

Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: http://orca.cf.ac.uk/99828/

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Roberts, Colin, Innes, Martin, Preece, Alun and Rogers, David 2018. After Woolwich: analyzing open source communications to understand the interactive and multi-polar dynamics of the arc of conflict. British Journal of Criminology 58 (2), pp. 434-454. 10.1093/bjc/azx024 file

Publishers page: http://dx.doi.org/10.1093/bjc/azx024 http://dx.doi.org/10.1093/bjc/azx024

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See http://orca.cf.ac.uk/policies.html for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



AFTER WOOLWICH: ANALYZING OPEN SOURCE COMMUNICATIONS TO UNDERSTAND THE INTERACTIVE AND MULTI-POLAR DYNAMICS OF THE ARC OF CONFLICT

COLIN ROBERTS*, MARTIN INNES, ALUN PREECE and DAVID ROGERS

This article is based upon a case study of the 2013 murder of Fusilier Lee Rigby in Woolwich, London. It shows how analysis of open source communications data collected via social media platforms can illuminate the inter- and intra-community conflict dynamics arising in the aftermath of such events. Framed by Collins' recent theoretical work on the escalatory and de-escalatory forces in conflict situations, the empirical analysis brings to the fore some new insights about the 'arc of conflict'. These frame a conceptual accent upon the interactive sequences of mobilization and counter-mobilization occurring in the moves towards group-based conflicts, and the importance of understanding the multi-polar nature of these involvements.

Key words: conflict dynamics, Lee Rigby, terrorism, social reaction, polarization

Introduction

In his 2011 presidential address to the American Sociological Association, Randall Collins theorized the time dynamics of conflict, and the causes and consequences of violence escalation and de-escalation. Developing themes from his previous work on the rituals and routines of violence (Collins 2008), Collins connects to a long-standing sociological interest in explaining and accounting for conflict. This ranges from the seminal contribution of Coser (1956), stretching back to the foundational statements of Simmel (1922/1955). Collins' particular contribution to this tradition is a proposition that conflicts progress through three principal temporal phases: explosion, plateau and dissipation. He posits that irrespective of the scale of conflict, there is a generalizable process to how violence between engaged actors and groups emerges, unfolds and subsides. Albeit he does not describe it in such terms, it is a model suggesting a patterned 'arc of conflict'.

In formulating his ideas, Collins' drew upon a diverse empirical base from a range of fairly orthodox research methodologies. What he was not in a position to do however, was to be informed by the increasing number of innovative approaches using analyses of open source communications data to trace how particular conflicts adapt and change with the passing of time. For instance, Procter *et al.* (2013) examined the role that social media played in the social organization of the London riots in 2011. They highlight how Blackberry Messenger in particular facilitated a range of illegal activities. Collectively these studies (see for example Cassa *et al.* 2013; Brym *et al.* 2014; LeFebrve and Armstrong 2016), suggest analysis of data derived from social media can afford unique insights into social responses and reactions to high profile crime events in particular.

*Colin Roberts, Martin Innes, Universities Police Science Institute, Cardiff University Crime and Security Institute, Cardiff, UK; robertsc10@cardiff.ac.uk; Alun Preece, David Rogers, Cardiff University Crime and Security Institute, Cardiff, UK.

One such event that has been subject to relatively intensive investigation is the murder of Lee Rigby in Woolwich, London in 2013. There are now five significant studies of this incident. The most detailed of these is the report of the Home Affairs Select Committee enquiry, that focused in particular upon the pre-crime activities of the two suspects, and their radicalization. Relatively quickly after the crime, the think-tank Demos published a report incorporating Twitter data collected following the murder, to argue that police needed enhanced capacity and capability to monitor and analyze social media platforms. Williams and Burnap (2015) focus upon how terrorist attacks such as this, occasion forms of digital cyber-hate. McEnery *et al.* (2015) use the same case to explore interactions between National Press and social media, finding the former play an important role in steering and guiding the content of the latter in the aftermaths of atrocity events. Most recently, Innes *et al.* (2016) have conducted a detailed analysis of social media data collected in the 12 months following the murder of Fusilier Rigby, to distil a new framework for analyzing processes of social reaction.

Although differently oriented and positioned, these studies all use high resolution empirical evidence to warrant their claims through collecting and analyzing social communications from a range of social media platforms. At a 'deeper' more theoretical level, several recent Criminologically inflected studies have attended to how the dispersal of social media have altered our ways of knowing about crime, disorder and conflict. Greer and McLaughlin (2011) and Loader and Mulcahy (2003) for example, establish how the 'police voice' has undergone a diminution in terms of its previous authoritative status in the 'hierarchy of credibility' of media commentating on criminal justice matters. Developing this line of thinking and resonating strongly with the interests of this article, Greer and McLaughlin's (2010) analysis of the G20 demonstrations in London captures how the police's role as 'primary definers' in framing the meaning and causes of public order conflicts has been significantly reduced by 'citizen journalists' using social media platforms to report their alternative interpretations that manifestly influence the resulting public narratives. For Cottle (2008), the adoption of these technologies is part of how the new media ecology has altered the opportunity structures for dissent and protest, and the ways that demonstrations 'demonstrate' their relevance and impact to foster wider interest and mobilization.

Informed by the findings of this rapidly evolving literature on the role of digital social communications data in contemporary protest and conflict situations, it is possible to start to construct a preliminary conceptual map, pivoting around a distinction between online and offline communications and their consequences. As Table 1 depicts, this identifies four key modes of contemporary conflict where digital communications play an important role:

Table 1 Conceptualising the digital in conflict

	Online interactions and communications	Online effects and consequences		
Offline interactions and communications	Cyber conflicts	Digitally performed conflicts		
Offline effects and consequences	Digitally enabled conflict episodes	Orthodox conflicts		

Cast in this way, we can differentiate between: digitally dependent conflicts where both their causes and consequences occur in digital spaces (cyber conflicts); and those that are wholly unmediated (orthodox conflicts). For the purposes of this article however, of more interest are conflicts integrating an interaction between the offline and online dimensions of the social world. 'Digitally performed conflicts' can be understood as those where tensions in offline relationships present and are manifested in virtual conflict episodes.¹ Contrastingly, there are physical conflicts taking place 'in the real world', but where their social organization occurs via digital communications.

Framed by this analysis, this article focuses upon illuminating the dynamics and mechanics of 'digitally performed' and 'digitally enabled' conflicts. In so doing, it develops two principal conceptual claims informed by the empirical materials collected via social media in the days, weeks and months following the Lee Rigby murder. The first of these is based upon analysis of these open source communications data to systematically test the key tenets of Collins' theory. This reflects how such data provide a fairly unique, 'high resolution' digital documentary record of how processes of reaction took place, and who did what to whom and why. It is found that whilst the broad frame that Collins sets out is supported, it can be refined and nuanced in several important ways by exposing it to these kinds of empirical resources. In so doing, the analysis speaks to Jock Young's long-standing admonition to Criminology that it should attend more closely to patterns of social reaction, outwith its more established concerns with processes of moral panic (McLaughlin 2014).

