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ABSTRACT:

Purpose: Taming the complexity of crisis and integrating diverse narratives and sources regarding crisis events is a serious challenge. This paper presents a methodology for reconstructing, dissecting, and thematically comparing crisis experiences, using the 7/7 London Bombings of 2005 as an illustrative empirical application.

Design/methodology/approach: A *cognitive-institutional process-tracing* methodology suitable compatible with structured focused comparison of crisis cases (Stern and Sundelius, 2002; c.f. George and Bennett, 2005) is used. This cognitive-institutional process tracing and analysis strategy consists of four steps—contextualization, development of a synthetic chronological narrative, identification and reconstruction of decision occasions, and (comparative) thematic analysis.

Findings: The paper demonstrates the feasibility of applying the methodology to real world cases in the UK and concludes with reflections about the need for contextualized, systematic post mortem crisis analysis taking into account problem and process complexity, differential crisis performances of individuals and organizations under adverse conditions, and the increasing importance of social media and personal communications devices for crisis research and practice.

Research implications: This research strategy has been widely used to study public sector crisis management, though primarily in Sweden and a number of other smaller European countries. It can potentially be applied to good effect in larger countries such as the UK and the United States, as well as in the study of private and non-profit sector organizations.

Practical implications: The methodology used in this article has the potential to improve the effectiveness of organizational learning and reform efforts in the wake of crisis experiences.

Social implications: Insights associated with the application of this methodology can lead to improved post-crisis learning and fairer accountability processes, and thus contribute to enhancing societal resilience.

Originality: The study not only presents an original methodology developed by one of the authors, but also provides a systematic, relatively comprehensive and theoretically informed analysis of the July 7 London Bombings based not only upon the documentary record, but also upon a substantial number of interviews.

Key Words: Crisis, Crisis Management, Cognitive-Institutional Process Tracing, Method, London Bombings.

Introduction

Crises are dramatic events that test the coping capacity of organizations and those who lead them (Boin et al, 2005; Smith, 2006; c.f. Weick, 1988). They stem from complex, cascading and contested processes (Perrow, 1984). Misperceptions and deviations from rules or procedures at the individual, organizational, societal, or technical, levels are often judged with 20/20 hindsight (Turner, 1978). Accounts produced by learning and accountability processes tend to be selective and divergent (Boin, 2009). Post crisis atmospheres are permeated with politically motivated debates over blame and accountability (Hood, 2011; Boin; 't Hart & McConnell, 2009). Pressures in the form of post-crisis investigations, public inquiries and media reporting tempt crisis managers resort to denial, opportunistic spin, scapegoating and quick fixes instead of focusing on reform and system improvements (Boin & 't Hart, 2003; Stern, 1997; Smith & Elliott, 2007). Learning then tends to be underdeveloped or distorted in the crisis aftermath. Yet, it is increasingly recognized that failing to learn from crisis experiences is a luxury that organizations can ill afford (Deverell and Olsson, 2009; Drupsteen & Guldenmund, 2014).

This article presents an integrative method for crisis reconstruction and dissection which can contribute to a more systematic and multi-dimensional understanding of practitioners' efforts to frame and solve crisis issues (Stern, 1999), providing a potentially enhanced knowledge base for both scientific and practical purposes. In approaching this task, an analogy from the medical realm is used as a point of departure. Through cumulative study of cases including forensic analysis of the remains of deceased persons, invaluable knowledge regarding causes of death (natural and 'suspicious'), progression of disease, and efficacy of various medical diagnoses interventions has been generated (Mackowiak, 2007; Goldman et al, 1983).

However, a glaring difference between the realms of forensic medicine and crisis analysis, is that in the wake of an organizational or national/societal crisis there is generally no single, integrated, physical corpse to be studied. Rather, the 'remains' of the crisis are fragmented, diverse, widely distributed, and take the form of a variety of textual/media artifacts (such as government records/documents) and professional/personal recollections. This poses a significant empirical challenge and one that tends to require significant investment of time and resources. While there are complementary approaches which may be simpler and cheaper to administer (such as using surveys to capture the impressions of crisis managers and citizens, computer-enhanced debriefing techniques such as the so-called 10,000 volts approach¹ and social media content analysis)—these tend to deemphasize the context (historical, social, psychological, political, organizational), critical micro-history, and (inter-) organizational processes of the event—all of which play important roles in influencing outcomes and have potentially profound implications for lesson-drawing.

