research and findings discussed by the DMI at the RUSI conference and in this article have been compiled into a field publication entitled 'What Could Internet Analysis Add to the Study of Extremism?' The first part of this paper, taken from the publication's foreword, is written by Professor Doctor Richard Rogers, Director of the DMI; the rest is written by Matthew Elworthy and his fellow students.

# Case Study 2: Improving Community Engagement with the Police: The Tell MAMA approach

#### Fiyaz Mughal

In addition to supporting victims of anti-Muslim prejudice (and seeking prosecutions in the process), Tell MAMA is a third-party site for reporting anti-Muslim attacks, anti-Muslim prejudice and other Islamophobic matters. The collection of this data over the past twelve months has allowed Tell MAMA to identify a number of trends, particularly with regards to far-right activities by the English Defence League (EDL), British National Party (BNP) and splinter groups within the public domain.

For us, the use of technology has been absolutely fundamental. In particular, we have used mapping software to map out hotspots and locations where anti-Muslim incidents are taking place in real time. There are several ways in which people can submit reports of incidents; the project runs a confidential telephone service and an online service — reports can even be submitted via an iPhone app or Twitter. As part of this data-collection process, it has been extremely important for us to work with other support services and organisations, in order to get a more holistic view of what has happened to the victim (which is also useful in witness statements that go to the police and prosecution).

After logging reports, the software is able to identify trends in the data, and in particular can track and analyse some of the key language employed around anti-Islamic prejudice or Islamophobia. This builds on work carried out by organisations such as the Community Security Trust (CST), which found that not only was there specific language associated with anti-Semitism, but also that there were peaks and troughs of when the organisation received reports of hate incidents and hate crimes, related to wider events (in the Middle East, for instance).

By using a variety of filters and mechanisms to pick out key words, the software programme can provide robust quantitative and qualitative data. Contrary to expectations that the key terms and buzzwords associated with Islamophobic statements would be 'terrorism' or 'bombs', for example, what we are finding today is that 'paedophilia' and 'grooming' are the key terms. What that is telling us is that the issue of grooming cases is feeding a language narrative within the far right, which is starting to change the kind of discourse around hate statements being made towards Muslim members of the community.

Furthermore, the software allows the project to carry out an intelligence-gathering function, collating information from members of the public on details of a flash demonstration, activists making online threats, or mosques that are potentially the target for incidents, for example. There was a discernible change in the period 2012–13 (prior to the conference) from individuals simply talking about incidences against mosques to actual incidences taking place using pig's head materials.

Various other data is collected by the project on incidents of anti-Muslim prejudices and Islamophobia. Data is collected on clothing and visibility, and whether these have played a significant role in the incident. Other key factors that are examined include the potential of multiple perpetrators, their ethnicity, approximate age and gender, and whether or not the perpetrators have far-right links — something that is considered very important. This is relatively straightforward to discover online; searching for 'No Surrender' or 'EDL Forever' in taglines allows Tell MAMA staff to track back, analyse and confirm whether the perpetrators are sympathetic towards the EDL or other far-right groups. This is more difficult to establish offline, unless a statement is made during an incident or attack.

Tell MAMA staff also look at how many times a victim has previously suffered from anti-Muslim prejudice or attacks, and speak to individuals who have been subject to incidents, which provides great insight into wider issues within their particular community. It can be really important to see if there is a perception in the community that they have suffered multiple incidences. Much can be revealed by this perception, including community tensions, the community's relationship with the police, and the long-term impact of engaging with neighbouring non-Muslim communities.

Having measured and collated this information, the academic analysis offered by Tell MAMA's colleagues at Teesside University and Manchester University has been of significant value, as it has looked at the overall issues surrounding Islamophobia and anti-Muslim prejudices, and focuses on the impact of the far-right element of these incidents.

With regard to the project's methodology, due diligence needs to be undertaken around each case. This is important not only in order to maintain the robustness of the data, but also because additional information and evidence is usually required to see if an incident is anti-Muslim in nature, since there are cases that are *not* considered of that nature in the project's data reporting and casework.

Second, trying to cover the whole of England and Wales is a very difficult task when Tell MAMA has only got a small team, although there are clever ways in which the project engages with community safety and civil society

partnerships, and feed that information in. Over the coming months we will continue to strengthen and build on this.

Fiyaz Mughal is the director of the inter-faith charity Faith Matters and director of the project Tell MAMA, a self-reporting data collection agency for online and offline attacks on Muslims.

### **Discussion Groups**

During the afternoon, the conference broke down into focused discussion groups, each comprising between ten and twenty delegates. The outcomes of these discussion forums are presented over the following pages.

Discussions were without attribution. The information presented here seeks to represent the discussions that took place; there is not always robust academic referencing to support the views offered, but it has been assumed that if comments made by individual delegates were not credible they would have been rejected by the other members of that group during the discussions. Views presented are therefore assumed to be broadly supported by the majority of those present. Where possible, transcripts of the discussion forums were distributed to the participants during the editing process for further comment and clarification.

There was, inevitably, some crossover of subject matter and topic discussion between one group and the next, and where this has occurred, comments have been amalgamated under one heading to avoid repetition.

# Discussion Group 1: Research Methodology to Inform the Understanding of Community Tensions

**Chair and Rapporteur: Jennifer Cole** 

#### **Key Issues and Challenges**

- Social scientists do not always have a good understanding of data collection, data analysis or computer modelling, or of how such methods can help their research. Methodologies available need to be explained clearly, with case studies showing where collaboration with data scientists has added real value to projects
- There are very few concrete measures of success in social science; defining and designing metrics could add value. Quantitative methods could help to determine what has worked well and less well, and could help social scientists to develop solutions from the existing theories
- Quantitative data alone cannot provide the answers but it may indicate where the answers are most likely to be found, enabling social scientists to focus on these areas.