The second claim concerns how elaborating and extending Collins' ideas surfaces the ways that, although the definition of the situation for the Rigby murder pivoted around a public narrative of an Islamist terrorist act, the conflicts occurring in its aftermath involved a diverse range of actors and had little to do with Islamist extremism. This steers our attention to how these new kinds of social data afford fine-grained views of social issues and problems that render hitherto almost imperceptible facets of social life more visible. It is found that contemporary conflicts of this kind are not bi-polar contests between two groups, but rather involve a complex of shifting and adapting ideological positions and multiple groups. Accordingly, we need more sophisticated theoretical models for understanding conflict dynamics in such situations. The article seeks to illuminate and accent an interactive and multi-polar conception of conflict dynamics, following high profile crime and terrorist attacks. The interactive dimension is especially important in capturing the ways that a conflict emerges as an outcome of a choreographed sequence of moves and counter-moves performed by a number of situated actors.

The next section lays out the research design and how the data were collected, processed and analyzed. This is followed by an empirically led exploration of the crime's initial reporting on social media, and how a particular definition of the situation was proposed and applied, and the consequences flowing from this. The unique quality afforded by the data is that previously public definitions of troubling and problematic events have typically been studied once they are relatively settled and authorized. Instead, here we can observe the act of defining as an emergent process that is actively

negotiated, queried and contested. This highlights how public sense-making under conditions of uncertainty, where it is not entirely clear what has happened, are somewhat confused and chaotic.

Having considered this issue, the analytic focus switches to providing a detailed account of how violent conflict between two polarized ideological groups arose, and then how it spread and developed. Towards the end of this analysis, which forms the main body of the article, some attention is given to the role played by late-joiners to the conflict and what their intervention did to the social dynamics. The concluding section distils a model informed by this analysis, premised upon accenting the interactive and multi-polar nature of contemporary conflicts with a digital component.

Research Design, Data and Method

The dataset informing this analysis comprises a total of 35 million data points collected between May 2013 and February 2014, from multiple social media platforms, but mostly Twitter. Initial collection started by chance when the authors were working in South London testing an experimental social media data-mining software program called 'Sentinel', the development of which was being funded by a European Commission project. The software was collecting data when initial social media posts appeared about a significant incident occurring in Woolwich. A decision was taken to try and keep the collector running, albeit it had never been run 'at scale' before. Collection continued until the conclusion of the suspects' criminal trial.

The research-grade platform used to collect and analyze the data possesses much of the functionality available in similar commercial packages. However, a key feature of Sentinel is it's design as a 'glass' rather than 'black box'. The purpose being to enable transparency and hence allow for the investigation of how decisions taken to alter data collection or processing protocols shape and guide resulting materials and insights. Thereby engaging with an issue of increasing import about the extent to which deliberately obscured algorithms are subtly and imperceptibly crafting what is rendered visible and invisible, and thus ordering what constitutes knowledge about the social world (Pasquale 2014; Amoore and Piotukh 2015).

Sentinel's data collection plugs directly into social media feeds through free API keys. For this study, this included Twitter and a series of blogs. The stream of data accessed is filtered by a series of 'channels' each comprising up to 400 linked search terms covering relevant people, places problems and issues. In this study, the breaking events were picked up on the basis of a pre-built ontology which was rapidly refined to focus upon key terms associated with the specifics of the case including 'Woolwich' and 'soldier'. As more details became available, a second 'channel' was brought online focusing upon the activities of the English Defence League (EDL), as it quickly became clear they were key actors in the unfolding narrative. Then a third channel with a lot more specific situational detail was developed and deployed by the end of the second day—which we label the 'Rigby' channel, reflecting how details about the victim were a key feature.

Figure 1 plots the volume of social media data collected via these channels in relation to the murder of Lee Rigby over a 6-month period. Plotted on the graph are some of the key events that occurred following the initial incident in order that the association between communication volumes and significant developments can be ascertained. Many of these relate to specific 'conflict episodes' referred to in subsequent sections of this article.

It can be observed that there was a massive spike in the volume of communications traffic on the day of the murder. This fell back, albeit remaining at a comparatively high level for a couple of weeks. Subsequently, there was a progressive diminishing in levels of interest, although there were significant increases in social media communications relating to several of the key episodes.

An interesting question posed by such volumes of data concerns is whether they are an artifact of public interest, or potentially driven by the online activities of a smaller number of highly active and intensively engaged groups? To investigate this, an attempt was made to attribute messages to individual accounts for the first seven days following the crime. These data are displayed in Figure 2 below, according to whether they were detected using the Woolwich, EDL or Rigby channels.

This approach to 'cutting into' the data reveals several insights. After the first 2 days there was a marked decrease in the number of individual social media users engaging in online interactions around the crime. At the same time, there are indications that the activities of the EDL became relatively more important in terms of those people who did remain engaged. This is consistent with findings from additional analysis conducted that suggests that, as time passed, levels of participation and engagement from the general public waned. However, there was a small core of individuals who remained vociferously and actively engaged in discussing events relating to the Rigby murder. Over the first week for example, one individual on the far-right² made nearly one thousand original contributions via their social media accounts.

Splitting the data into three 'streams': 'Woolwich'; 'Rigby' and 'EDL, intimates aspects of how the public narrative of the incident evolved over time. Initial public interest on social media gravitated around the place where the crime happened—Woolwich—in the absence of any more detailed information. Once the victim's identity was publicized on the second day, then 'Rigby' became a more important signifier for the story and a focal point for the organization of the public conversation. However, this ebbed away quite quickly, re-emerging at key points, such as around the funeral (Figure 1).

Contrastingly however, the 'EDL Channel' demonstrates a more sustained level of interest and activity according to the graph. This channel initially picked up in terms of the volume of activity around 4 hours after the murder, as the EDL leadership sought to mobilize their members, whilst other political groupings opposing their views engaged in a counter-mobilization effort. These interactive dynamics continued for several weeks, as an artifact of how the EDL membership sought to exploit the Rigby case as a 'condensing symbol' via which to project their ideological agenda.³ A close reading of the literature on the EDL indicates that, while many affiliating with the movement dispute that it is a 'Far Right' political group, most would accept it advocates a core set of values opposed to 'the Islamification of Britain', and a perceived failure of the 'liberal elite' to respond effectively to a looming threat posed by 'militant Islam' (Pilkington 2016; Busher 2016; Copsey 2010, 2016; Jackson and Feldman 2011; Garland and Treadwell 2010). The murder of Lee Rigby was thus constructed as a direct expression of the core threat central to their narrative, and around which mobilization was essential. Importantly for understanding the dynamics of conflict—those on the

²As deduced by the content of the posts made

³The concept of a 'condensing symbol' is Edelman's (1985).

ROBERTS ET AL.

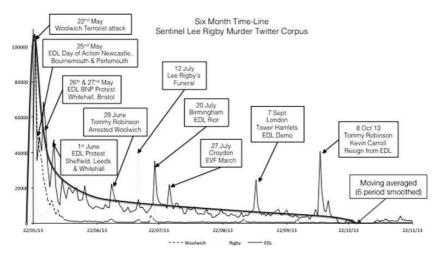


Fig 1 Data volumes timeline and key events. Sentinel Channel - Twitter User Account Daily Counts

100,000 90,000 80,000 70,000 60,000 □ Woolwich 50,000 MEDI 40,000 ■ Rigby 30,000 20,000 10,000

25th May Fig 2 Total number of individual twitter users per channel, per day.