In this article, a process-tracing and comparative case research strategy which has been employed in several large scale research programs and generated several hundred detailed crisis management case studies (see e.g. Stern and Sundelius, 2002; Hermann and Dayton, 2009; Deverell, 2010) will be explicated and illustrated—using empirics from a major UK case: the London Bombings (7/7) of 2005.

On July 7th 2005 the morning rush hour in London formed the backdrop for a series of coordinated suicide attacks against the public transport system. Three parts of the London subway system were attacked around 08.50: Aldgate, Edgware Road, and Russell Square. Three trains were all hit within 50 seconds time. A bomb on the upper floor of a double-decker bus at Tavistock Square was detonated at 09.47. In sum, four suicide bombers detonated one charge each, killing 52 people and injuring more than 700. Hundreds of rescue workers were engaged in coping with the aftermath. Over 200 staff from the London Fire Brigade, 450 staff and 186 vehicles from the London Ambulance Service, several hundred police officers from the Metropolitan Police and from the City of London Police, as well as over 130 staff from the British Transport Police were involved (LFEPA 2006; BTP 2005). Patients were sent to seven area hospitals (Benetto & Herbert, 2005; LAS, 2005).

Focusing on what Smith (1990) calls the operational crisis, the bombings set in motion a chain of events generating a series of difficult practical challenges for the government and society of the UK. The process-tracing methodology briefly described below will be used to identify some of the most significant and instructive of these.

Method

Traditionally, the process tracing method is used to trace the relation over time between a set of independent variables and the dependent variable in order to identify the causal chain and critical causal mechanisms (George and Bennett, 2004: 206). We use an adapted version of the process tracing method focusing on case reconstruction and decision making occasion analysis. The approach is apt for studying complex processes such as crisis management. The method consists of four steps designed to contextualize, reconstruct, dissect, and then analyze a crisis from different perspectives. The steps are contextualization, chronology/narrative, decision occasions, and thematic comparison.

The *first step* is to put the crisis in to its proper historical, institutional/organizational and political context. No crisis takes place in a vacuum. How a crisis occurs, is understood, managed and remembered, depends in large measure upon these key factors (Turner, 1976; Stern, 1999; Ullberg, 2013). Does the crisis center on a novel and relatively unexpected issue or is there a previous history of and legacy from previous similar (or other paradigm shifting) contingencies? What are the key features of the pre-crisis institutional/organizational/political environments? For example, to properly understand the U.S. Hurricane Katrina experience of 2005, it is necessary to understand (among other key factors) the legacy of previous Gulf Coast hurricanes, the negative impact of 9/11 on natural disaster preparedness, the legal and disaster planning arrangements under the Stafford Act and the National Response Plan, as well as partisan political tensions between the Bush administration and state/local governments (Parker et al, 2009).

The *second step* is to reconstruct the course of events. What is it that triggers the crisis and motivates key decision makers to act at various junctures? Many (but not all) crises begin with a dramatic, unexpected event. Some crises get a relatively quick closure while others tend to be drawn out, and may gradually turn into an enduring legitimacy crisis affecting the self-esteem and political maneuverability of government agencies and the public's trust in those agencies (Boin et al, 2005). Swedish examples of to this day contested and “unfinished” crises of this kind include the murder of Prime Minister Olof Palme (1986) and the MS Estonia ferry catastrophe (1994) while the enduring controversy surrounding the JFK assassination of 1963 stands out as a good example from the American context.

Whatever the trajectory, the key events are initially described chronologically, using available empirical material, such as government documents and press releases, official evaluations, Congressional or Parliamentary testimony, Reports from Commissions of Inquiry, traditional and social media sources, interviews, political biographies/autobiographies/memoirs etc. Various sources are combined and weighed against each other via source criticism, in order to produce a synthetic narrative (Bates et al, 1998; Stern 1999).

The *third step* is to break the crisis down into occasions for decision. An occasion for decision is a development in the ongoing course of events, which demands answer to the question, “What do we do now?” Three different criteria are relevant when identifying decision occasions. *Prominence in the crisis decision-making process*: which problems were regarded as the most important ones for the decision-makers to deal with? *Post hoc importance*: These are issues that might not have been seen as especially important during the crisis, but in retrospect—for example drawing on points emphasized in the crisis accountability process-- seem to have had a dramatic impact on the course of the events (c.f. Boin et al, 2008; Smith, 2006). *Pedagogical value* looks for potential examples of good or poor practices. These are the decisions that could serve as a good example for future crisis decision-making, or alternatively, those which had (or could have had under slightly different circumstances) negative impacts on the crisis management.