This discussion group met on 19 February 2013, as part of the set-up activities for the conference proper, and focused on how the Science and Technology Facilities Council (STFC), and quantitative methodologies in general, could help to improve the work of those social scientists who engage with research into community tensions and reciprocal radicalisation. The group was asked to identify areas where quantitative research methods could add significant value, and to consider what challenges may arise from the use of such methodologies.

The group acknowledged that social scientists can tend to get bogged down in intellectual debates that focus on defining the exact meaning of terms such as 'extremism' or 'community', which, while valuable, hamper the move beyond formulating theories to finding practical solutions. There is particular interest among social scientists in finding out how large, quantitative data sets and qualitative data can be combined to provide stronger results. Quantitative data sets alone will not provide the answers to the key challenges facing communities: research will always require in-depth and nuanced understanding of social and cultural issues. These will never be easy to quantify, but quantitative approaches can help.

The group felt that there are many theories about the causes and roots of community tensions, and also a lot of theories about what might be done to alleviate them, but very little empirical proof is available to back this up. This may be because there is little understanding of how empirical data might

be gathered on such topics, or because there is little understanding of what metrics could be used. There is wariness about using data in community studies, and it is important to acknowledge that data may not always represent what it appears to on the surface. Furthermore, collecting data may exacerbate community mistrust rather than improve relationships. One participant gave the example that many young Asians take 'Westernised' usernames online because they are afraid their communications are being monitored and tracked by the police. It may not, therefore, be possible to identify ethnicity from online identity without having some way of verifying this offline.

Data could potentially be used to track trends in community tensions from monitoring discussion topics to see where tensions appeared to be increasing, and through this giving 'early warnings'. This approach would benefit from a better understanding of, and knowing ways to identify, trigger events (including those happening overseas) that may affect certain communities. What might these trigger events be and how could they be recognised? How do they play out? What triggers an individual to move from being a passive supporter to being an active supporter of an extremist organisation, for example? More research into this would be valuable. The group also asked whether existing data sets owned by different organisations can be easily compared and combined; if not, how might this be improved?

#### **Identifying 'At-Risk Communities'**

Hate crimes and community unrest do not appear from nowhere: they are often the culmination of deep-seated tensions that already exist within the community. These tensions are often very local but may not be openly discussed by either community members or their local representatives.

One area where quantitative data could be used is in identifying 'at-risk communities'. Research has identified that low-income communities, and particularly males in low-income communities, tend to be more prejudiced than average against those of different ethnic origin. It is also well documented that it is hard for people in poorer communities to develop relationships outside their 'comfort zone' when they are not mixing with other cultures through work (as unemployment is high and many people do not work) or leisure clubs (as they may not be able to afford to visit pubs, sporting events and cinemas, and/or because other ethnic groups do not share the same leisure activities). Quantitative research could help to identify and map what opportunities exist for community integration, how accessible they are, and what the real or perceived barriers to engagement are. It could also show whether opportunities are increasing or declining in particular areas. This could help to identify communities where cohesion may be at risk of declining or becoming strained, and those where a small amount of investment may pull the community away from the potential tipping point.

Data may also be valuable for trying to identify trends or causal relationships between prejudices and community tensions, or to better understand what leads to problems. Some towns are very ethnically mixed but also largely trouble-free, whereas others are less diverse but have more challenges. Luton, which is often seen as a flashpoint for ethnic tensions, is not as culturally divided as some northern towns, for example.¹ The community is more integrated geographically, but this does not seem to correlate directly to social attitudes. Quantitative research may be able to help explain why tensions are higher in some (types of) communities than others. It is important to recognise that there is unlikely to be one model of community make-up that would always result in community cohesion, or in community tension, but computer modelling of different variables may be able to help some research projects.

The group also considered how quantitative data might improve researchers' understanding of 'reciprocal radicalisation' — defined as how intolerance and racism by one group makes another feel alienated and more likely to engage in similar behaviour in return, creating vicious circles of intolerance and community tensions. A particular example is the extent to which the English Defence League and Al-Muhajiroun have fed one another's rhetoric, and how the rhetoric of both sides affects the middle ground, including moderate Muslims and liberals, which is beginning to influence mainstream attitudes and politics. Research on fascist studies and far-right ideologies use quantitative analysis quite effectively; other areas of social science do not but the methodologies used might be equally applicable. It is important for social scientists to understand the positive impact quantitative methodology can have.

#### **Grassroots Engagement**

Another valuable use of quantitative data would be to help shed light on how and why people become marginalised, as well as where marginalised communities are located. Such projects would need to engage with communities to ensure that questions formulated for data collection are appropriate, as communities may see and measure things differently from academics. An example was given of 'peace indicators' identified from within a post-conflict zone, where community engagement identified the number of families taking in stray dogs as a measure of recovery, as this indicated the family believed they would have enough spare food to feed the dog and would be able to look after it in the long term. Another example was of shopkeepers painting their doors, confident that they would not be damaged again. These were very measurable effects, but would never have been chosen as indicators without engagement at the grassroots level.

<sup>1.</sup> Ted Cantle, 'Parallel Lives', in Nick Johnson (ed.), *Citizenship, Cohesion and Solidarity* (London: Smith Institute, 2008), <a href="http://tedcantle.co.uk/pdf/Parallel%20lives%20">http://tedcantle.co.uk/pdf/Parallel%20lives%20</a> Ted%20Cantle.pdf>, accessed 2 June 2014.