Day 5

Day 6

Day

Day 4

political Left opposed to the EDL, label it 'racist and facist' (Copsey 2016). This process of oppositional labelling keying into an established 'anti-fascist' identity narrative circulating amongst a diverse coalition of left-wing groups, which recursively became an important rallying point for their own counter-mobilization efforts. Thus the incident energized two groups already strongly positioned in opposition to each other. While much of the literature on these groups traces their history and key internal developments, what we explore here is how a sense of other, being an opposition and within a conflict, functions as a crucible for their respective processes of development.

Modes of analysis

Day 1

Day 2

Day 3

24th May

As implied by the above, Sentinel's operationalization as a research tool occurred in two modes. There was a dynamic 'fast time' mode where, as the case developed over the first few days, the stream of text and image data was being monitored and queried

⁴Hope Not Hate http://www.hopenothate.org.uk/hate-groups/edl/ for example, define the EDL as a 'racist organisation', while Unite Against Facism (UAF) call it a 'racist and facist' group http://uaf.org.uk/wp-content/uploads/2015/04/ EDLfactsheet2.pdf.

in 'real-time' by researchers to obtain a sense of what was happening, with interesting occurrences, developments and accounts being noted. Importantly, whilst this fast-time analysis was ongoing, the program was also acting like a digital recorder, storing relevant material for a slower-time, more deliberative, analysis.

Full analysis of the data commenced by developing a quantitative overview across the event as a whole and then, on the basis of the fast-time analysis and other sources (largely broadcast media and press accounts) identifying key 'sub-events' in the case narrative and connecting these to the social media timeline (as plotted on Figure 1 above). Data for more detailed coding were then sampled at points where there were significant 'spikes' in the volume of social media data, across the 12-month period covered. The focus here was on the build up to and the period of high volume traffic. These periods were divided into 3-hours units and further sub-divided into 15-min subunits, with the data relating to these times being screened for interest and relevance. This involved researchers reading and 'screening' around 500,000 Tweets in total and differentiating those that helped understand the story of the sub-event in question, or appeared to relate to the conceptual themes emerging to orient the study overall.

From the resulting dataset, around 17,000 messages were subject to more detailed axial coding (Strauss and Corbin 1988) including: whether the content was extremist, expressing far-right/far left/Islamist views; the presence of emotional attributes including fear, anger, shock, revulsion; and whether it could be identified with a particular group. This qualitative analysis was predicated upon an understanding that these data were derived from a new kind of public space where communicative actions are being performed by their authors for an imagined audience, who respond and react to the content that is both intentionally and unintentionally transmitted. This amounts to a 'digital dramaturgics' that extends and elaborates the lines of enquiry so fruitfully established by Goffman (1959). Cast in this fashion, the data are understood as influencers and persuaders that collectively narrate a story of an event, and the separate episodes and encounters that comprise it, as well as how these were interpreted and reacted to.

Coherent with this digital dramaturgical frame, an additional 2000 tweets were subject to even more detailed coding to obtain insights into the complex interactional dynamics observed taking place between different ideological groups and positions. By reading large volumes of material, the researchers were able to detect patterns in the material which were coded and subsequently used to derive conceptual categories.

One unanticipated finding from this qualitative coding was that approximately 20% of the Twitter messages that the data collection algorithms had connected to the Rigby case, actually emanated from several previous conflicts; in particular, the Boston Bombing from some months earlier. This is of considerable import for more quantitative analyses (such as Bartlett and Miller 2013; Williams and Burnap 2015) on the grounds that, the data they are processing may actually contain a lot of 'noise', including communications relating to other similar but distinct events, thereby decreasing the accuracy of the statistical models being developed.

In an effort to try and validate aspects of the 'work' being performed by social media communications, a request was made and accepted to obtain recorded hate crime data from the Metropolitan Police Service lead on Hate Crime.⁵

⁵We wish to record our thanks to the Metropolitan Police for their cooperation. These data were provided a parallel dataset to assess associations between acts of cyber-hate and off-line violence.

A Murder in Woolwich

Shortly after 14.00, on the 22nd May 2013, the Metropolitan Police received a 999 call from a member of the public about a violent incident in Woolwich, London. Armed officers attended and shot two suspects in the street. Lying in the road was the body of Fusilier Lee Rigby who had been subject to an attempted beheading in what was later identified as an Islamist Extremist terrorist attack. By 21:00 that night, members of the EDL were demonstrating on the streets of Woolwich throwing bottles and stones at police. Over the next 2 weeks, mosques were attacked and those perceived to be Muslims received insults and were subject to physical attack in the street. Additionally, the Al-Rahma Islamic Centre in Muswell Hill, London, was burnt to the ground on 5 June, the walls having been sprayed with EDL graffiti. In Walsall, Wolverhampton and then Tipton, on the 12 July, explosive devices were detonated outside mosques, with the latter one being packed with nails. Pavlo Lapshyn, a white supremacist Ukrainian student, was later charged with those offences, and with stabbing to death an elderly Muslim man in Birmingham near the Green Lane Mosque.

Reprising some of the material displayed previously in Figure 1, there is a clear implication that the temporal aspects of the conflict episodes following Lee Rigby's death are both coherent with aspects of Collins' (2012) model, but also nuance and refine some of its principal features. Consistent with Collins' account, there is a clear and obvious 'explosion' phase in terms of the amount of data pertaining to the incident. It then plateaus, over an extended period of decline. However, during this phase there were notable 'surges' in the material circulating on social media relating to the crime. These appear to be associated with several secondary conflict episodes that occurred—often between the EDL and groups ideologically opposed to them. There was also an 'upswing' in communications traffic around the funeral of Lee Rigby. This suggests an opportunity to refine aspects of Collins' basic model in a number of important respects.

Defining the Situation and its Consequences

A key factor identified by the analysis is how the process of defining the situation was a propellant towards conflict. Sociologists, especially those affiliating with the symbolic interactionist tradition, have long demonstrated an interest in how social situations are collectively defined and the consequences that flow from these defining actions. The data informing this study illuminates, in fine-grained detail, how the collective work of defining unfolds. For what emerges is a picture of a complex and chaotic process of interactive sense-making where observations are reported, contests over meaning played out and rumours swirl into the mix.

Social media played a critical role in making the general public aware that a significant crime event had taken place. One member of the public present at the crime scene functioned as a 'citizen journalist', consistent with Greer and McLaughlin's (2010) analysis, using Twitter to make multiple contemporaneous eyewitness reports to his followers about what he had seen. These were retweeted and shared in significant volumes, effectively setting off the 'information explosion' depicted in Figure 1. Thus Twitter became a key vehicle via which many people became aware of the events in Woolwich, as information was circulating well in advance of any mass media communications or official statements from the police. One consequence of this was that, for a couple of

hours, there was uncertainty about what had actually transpired in Woolwich and what it might mean, as conveyed in the following messages:

Evening Standard is saying the victim might be an army cadet, terrorist incident? (15:54)

Is this some sort of terrorist attack?? #woolwich (16:22)

One person's head chopped off, is it really that big a deal? Its not a terrorist attack (16:26)

Annoyed that the focus has been given a terrorist angle because a solider was attacked outside the barracks. #woolwich #propaganda (17:15)

The first two messages are clearly speculative. Indeed, they are almost seeking to consult the social network about what has happened. The third and fourth messages in the sequence are actively seeking to deny the possibility of a terrorist motivation. Lots of the social media traffic from around this period are in either a speculative or denial mode.