Decision occasions are generated as reactions to an *impetus*, a stimulus of some kind which generates a problem (or problems) for crisis managers. During the Cuba missile crisis—a classic of the crisis management literature-- the discovery of Soviet missiles in Cuba was the initial impetus which then sparked a series of challenges for the Kennedy administration (Allison, 1987). The impetus, which activates decision makers, might come from inside or outside the government apparatus. It could be a result of a dramatic event, changes in systematic indicators or signals received through formal or informal feedback. When there is information that “something has happened”, a decision unit forms to deal with a particular problem or set of problems (Hermann, Hermann, and Hagen, 1987). It's important to observe that such a decision unit might diverge dramatically from those described in organizational charts or mandated in constitutional arrangements. The *effective decision units* are formed in the interaction between codified requirements of governing, informal institutional rules and practices and contextual

factors (Stern and Sundelius, 2002). Especially early on in a crisis, time pressure or overload higher up in hierarchies may lead to key decisions being made by decision units composed of decentralized, informal and operational decision makers rather than formally mandated strategic crisis management teams (‘t Hart et al, 1993).

Having identified a decision unit, the next step is to examine problem framing, decisionmaking and implementation (Stern, 1999; c.f. Klein, 2001). The focus on the this broader trajectory is motivated by the belief that experience, organizational culture and other contextual factors (see above) shape problem perception and behavioral propensities well before critical choices are made. It should be noted analyzing problem framing and decision-making is empirically demanding and resource intense. The written record often emphasizes what was done and it is often necessary to use interviewing or other oral history techniques to complement the documentary record.

The result of a given decision occasion—not least when unintended consequences or reactions ensue-- tends to set the stage for the next one.... Note that in the empirical application presented below, we are providing preliminary sketches of the key decision occasions for illustrative purposes, rather than full blown process traces.

The *fourth step* in the model is comparative thematic analysis. A number of themes have emerged from former research, themes designed among other things to facilitate comparison (benchmarking) among different cases and identification of best (and lesser) practices (Boin et al, 2005; Stern 1999; Newlove et al, 2001; Deverell, 2010).

Application of the Process-Tracing Methodology: The London Bombings of 7/7 (2005)

In this section, the four step analytical framework developed above will be applied to the 7/7 case.

Step one: Place the crisis in its proper historical, institutional, legal and political context:

To understand and usefully analyze the behavior and organizational effectiveness of crisis managers during the London bombings, it is important to identify a number of key contextual features. Sadly, 7/7/2005 was far from the first time that London was bombed. In addition to the experience of Nazi terror bombing during WWII, London had extensive experience of terrorism linked to the conflict in Northern Ireland. Similarly, prior experience of jihadi terrorism in other Western countries (e.g. the September 11 and March 11 attacks on New York and Madrid respectively), the Bali Bombing of 2002 as well as the continued turbulence in the Middle East, also affected the frames of reference of leaders, first responders, and citizens alike (Trendall, 2005; Seldon et al, 2007). As Prime Minister Tony Blair later wrote (2011:1225):

“ I was continually conscious of the fact that terrorists would love to strike at Britain. We had more or less regular updates and briefings and were watching

numerous cells of activity.”

On the more operational level, the British police had proactively developed (so called ‘Kratos’) guidelines for dealing with suicide bombers based on experience from, among others, Israel (Leppard and Calvert, 2005; Burns, 2005). These guidelines—and a less than perfect implementation of them—would have dramatic consequences in the aftermath of the 7/7 attacks when an innocent Brazilian electrician was killed by Police who mistakenly thought a suicide bombing attack was imminent (Dodd and Katz, 2006). Prior experiences (one’s own and vicarious) had implications not only for psychological resilience and threat perception, but also for the institutional arrangements for crisis management (Deverell, 2012; Brändström et al, 2004). At the time of the 7/7 attacks, the UK had already developed a legal and organizational framework based on the Civil Contingencies Act of 2004 and a nation-wide framework (UK Resilience) for facilitating public-private partnership and whole of government response (cf. Christensen & Laegreid, 2007). This system was intended to provide a means of linking efforts at local, regional, and national levels as well as across the gap between public and private sectors.