Quantitative approaches could help to measure 'passive' racism and distrust within both white and Asian communities. As such mistrust is often based on lack of understanding and fear of the other, this might be measured using observational data on how often people mix socially with someone from another racial group, for example, or through questionnaires asking them about their feelings towards other groups. Passive attitudes may then escalate to behaviour that is still largely passive but may manifest in voting for the British National Party (BNP) or the UK Independence Party (UKIP), and eventually escalate to a more active role, such as posting racist comments or abuse on Facebook, taking part in demonstrations, vandalising mosques and cultural centres and, at the most extreme, in verbal and physical attacks on individuals. Quantitative data could be used to monitor behaviour, identify and track upward trends, and to predict or analyse tipping points. Once quantitative research has identified these trends, social sciences including anthropology can be used to understand what led the individual(s) to that point, where and when an intervention might have been possible, and where it might have proved most effective. Data analysis would also help to measure which particular interventions have the most impact.

Being able to communicate at this grassroots level needs trust to be built up gradually, sometimes over years. The Community Security Trust (CST), an organisation that collects data on anti-Semitic hate crimes, has this trust within the Jewish community but a similar organisation collecting similar data for other communities may not be able to set up quickly.

#### **Comparing Data Sets**

The discussion group was very aware that data collection can produce different results depending on who is collecting the data. An example was given of the way in which anti-Semitic crimes reported to CST can differ from those reported to the police. The reasons may depend on whether or not a police reference number is needed for insurance claims (in which case the crime is more likely to be reported to the police) or whether the person thinks the police will do anything; and can even depend on other factors such as what is on television on a particular night (does the victim have 'something better to do' than report a crime to the police he or she knows is not likely to be investigated further?). Comparing different data sets and seeking to understand how and why they differ may in itself have value and aid the wider understanding of the context. The group was also aware that an increase in crime reporting may not actually equate to an increase in crime: it may, rather, indicate an increased willingness to report the crime, signifying an improvement in policing in an area and greater community confidence in the police. Would a better analysis of existing data, or collection of different data in a different way, add to this understanding?

#### Conclusions

In summary, the group felt that more cross-disciplinary collaboration between social scientists and those more familiar with quantitative methodology offers strong opportunities to design quantitative studies that might help to 'prove' or measure the success of qualitative theories. Most agreed that social scientists would benefit from a better understanding of quantitative research techniques and how they could be used, and that more cross-disciplinary working in general was likely to be a good thing. It was also suggested that funding for short, three-month policy placements for early-career academic researchers would help them to understand what is required in a policy environment.

#### **Suggested Research Topics**

- 1. Research is needed into how trends in community tensions can be tracked to give 'early warnings' of trigger events. What might these trigger events be and how could they be recognised? How do they play out? What triggers an individual to move from being a passive supporter to being an active supporter of an extremist organisation?
- 2. Carry out further research into identifying 'at-risk communities' in order to identify and map what opportunities exist for community integration, how accessible they are, and what the real or perceived barriers to engagement are
- Better understanding is needed of how quantitative data and qualitative techniques can be used together to identify where more focus is needed, possibly through cross-disciplinary collaboration between social scientists and researchers familiar with quantitative methodology.

### **Discussion Group 2: Serious and Organised Crime**

Chair and Rapporteur: Sarah Groenewegen

#### **Key Issues and Challenges**

- Social media provides a platform from which the relationship between members of the public and law-enforcement agencies can improve by enabling direct communication between the two
- Informing the public of key crime issues affecting an area may improve the collection of community intelligence through open sources.
   The public is more likely to respond well to the overt collection of information within local areas
- Crime is more prolific in areas where there is a low level of confidence in the police and other authorities. Improving the level of confidence in the policing authority is key to easing community tensions exacerbated by crime.

Serious and organised crime affects numerous communities; if it is not dealt with appropriately, this can exacerbate community tensions. Lawenforcement techniques that tackle organised crime need to have suitable tools and mechanisms readily available to work within affected communities, to avoid potentially worsening the situation. This discussion group considered the role of quantitative data and social-media analysis within organised-crime research and analysis, and the importance of community-based intelligence as an aid to understanding whether endemic crime within communities can play into race hatred and drive extremist sympathies.

Advances in computer technology have created the means to store vast quantities of data that would have been unimaginable even a decade ago, and advances in software and analytics have created new techniques for inputting and processing data that can provide the basis for criminal investigation. For example, techniques such as geo-mapping, crime trends or facial recognition technology can now be used to analyse past and present criminal activity and can help to prevent crimes in the future. Possible areas for further development include linking counter-terrorist and organised-crime data from different agencies to maximise research and analysis, and using data and data-mining processes to identify crime hotspots. The construction of broader, more detailed databases will provide a wider bank of information from which to conduct research. New technological advances also enable data to be gathered across a wide spectrum of sources, for example from social-media platforms, crime databases and historical reports.

The challenge with such extensive data-collection methods lies in finding out the right amount of data to make a study both reliable and valid. An overload of data creates a risk of abstraction where supporting evidence can

be acquired for any conclusion, and risks creating so much information that there is a lack of human resources to handle the data. Despite advances in storage and analysis, much data still requires a human element for input, research and processing. Gathering the right quantity of data is crucial for effective sampling and analysis to take place.

The group suggested that HUMINT (human intelligence) will remain an important element of gathering information. While researching community tensions in a specific area, law-enforcement needs to operate on two levels — the local and community level, and the national and broad crime-overview level — in order to gain a detailed intelligence picture. It is often found that data gathered at the local level does not corroborate or paint the same picture as data at the national level, and in such instances it is important to work on contextual factors and the local issues that are important to residents.