A pivotal moment in defining the situation occurred just after 17.00, almost 3 hours after the killing, when London's LBC Radio started quoting Metropolitan Police sources that they were treating the incident as a terrorist attack. This broadcast had a dramatic impact upon the social media exchanges with this updated information being shared widely. In effect, LBC functioned as a 'credible voice' interjecting in a nebulous context to project a more authoritative definition of the situation:

BREAKING: The Met are now treating Woolwich as a terrorist incident. (17:16)

COBRA has been called to a meeting and it's being treated as a terrorist incident #woolwich RIP Soldier (17:28)

The establishment of this definition of the situation shifted the social media discourse, with far-right and anti-muslim voices becoming far more vocal and prominent. Less than an hour after the news breaking about it being a terrorist incident, the official EDL account tweeted:

@Official_EDL: ****CONFIRMED WE HAVE BEEN SUBJECT TO A TERROR ATTACK BY ISLAM, WE ARE CURRENTLY UNDER ATTACK**** (18:06)

Two features of this message are important to tease out. First, there is a collectivization of the threat by invoking that it is 'we' who have been attacked, not just the victim. Second, there is an attribution to 'Islam' rather than just the two suspects. Both aspects speak to the core ideology of the EDL, as described above. This was a significant message in shifting towards a conflict footing, that was shared on a significant scale. During this period around 9000 tweets per minute were being sent referencing the Rigby killing.

The sheer brutality of the violence enacted on the victim provided the raw ingredients for launching a 'politics of outrage' amongst those with established far-right sympathies (Greer and McLaughlin 2011). Accordingly, as the rhetoric escalated, EDL supporters started to use Twitter and several other social media platforms to organize and mobilize. At 18.26, the next tweet broadcast an intent to protest in Woolwich:

EDL leader Tommy Robinson on way to Woolwich now, Take to the streets peeps ENOUGH IS ENOUGH (18:26)

EDL Twitter and Facebook accounts played an important role in the attempts to rapidly mobilize a support group to engage in offline action. The potential for physical conflict was seeded by these online communications in a manner coherent with the concept of

'digitally enabled conflict' outlined previously. However, before investigating the efficacy of these moves and what happened next, it is important to understand the multiple roles and positions that were adopted as conflict dynamics were becoming established.

Multi-Polar Conflicts

A key axiom of conflict studies is that in conflictual situations there is a compelling 'norm' that few people seek to remain in conflict over an extended period (Francisco 2009). As Hardin (1995) asserts, 'Normal life is a fierce competitor of conflict'; a sentiment validated by our data. There are countervailing tendencies though, for as Collins (2012 p.2) notes, drawing on Coser (1956), external conflict increases group solidarity, but solidarity also induces conflict.

These dynamics and the interplay between them are all present in the data informing this study. Critically however, although the killing was being publicly defined as Islamist terrorism, the secondary conflicts arising in the aftermath, for the most part, did not gravitate around individuals and groups from this background. Instead, the key actors in these conflict dynamics were a coalition of groups on the far-right and far left, as well as a number of institutions. This is important inasmuch as in everyday use, the notion of conflict frequently implies a bi-directional opposition between two parties. The data collected for this study suggests this is an over-simplistic representation of what actually happened. Accordingly, in what follows, the accent is upon developing a 'multi-polar' conception of the dynamics of conflict.

To enable this analysis, a sample of tweets was drawn from across the dataset, and coded according to their authors' stance or position in the conflict and whether the content of their message was directed at any particular opponent. Based upon this, a number of key 'acting units' or groups within the conflict dynamics documented via social media were identified: extremist groups—including extreme right and left wing, and anarchists; hackers and other 'digital natives'; conspiricists; faith groups; journalists and media groups—the major TV and radio channels, all of the UK newspapers and a wide range of social media channels; groups defined by national identity; the police, security services and military; friends and families of the killers and deceased; campaign groups and charities; politicians and government organisations; and, other 'spokespeople' including celebrities, comics and academics. Many of the positions assumed and voices projected during the online response to the Rigby murder pivoted around coalitions involving multiple specific groups.

It was the leaders and supporters of the EDL and other extreme right wing organisations, such as the British National Party, Casuals United, Infidels and other smaller far right groups, who sought to initiate conflict multiaxially against Muslims, their established foes in the 'liberal elite' and the forces of 'cultural Marxism' (Busher 2016). Their actions triggered a counter-mobilization effort from a coalition of anti-fascist groups including Unite Against Fascism (UAF), and allied groups, such as Blacbloc, Redbloc and the 'hacktivist' collective Anonymous.

There is however an important and intriguing quality about how social media plays into such mobilization and counter-mobilization actions. This relates to the public nature of the communications, leading to them being used by both sides to try and motivate and organize their members. For example, in the first tweet below, it can be observed how the English Defence League tried to mobilize their supporters and others

who might affiliate with their position, to join a protest on the streets of Woolwich. This was followed shortly by their opponents re-tweeting the same text, in an attempt to inspire their own support base:

EDL ARE MARCHING TOWARDS WOOLWICH AS WE SPEAK (18:32)

Utterly irresponsible from @Official_EDL: "Tommy Robinson on way to Woolwich now, Take to the streets peeps ENOUGH IS ENOUGH (18:50)

@Official_EDL: Message from Tommy - Feet on the streets anyone want to go to Woolwich contact him/me, he will be there around 9pm (18:59)

The third message in this sequence, provides a sense of how repeated calls for support were broadcast via social media.

This was a recurring pattern in the data. Social media platforms played an important role in trying to mobilize offline protests, with the same messages and materials being re-used to occasion counter-mobilization activities. This may be an important issue in the dynamics of contemporary protest movements and warrants further investigation.

Shifting from an analysis of the messengers to message contents, as noted above, 5000 Tweets from the first week in May 2013 when conflict was especially acute were categorized in terms of whether they evidenced an oppositional stance to another group, or ideological position. This analysis revealed several key patterns, that can be summarized as follows:

- Although present, Islamist extremist messages were not large in number. When present they tended to assert negative views of 'moderate' Muslim communities;
- Extreme right-wing communications were far more prevalent, focusing principally upon expressing negative views about mainstream Muslims, and to a lesser extent the police and other governmental agencies.
- The extremist right wing communications were met with equally assertive claims from representatives of the anti-fascist coalition. There were also many negative sentiments expressed about the police.
- At this point in the arc of the conflict, journalists featured strongly in the discourse. As well as condemning extremist Islamist groups, there was quite a lot of negative sentiment expressed towards Muslims more generally. This was accompanied by 'pushback' from Muslim representatives lamenting the tenor of the coverage by mainstream media.