In terms of the national level and British domestic politics, Prime Minister Tony Blair had been in office since 1997. In late 2004, he had announced that he was going for his last term in office. This could have warranted a degree of political stability (Seldon et al, 2007). Such hopes were dashed, however, as Blair had sided with the widely unpopular US president and brought the country into the war in Iraq (Rawnsley, 2010: 444), a factor also thought to have brought the UK into the sights of Islamic violent extremists such as the 7/7 bombers (Blair, 2010: 568; Rawnsley, 2010: 336; Seldon et al, 2007: 237). This, in turn, opened up for fierce leadership challenges spearheaded by Gordon Brown, but grounded within the party (Blair, 2010). Despite these problems, Blair did win the May 2005 general elections, but he had to settle with a reduced majority (Kavanagh, 2005). In short by July 2005, the previously much admired leader of Cool Britannia had lost much of his popularity and authority (Seldon et al, 2007: 263; 346).

Step two: Reconstruct the crisis

As mentioned above, before one can dissect a crisis, one has to reconstruct the ‘body’. Generally this entails making use of several types of sources. The first is official government (or other organizational) sources such as press releases, material from official web-sites, press conference videos, audio tapes, or transcripts, testimony by officials to Parliamentary bodies or Commissions of Inquiry etc. Depending upon the political-cultural and legal context (e.g. with regard to freedom of information) and the timing in terms of distance from the event, this body of sources may be more or less extensive, complete and candid. After action sessions, witness symposia, and interviewing of involved and/or otherwise knowledgeable persons can provide additional accounts by individuals or units.

In this case, we based the interviewing on a bottom-up approach, where crisis managers in various operative and regional functions were interviewed first. This operative/regional point of departure was eventually complemented by additional interviews and study of mass media sources to begin to reconstruct the course of events and coping processes at

the national level. Interviews were carried out in late 2005 and early 2006 with 34 decision-makers at various levels of the British crisis management system, from the Cabinet Office to the blue light services. Table 1 gives a brief overview of the respondents. The interviews revolved around open ended questions that encouraged interviewees to tell their own stories in order to incite organizational and individual responses, actions and deliberations (cf. Sackmann, 1991).

----Table 1 in here ----

Additional key sources of information behind our reconstructive efforts were reports from the various inquiries and traditional media sources such as the major British newspapers: The Guardian/Observer, The Times, The Independent and Financial Times, as well as the TV and radio networks of the BBC. ‘Media sources’, which include the products of both traditional and social media outlets, are a key complement to the ‘official’ sources/perspectives. Media accounts may be more inclined to identify and dramatize potential shortcomings over time. Journalistic (and citizen) sources thus provide an alternative account regarding governmental processes and performance which usefully complements the ‘official sources’ and can provide a very useful frame of reference for source criticism and analysis. Such sources may be contrasted against government and political sources as they are often interested in portraying themselves and their organizations in a positive light (and occasionally rivals in a less flattering way). On that note, Resilience 05 – Sharing London’s Lessons, a high-level multi-agency debriefing conference aimed at sharing the experiences of the organizations involved in the management of the event in London’s Guildhall on October 5, 2005 was attended. As they become available, social science and historical works as well as political memoirs also add additional levels of detail and analysis that can inform process-tracing.

At the time that our initial case research on 7/7 was conducted (late 2005 and early 2006), putting together the chronology was a painstaking task of laying a mosaic based on information from a variety of available sources. As time has passed—and additional organizational after-action reports and public inquiries have taken place—several other chronologies have become part of the public record. A number of these reports have discussed in detail whether British authorities could have predicted and prevented the bombings (HM Government report 2006a, 2006b, 2006c). Other reports have emphasized what went well, while others have been searching for things to improve. London Resilience’s report of the multiagency debriefing mentioned above (London Resilience, 2006) is an example of the former, while the committee of London Assembly members’ report is an example of the latter. This report directed strong critique towards parts of the emergency management. Examples include the lack of underground radio communication capacities among most emergency services and the lack of planning to take care of the walking wounded (London Assembly 2006). According to Alexander, this critique “demonstrates a lack of understanding of the inevitable constraints and limitations of emergency management”, which may be a result of hindsight bias as due to the omission of operational emergency experts in the investigating team (Alexander, 2010:155). An additional contribution to this debate came from the Coroner’s reports stating that the

emergency services acted as swiftly and effectively as possible to avoid further deaths (HM Government, 2011; 2012). Ideally, then official narratives and investigations should be compared and contrasted with an eye to identifying areas of consensus and or contestation.