#### Social Media: Striking the Right Balance

Group participants thought that members of the public are unaware of what organised crime actually is, what it involves, and what they can do about it. The platform of social media creates a window of opportunity to improve the relationship between members of the public and law enforcers as the police become informative and engaging to communities. For example, many police constables or local authorities use Twitter to describe local issues, to explain how they are working to improve the community, and to build up a relationship with residents. Such uses of social media may help to establish trust and improve public confidence in policing activity; to achieve this, police forces need to establish a connection with local residents online in the same way they have face-to-face in the past.

When Twitter is used by the police to inform the public of key crime issues in an area, it acts as a tool to improve the collection of community intelligence through open sources. According to the group, members of the public are far more likely to report a crime to their friends on social media than to visit a police station and use formal procedures. In the past, using a more informal tone on social media platforms has generated a positive response from the public.

The group discussed the use of social media as a monitoring platform to analyse and assess threats, collect information and share intelligence. This raises the issue of ethics, as the collection of personal data either without consent or under false pretences has legal implications and may exacerbate existing communal tensions. Awareness of context, motivations and networks are crucial for analysing social media, as an individual message post may not be representative of an individual's personality or activities. For this reason, the analysis of large banks of data may be more suitable for monitoring crime trends and responding to key areas of community interests

than for targeting individuals. There was debate as to whether data collected should be anonymous in order to create an unbiased picture, in particular if this might be at the expense of being able to target high-profile offenders. Such issues require further consideration.

Social media can also be used to target specific crimes and audiences based on gender or age brackets. Public responses to events such as the Boston Marathon bombings have indicated that actively involving the public, and communicating with them openly and honestly, can have a positive impact on events. In Boston, open communication with the public, including circulating images of the suspects, may have helped to lead to the swift apprehension of the bombers. However, the discussion group largely displayed perceptions of public 'hysteria' and 'panic' in such situations, believing that the public would be likely to express offensive views, spread disinformation or undertake acts of vigilantism. These perceptions are not upheld by academic analysis of such events. While those managing the online associations and socialmedia footprints of law enforcement might need to consider the potential risk of abuse by groups or individuals, it is just as important that they are made fully aware of the large volume of research that has been undertaken into the behaviour of the public in such situations, so that these people are not discouraged from engaging because of incorrect and stereotyped perceptions. The works of academics such as Enrico Quarantelli, Christopher Cocking, John Drury and Rebecca Solnit are all important to consider here. In order to use social media effectively, law enforcers need to be responsive and maintain a strong 24/7 online 'profile' in order to improve community relations.

#### The Relationship between Crime, Racial Hatred and Extremism

The group agreed that crime is more prolific in areas where there are low levels of confidence in the police and other authorities than elsewhere. In these areas, crime not only has the effect of further eroding public confidence in the ability of the police to deal with serious crime, but also creates an environment in which it is easier for crime to thrive. In areas where serious and/or organised crime is present, local residents are hostile towards minority groups and, as a result, these minority groups might harden and become more radicalised. This creates a cycle of distrust and tension between different groups as external problems are transferred to those within the same community. Community tensions fuel organised crime and also limit the impact of policing activity in an area, as people turn away from typical enforcement methods towards closed social groups for protection.

<sup>1.</sup> Leonard J Marcus et al., 'Crisis Meta-Leadership Lessons from the Boston Marathon Bombings Response: The Ingenuity of Swarm Intelligence', National Preparedness Leadership Initiative, Harvard College, 2014, <a href="http://npli.sph.harvard.edu/wp-content/uploads/sites/8/2014/04/April-2014-Prelim-Report-Dist1.pdf">http://npli.sph.harvard.edu/wp-content/uploads/sites/8/2014/04/April-2014-Prelim-Report-Dist1.pdf</a>, accessed 28 May 2014.

Improving the level of confidence in the policing authority is therefore key to easing community tensions.

Another important issue is so-called ambivalence towards serious crime; the groups consider this to be a result of universal widespread decline in public confidence in policing, which subsequently contributes to rising community tensions. As much crime goes unreported, increasing public participation in local aspects of policing has an impact on national crime recording. The group pointed to successful and innovative campaigns such as Crimestoppers' 'scratch and sniff' cannabis campaign,<sup>2</sup> which alerted the public to the links between cannabis farms and organised crime. The campaign not only encouraged reporting of suspected farms and raised public awareness of the issue, but also sparked engagement amongst previously uninvolved members of local communities. This was offered as evidence that ordinary members of the public are willing to help when given the right initiative. If campaigns such as this could be co-ordinated to bring in actionable intelligence, it would have a significant detrimental effect on organised crime.

#### The Importance of Community-Based Intelligence

The role that local communities have in sharing and providing information is vital to successful policing operations, particularly where this can be transferred within communities to inform and improve public confidence. Many successful operations are the result of community-based information, but this is often overlooked. Sharing of community intelligence makes the response to organised crime more effective: it gives communities a stake in their protection and acts as a deterrent, as organised criminals are forced to increase protection and bolster security to outsiders.

The group suggested there has been some evidence to indicate that the public is likely to respond well to the overt collection of information within local areas in preference to the police using covert sources. Collecting information in this way also has the effect of building confidence within the community, as the police are seen to be responding to crime. Members of the public feel more secure and community tensions are reduced. To be made more effective, local councils may consider compiling, storing and sharing community intelligence in order to build up networks and intelligence between different regions, thus multiplying the threat against serious and organised crime. However, those gathering intelligence should consider the impact on the communities under investigation in order to prevent such activities from becoming counterproductive.

<sup>2.</sup> Crimestoppers, 'Commercial Cannabis Cultivation', no date, <a href="https://crimestoppers-uk.org/get-involved/our-campaigns/national-campaigns/commercial-cannabis-cultivation/">https://crimestoppers-uk.org/get-involved/our-campaigns/national-campaigns/commercial-cannabis-cultivation/</a>, accessed 28 May 2014.