What can be observed from these communication patterns is how the explosion phase is driven by large numbers of ordinary people using social media to try and establish what is going on. However, their engagement with the story passes quite quickly as their interest moves on to gravitate around the next salient event, albeit they may re-engage around key secondary developments. Contrastingly, the people who stay with the story across the extended period of the 'plateau' tend to be aligned with political groups at opposing ends of the ideological spectrum.

This picture broadly coheres with Sunstein's (2008: 1) contention that, 'members of a deliberating group usually end up at a more extreme position in the same general direction as their inclinations before deliberation began.' In relation to the specific dynamics of violent extremist radicalization, Nesser (2014) labels this 'reciprocal radicalistion'. However, he does not develop this concept owing to the empirical limitations

of his methodology. The advantage of social media materials is how they both evidence and clarify the sequence of actions and reactions that take place between far right and far left groups as they seek to leverage the mobilization of group resources. Within this 'dynamic polarisation', we can also observe the workings of what Collins (2008) labels 'confrontational tension and fear'.

Escalation and counter escalation: polarizing solidarity groups

According to Collins (2012: 2), when an atrocity is publicly labelled as an attack by one group upon another, a series of feedback loops can be activated that increase feelings of solidarity. This can happen generally, such as in America post 9/11, or it can be confined to certain previously sensitized and polarized groups in society, or both. Solidarity is nevertheless a weapon of conflict for Collins, rendering groups more conducive to mobilising and fighting. Co-occurring with increased solidarity is enhanced sensitivity, such that groups become alert to perceived threats to their norms and boundaries. Conflict and solidarity cause counter mobilization in opposing groups, driving the familiar spiral of conflict escalation (Collins 2012 ibid). Drawing these strands of the analysis together, in what follows, we refer to 'polarised solidarity groups' to articulate how collective identity was being actively formed in opposition to an alternative political perspective and position.

Interestingly, the analysis suggests that as group bonds solidify and the sense of opposition becomes more acute, this folds back upon itself, inflecting the language of some participants, building tension further. A small number of messages on social media began to actively advocate violence. This extreme language was not present in the timeline before this point:

Its time we had a national shoot a paki day and have it every year at £5 a head (money to charity) cull them (18:15)

I HOPE THE EDL COME AND KILL THESE WANKERS ALL OF THEM. #woolwich #EDL (18:16) #woolwich attack. This is war. First gang raping our children now beheading people on the streets of south London in broad daylight #EDL (18:18)

IF ANYONE CANT GET TO WOOLWICH, PETROL BOMB YOUR NEAREST MOSQUE (EDL 18:30 Facebook and Twitter)

In one sense, these messages accord with the notion of 'digitally performed conflicts'—they are 'acting out' the social tensions triggered by events. However, intriguingly, there are hints of a recursive relationship at work. Analysis of the Metropolitan Police's recorded Hate Crime data intimates that expression of these sentiments was closely temporally aligned (within a 40-min window), with the actual commission of violence against Muslims and Muslim buildings. It is suggested tentatively that this might be diagnostic. These messages contain a blend of what Collins (2012) terms 'righteous anger' and 'an atmosphere of sadistic gaiety' (Horowitz 2001:2–3). For Collins (2012:5), at this 'high point' of polarization, the 'enemy' are cast as completely evil and deserving of what is done to them. During this time, Twitter traffic shot up to over 9000 tweets per minute, with 'ideological partisans' piling into the discourse on all sides. This movement in polarity was also seen on Facebook with 30,000 new likes being added to the EDL page during the evening.⁶

An important element of the analysis is showing that such reactions were not geographically confined. By analyzing a subset of 'geo-tagged' tweets, it is possible to observe that positive sentiment for the anti-muslim narrative at this point in time was occurring across the country. This was quite rapidly overwhelmed by the online counter-mobilization by anti-fascist groups and the middle liberal groundswell, that 'drowned out' the right-wing protagonists, but there was an initial surge in positive sentiment for the far-right and their anti-Islam message. Table 2 below shows a count of geo-tagged tweets conveying support for right wing groups or ideas, coded to specific geographic regions. Across the country, user interest built from 17:00 to 21:00 when street violence began, before tailing off.

These geospatial data are only a minority of the social media communications taking place as estimates suggest only about 1% of Twitter users 'geo-tag' messages. Nevertheless, it provides an intriguing indicator of how a surge in expressions of support for far-right racist views occurred across the country almost simultaneously. In turn, this might suggest a potential for violence in these locations. Indeed, this is what happened with violent hate crimes being reported in major towns and cities that night and for several weeks afterwards.

Violence

Apologies, my last tweet about the Chatham mosque was untrue but in fact it occurred on Canterbury Street in Gillingham. Oh Gillingham. (20:56)

Local mosque in Braintree attacked by man with knives + incendiary device. Man arrested. No one injured. Many thx 2 police 4 swift response. (21:36)

As the two messages above convey, in addition to tracking and tracing the moves and countermoves performed by different actors in the conflict, these data also enable the piecing together of an understanding of how and when violence occurred.

Sum of Tweet_Count g	eo_label 💌											
Timestamp .T	Class this direction	Essa of England	Landar	Worth East	HOM Ness	Scotland	GOUTE BE	South West	Hales .	West Helpfeld	Hottstire and Ti	grand Total
2013-05-22 14:00	0	0		0					0		0	
2013-05-22 15:00	0	0	0	0	0	0	0	0	0	0	0	0
2013-05-22 16:00	0	0	2	1 1	0	0	1	0	0	1 1	1 1	6
2013-05-22 17:00	5	- 1	5	0	3	1	1	1 2	0	0	3	21
2013-05-22 18:00	7	4	13	4	16	1	3	1 1	1 2	1 2	10	63
2013-05-22 19:00	9						7	1 1	0		6	56
2013-05-22 20:00	3	2	10	1 1	3	2	II 4	0	3	1	1 1	30
2013-05-22 21:00	7	17	41	8 4	30	13	31	B 3	7	16	15	184
2013-05-22 22:00	8	6	21	4	12	1 5	21	5	5	4	3	94
2013-05-22 23:00	6	8	14	1 1	14	2	II 4	8	6	10	5	78
2013-05-23 0:00	4	6	10	2	16	6	8	1 1	3	4	3	63
2013-05-23 1:00	0	0	3	0	1 1	1	3	0	1 1	0	14	23
2013-05-23 2:00	0	0	0	0	0	0	1	0	1 1	1 1	1 1	4
2013-05-23 3:00	1	0	0	0	0	0	0	0	0	0	0	1
2013-05-23 4:00	0	0	2	0	0	1	0	0	0	0	0	3
2013-05-23 5:00	0	0	0	. 0			1	. 0	1 2	. 0	4	12
2013-05-23 6:00	3	4	12	1 1	3	2	9	9	0	3	0	46
Grand Total	53	52	146	22	110	36	94	30	30	45	66	684

Table 2 Geospatial distribution of geo-tagged tweets in the EDL channel

Extending the qualitative analytic approach demonstrates how the materials collated via social media can be used to reconstruct, in fine-grained detail, an understanding of how a situation of rising social tensions shifted into actual violence. The Tweets reproduced below evidence how, by monitoring EDL messages, their opponents were also seeking to counter-mobilize their support to confront the far-right groups:

