Understanding The Policy Context For Open Source Communications Analytics: A Simulation Exercise With The Dept. For Communities & Local Government And The Home Office

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Overview

This document reports findings from a policy development exercise designed to investigate how the increasing use of social media is altering the policy and practice context for monitoring and managing community tensions and cohesion, especially in terms of the community impacts of terrorist attacks and other major events. The work was conducted in partnership with staff from the Dept. for Communities and Local Government and the Home Office.
The work was undertaken as part of the Open Source Communications Analysis Research (OSCAR) Development Centre which is funded by the Home Office / HEFCE / College of Policing under the Police Knowledge Fund, and is led by Cardiff University in partnership with a number of police forces.\(^1\) It was triggered by a widely shared concern that the policy, regulatory and legal context for open source work is struggling to keep pace with advances in technology and practice. It is recognized that social media and other big data platforms are having a disruptive and transformative effect upon the institutional and interactional ordering of society. This includes enabling new forms of crime and new ways of policing criminogenic risks. As such, it seemed appropriate to investigate the policy context of open source working and how it could be developed to better reflect the rapid technological and practical advances that are taking place.

**Method**

The exercise was organised around four episodes that occurred in the aftermath of the terrorist murder of Fusilier Lee Rigby in May 2013. The four episodes were selected on the grounds that previous analysis had identified how they illuminate a range of challenges for policy and practice development in terms of the role of open source social media communications.

The concept of ‘open source communications’ is important in capturing some of the new social dynamics associated with the contemporary information environment. ‘Open source’ data is generally recognized as material that is publicly accessible, and does not require any covert means or special status to make use of it. Increasingly, in some areas reference is made to ‘open source intelligence’. However, we prefer the concept of ‘open source communications’ on the grounds that it enables a more comprehensive account of the different ways in which the available materials can be used. Specifically, it captures:

- How public agencies can monitor social media communications to obtain intelligence and insight into unfolding events, and public reactions to these;
- But also, how public agencies can communicate messages to the public in crisis situations, in order to persuade and influence aspects of the conversation that is occurring.\(^2\)

Positioned in this way, the concept of open source communication is designed to illuminate the different ways that social media can be collected and analysed to inform policy and practice responses to situations where community tensions are evident. This should encompass both how open source communications can be monitored to detect the emergence or presence of such issues, but also how making open source communications has the potential to mitigate the impacts of any tensions.

Evidence and insights developed by the OSCAR project’s activities has identified ten key challenges for improving the use of open source communications materials in informing policy and practice development.

**These can be summarized as:**

1. There is a general overselling of social media analytics & platform capabilities.
2. Too much emphasis has focused on technology, not enough on organisational structures, processes & understanding the human users;
3. A tendency is evident for organisations to see the solution to their problems as involving collecting more data, rather than robustly analysing and interpreting what they have got;
4. Profound issues are to be found in terms of the difficulty of validating social media claims;

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\(^1\) More detail about OSCAR and its concepts and methods is at www.upsi.org.uk/OSCAR

5. A degree of technology convergence can be observed with many of the main tools and platforms offering similar functionality;

6. It is an area susceptible to group-think, meaning that challenge, critique and different perspectives seem to can be lacking;

7. The Internet of Things and smart cities constructs may result in lots more data coming on stream and new vulnerabilities that have to be managed;

8. The social media world is increasingly visual, but visual analytics is lagging;

9. The regulatory environment is uncertain and out-dated;

10. Public permission problem – where is public consent on the use of new approaches?

The methodology for the study was based upon a simulation exercise where eight civil servants and two practitioners were provided with a sample of social media data relating to the identified episodes and working in groups were tasked to answer a series of questions. These questions keyed into a number of challenging issues that were identified on the basis of an ESRC funded project looking at the application of social media analytics to the aftermath of terrorist attacks. As part of the current work, there was an additional intention to use the results of the exercise to extrapolate to the implications of social media and the era of big data for policy development more generally.

Event 1: focused upon how social media provided ‘fast data’ about the breaking story of the terrorist murder of Lee Rigby that travelled quickly and widely creating an accelerated imperative for responses by key public services. This element of the exercise was deliberately designed to overwhelm the participants playing the part of decision-makers with lots of information, which was not necessarily coherent and consistent in terms of the story it was telling about what had happened. For this part of the exercise they were given regular ‘feeds’ of new data that shifted the narrative and understanding of the community impacts.

Event 2: developed the above by looking at what could be done in light of social media monitoring identifying a growing risk of public disorder on the evening following the killing.

Event 3: focused upon a potential conflict centred on the York Mosque and how a positive story was manufactured with implications for social resilience and positive community integration. This moved the story on but raised some

Event 4: drew attention to the intervention by Anonymous and the ethical and legal implications of their informal social control action undertaken against the EDL.