Historically, in areas of extreme violence, such as Northern Ireland, communities have responded reasonably positively to overt intelligence-gathering techniques, and such activities have reduced community tensions between different ethnic groups. The group agreed that effective campaigns against organised crime involve establishing a degree of trust between the local residents and law enforcers, and that covert activity risks alienating and incriminating large sections of the public.

It is also important to consider local communities' views on a particular crime in order to gauge how forces respond to the needs and requirements of specific areas. A local crackdown on cyber-crime and fraud in one area may take up resources, while drug trafficking and car theft remain prolific and the main concern of residents. It might also be important for police to inform the public of less noticeable activities in order to improve public confidence. Also, while crime reduction may be observed in one area, there might be an influx of crime elsewhere as criminals are displaced, rather than their activities being genuinely reduced. By including the public in the collection of information, it becomes easier to trace the movement and trends of crime regionally.

#### **Suggested Research Topics**

- 1. Public access to crime data: large collections of data and a reduction in the size of storage mean that crime data could be made easily accessible to the public, perhaps through libraries. Is this an acceptable form of community involvement? It would be valuable to look at the feasibility and impact of making such data publicly available, and to develop an understanding of who might access it, for what reasons, how they might act on the information they receive, and what impact this might have on policing activities
- 2. Monitor the impact of policing crime: new analytical programmes make it easier to generate simulations of crime, but further research is needed into how valid and/or useful they are
- 3. Future risk assessments: gathering large numbers of case studies will make it easier to generate tailored responses to similar events. Further research is needed to determine the extent to which this might this be used to inform preventive strategies.

## Discussion Group 3: Manipulation of Mainstream Media Narratives

Chair: Dr Fern Elsdon-Baker

**Sub-group chair: Professor Harris Beider** 

Rapporteur: Philippa Morrell

#### **Key Issues and Challenges**

- A perceived loss of 'Britishness', often referred to in the media, has served to fuel extreme organisations such as the English Defence League (EDL) in the UK, but what this 'Britishness' is (or was), how it is quantified, and what has been the impact of its apparent loss is undefined
- Media coverage of negative acts by individuals or isolated groups (for example, paedophile grooming groups) has a tendency to attribute the acts to a specific community, which can fuel existing prejudices
- Attitudes change over time and there has been a shift in what is culturally and socially acceptable, compared with what used to be societal norms.

The discussion group was first asked to consider what 'mainstream' means: it does not necessarily mean 'neutral'. The chair asked the group to consider that the 'mainstream' may oscillate between the different ends of a political spectrum, rather than being exactly in the more accommodationist middle-ground. In addition, what is considered to be 'peripheral' or 'fringe' in relation to the mainstream is a value judgement and can change according to geopolitical viewpoint, historical and cultural context. We therefore should not see 'fringe' or 'extreme' perspectives as an isolated permutation from the norm but as a product of more widely held viewpoints.

In relating ideas of 'mainstream' and 'extreme' to one another, the notion of a 'feedback loop' was considered. For example, rhetoric within extreme groups such as the EDL and Al-Muhajiroun is not disseminated solely from the fringes of these groups, but also circulated to the groups' supporters from the 'mainstream', depending on how issues are covered in the media and discussed in other contexts.

The group discussed whether politics leads the debate on issues such as immigration and multiculturalism, or whether the key debates take place at a more local level, with influence by extreme groups at these local levels (such as around local elections) influencing mainstream politics. The issue of 'what feeds what' was a key part of the discussion. The group did not consider that

'mainstream' and 'extreme' were polar opposites of one another, nor that 'extreme' and 'mainstream' views necessarily had to be distanced from one another. They exist on a shifting continuum and where they meet along that continuum can shift depend on time and context.

One member of the group provided insight into experiences with the local Luton branch of the EDL and the prominent extremist Muslim groups there. It was reflected that in small communities the individuals leading these groups have known each other from school age and are not as intellectually, socially or strategically isolated from each other as it might be assumed. It was anecdotally suggested that extremist organisations (in this case, the EDL and Al-Muhajiroun) regularly use each other to further their own agenda. For example, leaders of EDL-style groups have been known to bolster wavering support by openly contacting members of antagonistic extreme Muslim groups to inform them of future EDL gatherings. This not only ensured the attendance of the Muslim anti-EDL groups seeking to disrupt EDL gatherings, but also served to fuel tensions within the community.

#### The Impact of the Media

The group felt strongly that media has a pivotal role in generating or shifting mainstream and extreme discourses. For example, the media can help to set up 'the Muslim community' in the public eye as being a single, homogenous community (whereas it is actually referring to a very diverse, broad range of geographic and ethnic groupings). This can give an impression that negative acts which are in evidence across all societies and cultures – for example, child abuse or grooming by paedophiles - is acceptable within Muslim religion, when this is clearly not the case. There is a certain amount of historical and theological myth-making at play in discussions concerning differing ages of consent for marriage and arranged marriage for young women, for example, whereby these accepted cultural practices (which vary across international communities and move well beyond the 'Muslim' community) are presented as symptomatic of 'Muslim' cultural norms that tolerate the grooming of underage girls by paedophile rings. The role of the media is blurred as the culturally inappropriate 'myth-making' does not necessarily originate from the content of the media coverage, but may be driven by the extent and profile of the media coverage.

The group felt that the media has also fuelled issues surrounding a notional British identity and community. There has been much discussion about the loss of identity and community across the country, which has enabled groups such as the EDL, which present themselves as patriotic and protective of a threatened British culture, to get a foothold. Many supporters of the EDL cite a desire to return to core 'British' values as being a key reason for joining the organisation but offer no explanation of what these values are, why they are

not held or shared by the Muslim community, and how their approach can improve the current situation as they perceive it.