URGENT: reports (unconfirmed) EDL gathering in Wetherspoons in Woolwich #Antifa (21:02) Have it on good authority that #EDL are gathering in the Great Harry Wetherspoons in #Woolwich. Anti-nazis in the area be ready. (21:03)

In addition, these channels were being monitored by police and the media, with the latter using the information to position their journalists to acquire a good story:

Few EDL activists gathering in Woolwich. Says @EwartRoyale Police presence heavy as International press descend on small, scarred London St (21:04)

Shortly after this point in time, multiple messages appear in the dataset reporting violence between EDL supporters who had mustered in Woolwich and police:

Clash now on Woolwich New Road. EDL throwing glass missiles at the police (21:46)

EDL chants, missiles thrown at police lines. Cops putting on riot gear. came from nowhere. #woolwich (21:46)

EDL marching outside Woolwich DLR. About 60. Throwing bottles. Police lining up. Many black ppl in neighbourhood running away across square (21:48)

#Woolwich big crowd of EDL chanting 'whose streets, our streets' outside Woolwich Arsenal station. Threw bottles at police. (21:49)

Over in a flash. Police lines formed and suddenly withdrawn as edl disappear. Police moving out of #woolwich centre now (21:52)

Although our analysis suggests just under 35,000 supporters and opponents of the EDL engaged that evening in emotionally charged exchanges, and virtual interaction rituals on Twitter and other platforms, only about 60–100 people actually participated in physical conflict in Woolwich. They were quickly neutralized by a robust police presence. This episode showcases both the strengths and weaknesses of social media analytics applied to conflict situations. Relying purely upon social media data one might over-state the seriousness of the situation, as the volume of communications amplifies the potential implications. But equally, these same materials afford unique insights into how groups with an intent to engage in violence use these platforms to influence and persuade their affiliates to join the conflict.

Tea, Cake and Football Dissipates Conflict

In Collins' (2012) modelling of the temporal development of conflict, the concept of a 'plateau' phase implicitly connotes a relatively steady state of social tension below it's 'peak' level. By introducing data distilled from social media, however, we can significantly refine our understanding of what actually happens in the plateau phase. For the key insight that this provides is how this period is punctuated by a series of significant episodes, where the potential for further conflict presents. Sometimes violence occurs, but other times it does not. To illustrate this, two case study analyses are presented. The

first focuses upon events around York Mosque and the second upon the moment when the hacktivist collective Anonymous entered the conflict.

Although following Lee Rigby's murder, country-wide reports were received of violence against people and buildings affiliated with the Muslim faith, one particular story 'cut through' this atmosphere of concern and tension. It told of how an EDL march in York was disrupted when local mosque members had come out and talked with the marchers over a cup of tea, and a friendly game of football had ensued. It was a narrative achieving almost iconic status in terms of the restoration of social order at a moment where it was imperilled. It resonated especially deeply and profoundly owing to how it described symbols of English identity (a cup of tea and biscuits, and football) dissipating potential racial conflict. That being said, a careful reading of messages on Twitter suggest what actually happened was substantively different from the mediated narrative propagated subsequently.

The story starts on 23 May 2013, following a night of public disorder caused by EDL members, when a message was posted on the Scarborough EDL Division Facebook page:

The planned protest was scheduled for the day following a large demonstration in Newcastle, and prior to another the day after in Downing Street. In fact, only five supporters attended on the 26 May in York, from a division capable of fielding many more. The EDL supporters who did show were massively out-numbered by a counter-protest. The Facebook post by the EDL's Scarborough division on the $23^{\rm rd}$ had triggered alarm amongst some Twitter users, who had engaged social media channels to mobilize a coalition of local groups and institutional representatives willing to confront any potential troublemakers. Indeed, on the day of the demonstration somewhere between 100 and 150 local people and students gathered at the mosque named by the EDL, to demonstrate their solidarity with the local Muslim community. Given the large differences in numbers on the two sides, it is perhaps unsurprising that the small number of EDL activists preferred to have a cup of tea and play football than ferment conflict.

Analysis of the Twitter data implies that the counter-mobilization to the perceived EDL threat was 'scaffolded' by an extant social network involving members from the mosque, and students and staff of York University. On Saturday 25th, the University's student newspaper (which is published online and in print), posted a story with the headline 'Twitter raises fears of York EDL rally'. It stated that an anti-EDL protest was being organized involving the Student's Union and the University's Amnesty International section.

Details about the counter-action were widely retweeted. By the morning of the planned EDL demonstration, a sizeable volume of Twitter traffic was disseminating the call to participate in the response to a deliberately provocative move by the farright group (Figure 3):



demonstration on Sunday at bull Lane mosque York. please come along.
no SURRENDER.

Fig 3 Scarborough EDL Division Facebook page.

The #York community has been invited for tea at York Mosque (Bull Lane) today from 2pm to stand up to EDL threats. Pls RT

YORK PEOPLE: Bull Lane Mosque, just off Lawrence Street has received threats of an EDL action. A counter-demo is assembling.

When the small number of EDL members arrived outside the mosque and were confronted by a much larger crowd of people, it was reported thus:

At #YorkMosque the EDL (we assume) have just appeared. Everything calm. They're about to be invited to tea.

Some EDL at #Yorkmosque. All peaceful now. Tea and biscuits with the fascists. Oh #york.

Several tweets and blogs (and subsequently multiple accounts written by journalists) featured a picture of a female EDL supporter taking a cup of tea from a mosque representative. Later the supporters and protesters dispersed peacefully.

It was only after the potential for conflict had been dissipated that the construction of a stylized public narrative started to take hold. That evening, several tweets started to 'spin' the earlier events in a particular way. No mention was made of the tiny EDL turn out. Indeed, reading these accounts one might easily be forgiven for inferring that a significant risk of violence had been neutralized by the liberal application of tea and cake:

Amazing rumours that the EDL has been thwarted in York by a Tea party hosted by the Mosque. Bloody love my home town

#EDL showed up for a rally outside a York mosque today only to find 100 locals defiantly sipping tea and eating cake.

These tweets subtly perform some important symbolic work. By linking a quintessential symbol of Britishness—a tea party—to the mosque, they connote a message of how a very different faith tradition has been integrated within the local rituals and rhythms of life in Yorkshire. In so doing, they provide an account of community resilience and how risks of inter-community conflict can be mitigated. In a slightly different conceptual register, this particular episode showcases the workings of both the 'digitally enabled' and 'digitally performed' dimensions of contemporary conflicts.

An Anonymous Intervention

Sporadic episodes of violent hate crimes and public disorder continued throughout May 2013. On the 27th of that month, it emerged that the EDL's webpage had been hacked and 'taken down'. Responsibility for this was claimed by the online collective Anonymous UK. In the following days, personal addresses and telephone numbers of the leadership and members of the EDL were posted on 'Pastebin'.