3 See http://www.esrc.ac.uk/news-events-and-publications/evidence-briefings/security-terrorism-and-social-media/ accessed 01/02/16

The analysis has distilled some key themes and issues in terms of the participants conclusions in the exercise:

Key Findings

- It was identified that there is a lack of current capacity and capability to engage real-time analytics, especially when events occur ‘out of hours’. A potential technological solution for this would be to think about developing more flexible and ‘networked’ analysis platforms, rather than centralized processing models.

- There are real challenges in the immediate aftermath of major events in terms of validating information on social media given high volumes of misinformation and disinformation. That said, it is clear that members of the public are using it as a ‘sense-making’ tool to collectively understand what they think is occurring.

4 More details about these episodes and how they are illuminated by social media data can be found in the Cardiff Working Paper for Nesta’s ‘Data for Good’ programme: http://www.nesta.org.uk/publications/soft-facts-and-spontaneous-community-mobilisation-role-rumour-after-major-crime-events accessed 01/02/16
It is not just about central government departments or public safety agencies possessing capacity and capability to understand what is going on via social media analysis. Local civil society groups can often provide credible, tailored and effective messages to counter community tensions. There is an issue about how to enable them to do this. Fast-time responses to extremist narratives in emergency situations can be important in shaping the public definition of the situation, which can impact the longer term consequences of the event.

Currently the focus is upon managing the short-term risks and threats, less thought has been given to longer term consequence management. More work could address about how to bring communities back to a state of ‘normality’ following major incidents, so that the first responses do not impede longer-term resilience.

There are opportunities to use social media analytics to ‘test’ messages from political leaders and other senior figures to develop a more evidence-based understanding of ‘what works’ for which segments of the public in terms of crisis communications.

Whilst the notion of ‘big data’ has been popularized, it is actually the dynamics of ‘fast data’ that are most important from a public safety and reassurance perspective. Current communications strategies look ‘off the pace’ in terms of providing the flexibility and agility to respond to rapidly developing situations. The new information environment and the availability of open source data also creates pressures to blend ‘intelligence’ and ‘communications’ functions, which have traditionally been ‘firewalled’ from each other.

Shouldn’t equate the ‘reach’ of open source social media communications with their ability to ‘touch’ people - where the latter is defined as the ability to meaningfully impact upon how they think, feel or act.

Detailed analysis of the Lee Rigby data reveals that albeit the initial crime was defined as an Islamist inspired murder, the subsequent incidents of violence that occurred in the aftermath of the killing involved far-right supporters, and a coalition of left-wing groups opposing them. This shift to acknowledging the interactive and multi-polar dynamics of conflict in the wake of major crimes is something that policy frameworks could usefully pick up on.

There is an opportunity to learn from previous incidents and events in terms of what works. Current de-briefing tends to operate on a case by case basis, rather than looking for patterns of organizational and individual behaviours across multiple cases.

The interventions by groups such as the hacker collective Anonymous who are engaging in actions that are probably against the law, but diffuse the potential for violence, pose profound ethical challenges for policy in the future. Focused work investigating such developments and how to respond to them is probably warranted.

Participants identified a lack of confidence about how to use social media to communicate ‘out’ effectively, especially in emergency situations. The ability to use social media platforms to influence the response dynamics and persuade people in terms of their reactions is currently under-developed.

There is a need for policy frames to reflect the new open source communications dynamics, rather than rely upon models that were appropriate for previous eras. New response models need to be programmed in, as opposed to ‘improvised’ when something bad happens.
Conclusions

The methodology used in the simulation exercise was effective at helping participants identify new dynamics shaping how communities react in the aftermath of major crisis events. Current approaches to learning from such incidents tend to focus upon ‘de-briefing’ individual incidents in isolation, rather than looking for patterns across several past occurrences. The work conducted has highlighted a number of weaknesses in terms of current social media analytics capacity and capability to respond effectively in ways that would help to mitigate the community impacts of events in the future.

Policy frames and their associated regulatory instruments are clearly struggling to accommodate how new technologies are changing the nature of the risks and threats that have to be encountered, as well as the tactical and operational approaches that police and their partners are generating. Accordingly, in building evidence-based insights into how police are using open source communications across their investigative, intelligence and engagement functions, the OSCAR project has much to offer future policy development in this area.

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The Open Source Communications Analytics Research (OSCAR) Development Centre & the Challenges of Open Source

SENTINEL: Localised Situational Awareness via Social Media

Red Teaming: A Dynamic Methodology for Challenging, Critiquing & Posing Counterfactuals

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