While the group did not want to make assumptions that a certain demographic will be more likely to support certain organisations, they were aware that those who feel disenfranchised and disconnected from their perception of 'Britishness' are more likely to be drawn to and support the ethics of divisive groups such as the EDL. Disenfranchised communities may use feelings of isolation and disconnectedness to look for and emphasise differences between communities. For example, religious identities may come to the forefront of people's lives when they feel disenfranchised, making them more likely to identify themselves as 'Christians', with 'Christian values' who see 'Muslims' as different, and a threat.

#### **Disseminating Information among Extreme Communities**

The group concluded that social media were not necessarily used to recruit members for extremist groups but instead as a tool for retention. Social media can be used to arrange gatherings quickly and easily, to disseminate information, to enable discussion and to bring group members up to date with the latest information.

The group also considered how peaceful gatherings of extremist groups should be handled. For example, if a group is handing out leaflets that are inflammatory in nature but what they are doing is not illegal, what can or should be done? It was agreed that while the content of leaflets, sermons, protests and so on may be provocative or incendiary, the actions of individuals or groups should not be considered illegal unless people are breaking specific laws. Furthermore, the group felt that if the police do become involved in breaking up what is a legal undertaking, there may be a risk that those involved will be subsequently considered martyrs by their followers and others in the wider community. This in itself may push others into becoming radicalised. One participant commented on the importance of remaining aware of the ethics of the interventions and of being wary of tolerating 'thought police' – anticipating what individuals or communities might do before they have actually done it. However, making it clear that rules apply equally to all communities and stepping in swiftly if lines are crossed helps to ensure that communities do not feel that their concerns are being ignored.

The group felt there can be a positive role for peripheral communities to play in mediating more radicalised groups (and actors within them). Furthermore, epistemological questions about the nature and ownership of authority and leadership within communities are poorly understood or factored into interventions; this would be a fruitful area for future research.

It was further discussed that there was no clear evidence available for the pivot point between non-violent extremism and violent extremism: where it lies, and what might be the factors that tip individuals from one to the other. The uncertainty surrounding the lack of clarity in understanding which individuals move from non-violence to violence and why was a major area of concern for the group, and one where considerably more research is needed.

#### **Mapping News Coverage and Spread of Media Narratives**

The group felt that there is benefit in mapping how news stories are covered in different media, what language is used, and how such stories are picked up and disseminated by extremist groups on both sides. How do such stories feed existing prejudices? The way in which the media covers stories of paedophile rings consisting of mostly Asian men implies all Muslim men see underage white girls as sexually active and therefore acceptable, and that the entire 'Muslim community' tolerates their behaviour, is an example of this.

The group felt there is value in research that will provide better understanding of 'seepage narratives' – how rhetoric from far-right and Islamist websites, blogs and other media enter the mainstream and become acceptable. An example given was of news stories that present headscarves as a sign of extremism, and that they should therefore be banned in schools.

It would be valuable to map which stories in mainstream media are picked up and redistributed by both Islamist and extreme right-wing groups in a way that helps to normalise xenophobia. Potential topics include controversies over planning permission for (large) mosque construction, Saudi-run schools, perceived injustices against Christians in the name of political correctness, and alcohol-free areas on university campuses with large numbers of Muslim students.

Such mapping would be particularly beneficial as it is not only extreme right-wing and Islamist groups that pick up stories and mould them to their rhetoric – left-wing groups also do this. For example, gay-rights groups pick up stories about Muslim prejudice against homosexuality and feminist groups pick up stories relating to the poor treatment of women.

This sort of mapping could also help to identify what those within the groups see as the most important focus — Mosque construction may be the lead story on a counter-jihad website, suggesting it is a major focus for the group's leadership, but another issue may be getting the most hits from the followers. Such a project would help to identify which mainstream newspapers and websites are most often quoted, retweeted and redistributed by extremists.

Furthermore, it would help researchers and analysts to understand how accurate the reporting and re-reporting of such stories is – for example, it is now widely believed that Anjem Choudary actually marched at Wootton Bassett. This never happened but is widely presented as 'fact'. How did this become established? Who are the 'influencers' as opposed to the 'leaders' of the narrative? Quantitative research would provide a measurement of whose work is most often quoted and track how extreme narratives travel from and to mainstream media.

In particular, the group felt there would be a significant benefit in mapping riots and hate crimes reported in local newspapers, noting the frequency and characteristics of the events, and how they are covered. It would be helpful to look at the media's role in agitation – how much does what people read in newspapers influence what they actually think or believe? Such analysis could also map links between local and community media and national media, and seek to identify what sort of stories unwittingly encourage or antagonise community division. It was suggested that there might be significant differences between what people read and what they listen to, and that all types of media, not just social media, should be considered in such studies.

#### Conclusion

In summary, the group agreed that extremist narratives cannot easily be eliminated. Communities need to be given the tools and infrastructure to deal with these problems adequately and to manage each situation; the challenges need to be addressed at the community level but in order to do this a better understanding is needed of how the narratives are formed and disseminated, and how they are taken up by those exposed to them.

#### **Suggested Research Topics**

- 1. Extreme narrative at both ends of the spectrum feed into one another; a better understanding is needed of their impact on the groups involved and everyone else
- 2. More research is needed on the psychological aspects of countering extreme narratives within communities
- 3. What role does (media) imagery play in Islamophobic discourse and how can this explain the shift in focus from 'terrorist' to 'paedophile grooming rings' in fuelling mistrust and hate crimes?
- 4. A better understanding is needed of the processes by which extreme narratives are reinforced by stories from the middle ground or mainstream. In particular, it would be helpful to explore what role the stereotyping of English nationalism plays in these processes
- 5. More research is needed on how accurately the media (and, to an extent, research and practitioner communities) reflect real tensions on the ground; for example, the impact of vigilante groups or the EDL

- on the communities in which they operate is minimal in relation to the extent of the focus on them
- 6. It would be valuable to investigate the nature and ownership of authority and leadership within communities where these groups are active and have influence.