Indications that Anonymous were planning to engage in the conflict situation were present in social media messages posted in the days preceding the above action:

#EDL racist bastards must be stop. They spread islamophobia in the UK and around the world. $\#anonymous\ \#OpEDL\ (14:00\ 23^{rd}\ may)$

#CallToAction #Anonymous! #EDL organize an event in #London. Wear your mask peacefully and help teach some manners! (23rd)

Aside from a couple of in-depth journalistic accounts of Anonymous (Coleman 2014), relatively little is known about it's community of membership. Whilst a global community, UK affiliates or 'anons' as they are known, have campaigned against a wide range and sometimes eclectic mix of issues, including: opposition to GM food manufacturer Monsanto; censorship—free speech on the Internet and social media; student rights; and, opposition to several large corporations. The Twitter data suggests they support Anti-fascist groups including Unite Against Fascism and Hope Not Hate. They have also shown support for Wikileaks and its founder Julian Assange, and Edward Snowden.

In respect of the Woolwich action, it is not possible to establish how their mobilization was accomplished or by whom, other than the posts are in English with UK identifiers. It did have an important impact upon the overarching conflict dynamics however, and highlights the increasing salience of 'digitally dependent conflicts' in social scientific analyses of social order more generally.

In a manner redolent of the process followed by the other groups in the lead up to engaging in a conflict, prior to their participation, tweets from representatives of Anonymous displayed increasing emotional intensity:

#BNP and #EDL accused of attempt to fuel #Racial hatred after #Woolwich #Terror attack @ http://t.co/T1Rg26Tcw1 RT #Anonymous (25th may)

Anti #EDL counter protest! Don't let RACISTS divide us! Join us tomorrow 2pm Downing Street. #Anonymous (26th)

And then just prior to the attack on the 27th, it was clearly signalled that an active intervention was imminent. The inclusion of the 'OpEDL' hashtag is a signature device that has been used previously to convey that a defined operation is due to be launched:

#OpEDL @EDLTrobinson warning, warning, anonymous on this case @EDLTrobinson We have been watching. We have been judging. #OpEDL ENGAGED #Anonymous

As can be seen in the tweets above that were widely retweeted, the tone had changed with Anonymous activists moving to an attack posture. The word 'ENGAGED' has also been used prior to other Anonymous cyber-attacks. The social reaction to this informal social control intervention by Anonymous was positively received by many Twitter users, with lots of expressions of support being shared.

On the 4 June, a second data release was made by #AnonymousUK and #Zhc (Z Company Hacking Crew), this time purporting to identify individual EDL members with criminal histories. The intent here was clearly to systematically discredit the EDL and it's supporters by publishing information on their convictions. For example, one individual was linked to child pornography, a subject the EDL has campaigned vigorously against nationally and locally (Pilkington 2017; Robinson 2015). After this point in June 2013, the Anonymous action declined in intensity, following the trend seen across other community mobilizations in the wake of the Lee Rigby murder. Anonymous, like other communities, moved onto other issues.

There are several implications for the analysis of contemporary conflict dynamics to be drawn from this episode. First, it demonstrates how the groups engaged in conflict can shift and change over time. In this instance, Anonymous actively entered a conflictual situation relatively late, but had a decisive impact upon its trajectory of development. In so doing, it is possible to distinguish the extent to which informal social control actions are an important part of what drives and mitigates violence. Of

particular interest and salience is how their intervention is purely 'digital', but nevertheless influences both the offline and online consequences. Anonymous's intervention appears to have played a pivotal role in shifting the conflict towards Collins' (2012) 'dissipation phase'. The EDL members whose personal details were published online, became more concerned by the risks to them, making them less able to organize and stay emotionally focused upon conflict actions.

The 6-day period following the murder saw daily street protests by the EDL and other far right groups in towns and cities all over the country; some involved over 1000 supporters and almost as many opponents. But by early June that intensity had begun to subside. One additional key event in marking the decrease in tension was the funeral of Lee Rigby on 12 July 2013. At this moment, Twitter and the other social media platforms became vehicles for acts of collective remembering and digital performance that, for the most part, had a more reflective tone:

Lee Rigby. You have united this country. You will be remembered with dignity. Your comrades and countrymen salute you. Rest in peace \dots

hero (10:00)

Wearing my union jack dress with pride today #rip #leerigby

That said, there were a small number of messages whose purpose seemed to be to try and keep the conflict going, containing links to extreme right wing websites and propaganda:

Today, respect the sacrifice of Lee Rigby. And then redouble your efforts to stop it ever happening again - XXXXXXX (link redacted to British National Party propaganda page) (11:45)

However, despite such attempts to reignite the conflict, and there were subsequent acts of violence, from around this point in time the plateau phase started to weaken and dissipation set in.

Conclusion

This extended case study suggests Collins' (2012) three phases of conflict dynamics are supported by the empirical social media data collected following the terrorist murder of Lee Rigby in 2013. Such data provide a high resolution view that can retrospectively track and trace the interactions between different groups as they choreograph their way through sequences of moves and counter-moves, actions and interactive adjustments, endowing the resulting conflict episodes with a defined 'arc'. Equally importantly however, exposure to empirical data allows us to refine and elaborate aspects of Collins' original model. There is a clear 'explosion' as public interest ignites and then develops. Partly this is driven by members of the general public utilizing social media to try and determine what is occurring. Alongside these general participants however, are members of defined ideological interest groups who become activated by the event and contribute to it. From our analysis, it appears that whilst general public interest falls away quite quickly, more ideologically motivated groups stay engaged in the conflict dynamics over an extended period.

A second key feature of the analysis is in demonstrating just how significant social media has become in the social organization of contemporary conflict. This is a trajectory of development especially salient to contemporary criminological analyses,

which are increasingly alert to how media dynamics are rendering more complex the ways that definitions of the situation are established and coalitions amongst protesting groups fashioned (Greer and McLaughlin 2010). Procter *et al.*'s (2013) work started to tease out some of these issues when looking at the London riots of 2011. The current analysis moves this approach on, particularly by integrating the theoretical framework derived from Collins. Other studies have documented how in the aftermath of terrorist attacks digital social media propagates online 'cyber-hate'. Herein, the role of such platforms in the social organization of offline conflicts has been significantly elaborated by attending to the workings of 'digitally enabled' and 'digitally performed' conflicts.

In this respect, the empirical data support two key claims about the social organization of conflict dynamics. The first concerns the interactive nature of the conflict, as various actors move and adjust their positions in response to actions performed by other groups to whom they see themselves as either opposed or aligned. A significant finding in this respect is how they monitor open source communications data and make use of this to try and discern their opponents' intents and actions. The second claim concerns how the detail afforded by these digital data provide compelling insights into the complex array of relationships that emerge and evolve over the course of a conflict. There are a multitude of formal and informal social control activities being performed by a whole variety of actors. Contemporary criminological accounts of the workings of informal social control, certainly need to accommodate this digital dimension (Innes 2003).

Accordingly, future theoretical modelling work, particularly that relating to political extremism, needs to attend more closely to the interactive and multi-polar aspects of conflict. This analysis has catalogued conflicts between: far-right and left-wing coalitions; far-right groups and the police; contests over meaning between journalists, citizens and Government on social media. Teasing apart how these conflictual relationships are digitally enabled and digitally performed is a necessity for leveraging valid insights from research in this area.