# Discussion Group 4: Youth Engagement for Community Cohesion

**Chair: Alethea Melling** 

Rapporteur: Rihana Khan

#### **Key Issues and Challenges**

- Young people need a common purpose to bring them together. A good way to initiate this is through activities that young people of all ethnic groups can engage with
- Fear of being 'politically incorrect' has been a prominent barrier to increased integration
- Family is a key influence on the behaviour of young people towards other ethnic groups
- Schools could do more to facilitate integration
- Young people who feel disenfranchised as individuals or are part of a disenfranchised community are more likely to become influenced by extremist politics.

Issues of integration within immigrant communities around the UK have provided some challenges and 'speed bumps' with regard to community cohesion. This discussion group explored whether or not 'bonding' social capital to particular groups helped to feed segregation within diverse communities.

The discussion group comprised individuals who had previous experience of living in and working with diverse communities, mainly in East Lancashire; it looked particularly at the issues within South Asian communities in the area. One member of the group was from the police service and had knowledge of working with similar groups in southern England.

Members of the group from South Asian communities, some of whom had been in the UK since the 1970s, discussed how they felt their communities were becoming increasingly segregated. They recalled that during the 1970s white and Asian families and communities mixed readily. They went into each other's houses, their children played together and the whole community enjoyed the Silver Jubilee street parties. However, in recent times communities have become more segregated. One group member stated that her children (third-generation Pakistani diaspora) did not go into the homes of people from the white communities in the way that she had done as a child and that social interaction is not the same. The level of social capital between the groups is very low. She referred to the Putnam theory that

social capital has diminished because of the demise of community activities (Putnam, 2000).<sup>1</sup>

#### **Problems in the Community**

The group agreed that young people in particular need a common purpose to bring them together. In the past it has been thought that this might be achieved through activities such as football, but such strategies have not been successful in encouraging young Asian boys and men to play community football; no common sport or activity that transcends race has been identified. Even though there is a strong and well-established junior Asian football culture in Lancashire, particularly in Preston and East Lancashire, there is virtually no progression for young adults and men, and those who play avidly in their youth rarely pursue professional football careers because of societal constraints; there are no Asian role models in this sport. The group felt that the reason behind this is not a lack of talent, but prevailing racism at a local level and a lack of belief that it is realistic for young Asian men to have such aspirations. Furthermore, the junior league teams are almost always racially segregated; it is rare to see teams of Asians and whites training together.

Drawing on the experiences of one of the group members, who has worked extensively with the youth community, the group agreed that the fear of being politically incorrect has been a huge barrier to achieving better integration in certain communities. She revealed that young people are often afraid of saying the wrong thing to the 'other' group. Rather than risking this, they avoid each other; they never break through the boundaries of cultural diversity and are therefore unable to tap into each other's cultures and share commonalities. A specific point was raised concerning fear of asking questions about the other group's faith. For example, someone in the group had previously been invited to an Asian wedding, but decided not to go because she was afraid she might offend her hosts by not knowing what to wear or how to behave. The group collectively agreed that not being forthright when encountering people of a different cultural background only serves to strengthen existing barriers to integration.

#### **Challenges at School**

Another issue the group discussed in depth was the behaviour of young people in schools. One group member, who moved to the UK in the 1970s, recalled her very inclusive school experiences, where segregation was not an issue. The opposite situation exists today, where pronounced segregation between different cultures in the playground and the classroom is the norm. According to the group, these issues cement themselves between the ages of 11 and 14, when young people start to explore their personal and cultural identites.

<sup>1.</sup> Robert Putnam, Bowling Alone (New York: Simon and Schuster, 2000).

<sup>2.</sup> J Baines, Corner Flags and Corner Shops (London: Pheonix, 1999).

One member of the group suggested that the increase in segregation within schools from one generation to another is a 'critical mass issue': when critical mass is low, young people are forced to integrate; when it is high, they gravitate towards the cultural groups in which they share social capital. An example of this is the South Asian Muslim community's tradition of sending children to 'madrasah' or Islamic education at their local mosque until they are about 12 years old. A culturally exclusive social capital between young people is developed intensively during their religious and cultural education, which they do not share with others outside their community. This then prevents them from integrating when they do move into more mainstream schools.

One member of the team gave an anecdotal account of her experience of taking a group of white and Asian young people on a residential event. Afterwards, the young people voiced their concerns that although they share classes and the same playground, they actually knew nothing about each other. The trip made them realise that they have much in common, especially with regard to issues faced while growing up. As a result of this extremely positive experience, the young people continued for some time to meet and socialise outside the classroom in their own time.

The discussion group concluded that schools could do more to facilitate integration. While they are at school, individuals are receptive to positive intervention, and this should be taken advantage of in order to provide an environment that promotes inclusivity and acceptance between cultures.

#### Family as a Key Factor in Promoting Positive Integration

The group agreed that family is a key influencer on the behaviour of young people towards another ethnic group; family education within segregated areas is key to pulling communities together. Young people who come from families that are openly racist or mistrust the 'other' generally have similar sentiments. Those brought up on a culture of mistrust and hate continue to have this mindset unless effective intervention takes place. Practices at home inevitably influence how individuals behave outside – especially during their formative years at school.

The group concluded that proactive intervention around raising awareness within families and the coaching and development of positive peer role models was more necessary than sophisticated surveillance techniques.