These concepts and insights have important policy and practice implications. The murder of Lee Rigby was rapidly and publicly defined as an Islamist terrorist attack. However, the episodes of online and offline conflict that arose following this crime, involved a multitude of groups, networks and institutions. Critiques of the UK government's Prevent counter-extremism strategy have identified an over emphasis upon Muslim issues, effectively casting them as 'suspect communities' (Pantazis and Pemberton 2009). The analysis set out herein, clearly demonstrates that improving the consequence management of terrorist incidents, requires a more rounded and nuanced approach. Although the initial violence was performed by individuals propounding an Islamist agenda, the subsequent violence was, for the most part, conducted by far-right extremists.

There are limits to what a case study analysis can say about the presence or absence of patterned sequences underlying the theory of time dynamics of conflict. As such, any conclusions are necessarily tentative and provisional. But what this analysis has shown is that there are a number of core behaviours that take place on social media that play an active role in shaping and constituting the broader social reaction that occurs. In this respect, engagement in virtual interaction rituals seems to be an important component of conflict dynamics and of the secondary conflict events. In this sense, the contemporary 'arc of conflict' is increasingly digitally enabled and digitally performed.

REFERENCES

- AMOORE, L. and РІОТИКН, V. (2105), 'Life Beyond Big Data Governing with Little Analytics', *Economy and Society*, 44: 341–66.
- Bartlett, J. and Miller, C. (2013), @metpoliceuk: How Twitter is Changing Modern Policing. Demos.
- Brym, R., Godbout, M., Hoffbauer, A., Menard, G. and Zhang, T. H. (2014), 'Social Media in the 2011 Egyptian Uprising', *British Journal of Sociology*, 65: 266–92.
- Busher, J. (2016), The Making of Anti-Muslim Protest: Grassroots Activism in the English Defence League. London: Routledge.
- Cassa, C. Chunara, R., Mandl, K. and Brownstein, J. (2013), 'Twitter as a Sentinel in Emergency Situations: Lessons from the Boston Marathon Explosions', *PLOS* http://currents.plos.org/disasters/article/twitter-as-a-sentinel-in-emergency-situations-lessons-from-the-boston-marathon-explosions/
- COLEMAN, G. (2014), Hacker, Hoaxer, Whistleblower, Spy: The Many Faces of Anonymous. Verso.
- Collins, R. (2008), Violence: A Micro-Sociological Theory. Princeton: Princeton University Press.
- COLLINS, R. (2012), 'C-Escalation and D-Escalation: A Theory of the Time-Dynamics of Conflict', *American Sociological Review*, 77: 1–20.
- COPSEY, N (2010), The English Defence League: Challenging Our Country and Our Values of Social Inclusion, Fairness and Equality. Posted by Faith Matters, November 20, 2010. https://www.faith-matters.org/.
- COPSEY, Nigel. (2016), Anti-Fascism in Britain. 2th edn.
- Coser, L. (1956), Functions of Social Conflict. Free Press.
- Cottle, S. (2008), 'Reporting Demonstrations: the Changing Media Politics of Dissent', *Media, Culture and Society*, 30: 853–72.
- EDELMAN, M. J. (1985), *The Symbolic Uses of Politics*. Political Science. University of Illnois Press.
- Francisco, R. (2009), Dynamics of Conflict. Springer.
- Garland, J. and Treadwell, J. (2010) 'No Surrender to the Taliban': Football Hooliganism, Islamophobia and the Rise of the English Defence League. Panel paper. *Papers from the British Society of Criminology Conference*. 10: 19–35.
- GEERTZ, C. (1973), Interpretation of Cultures. Basic Books.
- GOFFMAN, E. (1959), The Presentation of Self in Everyday Life. London: Penguin.
- Greer, C. and McLaughlin, E. (2010), 'We Predict a Riot: Public Order Policing, New Media Environments and the Rise of the Citizen Journalist', *British Journal of Criminology*, 50: 1041–59.
- Greer, C. and McLaughlin, E. (2011), 'Trial by Media: Policing the 24–7 News Mediasphere and the Politics of Outrage', *Theoretical Criminology*, 15: 23–46.
- HARDIN, R. (1995), One for All: The Logic of Group Conflict. Princeton University Press.
- HOROWITZ, D. L. (2001), The Deadly Ethnic Riot. University of California Press.
- INNES, M. (2003), Understanding Social Control. Maidenhead: Open University Press.
- INNES, M., ROBERTS, C., PREECE, A. and ROGERS, D. (2016), 'Ten Rs of Social Reaction: Using Social Media to Measure the Post-Event Impacts of the Murder of Lee Rigby', *Terrorism and Political Violence*.
- Intelligence and Security Committee. (2014), Report on the Intelligence Relating to the Murder of Lee Rigby. House of Commons.

- JACKSON, P. and FELDMAN, M. (2011), *The EDL: Britain's 'New Far Right' Social Movement*. The University of Northampton.
- LEFEBRVE, K. and ARMSTRONG, C. (2016), 'Grievance-Based Social Movement Mobilization in the #Ferguson Twitter Storm', *New Media and Society*.
- LOADER, I. and MULCAHY, A. (2003), Policing and the Condition of England: Memory, Politics and Culture. Clarendon Press.
- McEnery, T., McGlashan, M. and Love, R. (2015), 'Press and Media Reaction to Ideologically Inspired Murder: The Case of Lee Rigby', *Discourse and Communication*, 9: 1–23.
- McLaughlin, E. (2014), 'See Also Young, 1971: Marshall McLuhan, Moral Panics and Moral Indignation', *Theoretical Criminology*, 18: 422–31.
- Nesser, P. (2014), Islamist Terrorism in Europe. Hurst.
- Pantazis, C. and Pemberton, S. (2009), 'From the 'Old' to the 'New' Suspect Community Examining the Impacts of Recent UK Counter-Terrorist Legislation', *British Journal of Criminology*, 49: 646–66.
- PASQUALE, F. (2015), The Black Box Society. Harvard University Press.
- PILKINGTON, H. (2017), 'Gender and the Radical Extreme Right: Mechanisms of Transmission and the Role of Educational Interventions,' *Journal: Education and Gender*, 29: 238–57.
- PILKINGTON, H. (2016), Loud and Proud: Passiona and Politics in the English defence League. Manchester: Manchester University Press.
- PROCTER, R., CRUMP, J., KARSTEDT, S, Voss, A. and CANTIJOCH, M. (2013), 'Reading the Riots: What Were the Police Doing on Twitter?', *Policing and Society*.
- ROBINSON, T (2015), Tommy Robinson Enemy of the State. The Press News Ltd.
- TREADWELL, J. and GARLAND, J. (2011), 'Masculinity, Marginalization and Violence: A Case Study of the English Defence League', *British Journal of Criminology*, 51: 621–34.
- SIMMEL, G. (1922/1955), Conflict and the Web of Group Affiliations. (translated and edited by Kurt Wolff). Free Press.
- STRAUSS, A. and CORBIN, J. (1988), Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, 2nd edn. SAGE Publications, Inc.
- SUNSTEIN, C. R. (2008), Why Groups Go to Extremes, Washington, D.C: AEI Press.
- WILKINS, L. T. (1964), Social Deviance Social Policy, Action and Research. 1st edn. Tavistock Publications.
- WILLIAMS, M. L. and BURNAP, P. (2015), 'Cyberhate on Social Media in the Aftermath of Woolwich: A Case Study in Computational Criminology and Big Data', *British Journal of Criminology*, 56: 211–38.