#### The Influence of Extreme Politics

The discussion group also spoke about how young people can get drawn into extreme politics, and especially the problems related to extreme far-right politics. More often than not, young people who feel disenfranchised, as individuals, or as part of a disenfranchised community, are likely to become

influenced by extremist politics. Other factors that may contribute towards this are isolation and a lack of positive social capital. Once again, the group thought that family influence and a strong, caring community are necessary to prevent young people from becoming involved in extremist politics. The group drew attention to the importance of positive peer leadership and role models, particularly in areas where there is a distinct lack of them – for example, the lack of South Asian role models in football. Football could be a key way to introduce positive integration, but more needs to be done to link it to ideas of collective identity rather than elitist empowerment.

#### Summary

The problems of integration within communities start at home; the formative years of childhood shape the rest of a person's life, so it is important to surround children with ideas of inclusivity and acceptance of different ethnicities and cultures. Society needs to provide a broader array of role models for the youth of different ethnicities to look up to and admire; we can only claim the benefits of living in such a multicultural country when individuals of all races are properly represented in positions of authority and importance. In order to combat these problems, schools need to push for proactive intervention techniques – especially as a means to thwart the possibility of extremist politics being an attractive ideal for those who feel disenfranchised from their peers and environments.

#### **Suggested Research Topics**

- More research is needed into the type of youth integration activities that have a real impact on social integration, and the ways in which they can be introduced through local council initiatives
- 2. Research is needed to determine the best type of programmes for schools to implement during and outside school hours to generate lasting dialogue between young people on the basis of commonality
- 3. Further research is needed on the impact of culturally diverse events for all to participate in within local councils as a means to learn, understand and appreciate different ethnicities.

# Research Themes Identified in the Discussion Groups

### Discussion Group 1: Research Methodology to Inform the Understanding of Community Tensions

- 1. Research is needed into how trends in community tensions can be tracked to give 'early warnings' of trigger events. What might these trigger events be and how could they be recognised? How do they play out? What triggers an individual to move from being a passive supporter to being an active supporter of an extremist organisation?
- 2. Carry out further research into identifying 'at-risk communities' in order to identify and map what opportunities exist for community integration, how accessible they are, and what the real or perceived barriers to engagement are
- Better understanding is needed of how quantitative data and qualitative techniques can be used together to identify where more focus is needed, possibly through cross-disciplinary collaboration between social scientists and researchers familiar with quantitative methodology.

#### **Discussion Group 2: Serious and Organised Crime**

- 1. Public access to crime data: large collections of data and a reduction in the size of storage means that crime data could be made easily accessible to the public, perhaps through libraries. Is this an acceptable form of community involvement? It would be valuable to look at the feasibility and impact of making such data publicly available, and to develop an understanding of who might access it, for what reasons, how they might act on the information they receive, and what impact this might have on policing activities
- 2. Monitor the impact of policing crime: new analytical programmes make it easier to generate simulations of crime, but further research is needed into how valid and/or useful they are
- 3. Future risk assessments: gathering large numbers of case studies will make it easier to generate tailored responses to similar events. Further research is needed to determine the extent to which this might this be used to inform preventive strategies.

#### **Discussion Group 3: Manipulation of Mainstream Media Narratives**

- 1. Extreme narrative at both ends of the spectrum feed into one another; a better understanding is needed of their impact on the groups involved and everyone else
- 2. More research is needed on the psychological aspects of countering extreme narratives within communities
- 3. What role does (media) imagery play in Islamophobic discourse and

- how can this explain the shift in focus from 'terrorist' to 'paedophile grooming rings' in fuelling mistrust and hate crimes?
- 4. A better understanding is needed of the processes by which extreme narratives are reinforced by stories from the middle ground or mainstream. In particular, it would be helpful to explore what role the stereotyping of English nationalism plays in these processes
- 5. More research is needed on how accurately the media (and to an extent research and practitioner communities) reflects real tensions on the ground; for example, the impact of vigilante groups or the EDL on the communities in which they operate is minimal in relation to the extent of focus on them
- 6. It would be valuable to investigate the nature and ownership of authority and leadership within communities.

#### Discussion Group 4: Youth Engagement for Community Cohesion

- 1. More research is needed into the type of youth integration activities that have a real impact on social integration, and the ways in which they can be introduced through local council initiatives
- Research is needed to determine the best type of programmes for schools to implement during and outside school hours to generate lasting dialogue between young people on the basis of commonality
- 3. Further research is needed on the impact of culturally diverse events for all to participate in within local councils as a means to learn, understand and appreciate different ethnicities.

### **COMMUNITY TENSIONS**

# Evidence-Based Approaches to Understanding the Interplay between Hate Crimes and Reciprocal Radicalisation

### Edited by Jennifer Cole and Raffaello Pantucci

Foreword Bryan Edwards

Introduction
Charlie Edwards

Keynote Address: Community Tensions and the Relationship with Reciprocal Radicalisation Bernard Silverman

I. A Scientific Approach to Countering the Terrorist Threat Mandeep K Dhami

II. Social Science, Evidence-Based Data Metrics and Evaluation: A Methodological Partnership Laura Zahra McDonald

III. High-Performance Computing and Data Storage at STFC: An Introduction Adrian Wander

IV. Faster Processing and the Future of Computing Jeremy Purches

Case Study 1: What Can Internet Analysis Add to the Study of Extremism? Matthew Elworthy

Case Study 2: Improving Community Engagement with the Police: The Tell MAMA Approach Fiyaz Mughal

**Discussion Groups:** 

Research Methodology to Inform the Understanding of Community Tensions Serious and Organised Crime Manipulation of Mainstream Media Narratives Youth Engagement for Community Cohesion

Research Themes Identified in the Presentations and Discussion Groups