Step three: Identify Occasions for Decision

Once a preliminary chronology of the case has been developed, the analyst scans the material to identify key occasions for decision: the 'what do we do now?' moments described above. Generally speaking, the analyst will begin by looking for signals or events 'triggering' a response. These are often indications of potentially acute threat (or in some cases potentially fleeting opportunity) that capture the attention of participating actors. For example, the initial 'signal' on 7/7 was reports of power failures and bangs in the London Underground, which indicated to authorities and citizens that 'something' was going on potentially requiring action. As the nature of the threat became more clear—and individuals and organizations began to respond, additional threats and opportunities emerge. Twelve distinct occasions for decision will be briefly explicated below.²

In addition to focusing on the major issues experienced by the participants, we have also included a number of problems/issues which received less attention. For example, the finding of the decision occasion regarding the use of possible use of CBRN in the attacks actually describes an instinctive decision that at the time did not lead to hesitation. First responders reportedly initially disregarded protocols mandating time-consuming special precautions to identify CBRN hazards, but rather rushed to the scene to provide immediate aid. Some of the occasions describe creative and relatively innovative problem-solving ; others involve somewhat less flattering examples of misperceptions and miscommunications.

Let us examine each of the 12 decision occasions in turn.

1. What is going on?

The first occasion for decision arose when alarms came flooding in the morning of July 7 and it became clear that something was terribly awry in the subway stations of London. A great deal of uncertainty shrouded the situation initially. Reports from Londoners regarding explosions and injured persons flooded in, but it was at first unclear what had happened and what had caused the problems (Gomm, 2006; Barr, 2006; Agnew, 2005; Smith 2006).

At the G8-summit in Scotland, Prime Minister Tony Blair was in a meeting with the Chinese Prime Minister when the news came in, initially indicating a possible power problem or an accident in the underground (Blair, 2011). His staff was not, according to press reports, initially allowed to interrupt the meeting. Blair recalls receiving a note fifteen minutes into the meeting saying "...incident on the Tube. Possible casualties. Might be an accident. Might Not.". Once it was established that there were multiple explosions, Blair (2011:1424) ended the meeting. The government met in a regularly scheduled Thursday morning meeting at Downing Street, number 10. Vice PM John Prescott led the meeting in Tony Blair's absence (Moreton, 2005).

As people emerged into the streets from the attacked trains, the mass media coverage started in earnest and the first police officers arrived at the scenes. People were sending still pictures and video of the scenes from their mobile phones and these were being rebroadcast via conventional and social media. A large number of alarms quickly reached the command and control centers of the first responders (LAS News, 2005; LFB, 2005). Within minutes – particularly in the case of Edgware Road where people (many of them injured) were walking from the station – it became apparent that the cause of the disruption was no power failure, but rather a large-scale terrorist attack against multiple targets in the underground system (Gomm, 2006).

2. It's a terrorist attack – have they used CBRN?

During Thursday morning, more and more indications suggested that a large terrorist attack had struck London. But had the terrorists also used chemical, biological or radiological weapons? One reason for emergency personnel to be cautious was the uncertainty of what kind of situation they were going to face. Although the cases of CBRN-terrorism have been relatively rare, it is a scenario that is part of the planning process (LESLP 2004, Appendix A, p 61-62), as well as one regularly discussed and trained during first responder exercises (Marshall, 2006; Waspe, 2005). In fact, the first responders on 7/7 did not wait for CBRN-experts or any exotic equipment to arrive. Faced with a large number of injured people, they reacted according to their primary experience, basic training, and the ethos within the blue light services; their primary mission is to save lives. The fire crews, the police and the ambulance personnel did not hesitate to care for the wounded and undertake other critical tasks, despite the specter of the CBRN-threat (Waspe, 2005; Edmondson, 2005).

3. Would more incidents follow?

It was soon clear that London had been hit by several deliberate attacks. The exact number of sites, and the amount of casualties were still unclear, though the emergency services had started to arrive at the bombed sites. At about 09:15, the Metropolitan Police feared that up to nine underground stations had been hit (Gomm, 2006). At the same time as it became clearer that London was under attack, a mounting worry emerged: would there be more to come? The rescue services had, on the one hand, to mobilize large numbers to deal with the current incidents, but, on the other hand, they also had to consider the risk of overstretching their personnel. The problem was how to allocate scarce and potentially critical resources. The rescue services had to optimize deployment for any one site, in light of existing and potential needs at other sites. What if a new series of bombs hits London in the afternoon? Are the terrorists planning to strike again next week? How can responding organizations sustain the readiness and endurance of key personnel, already heavily engaged in dealing with the previous incidents? At the same time, the ordinary work of the police, ambulance and fire services had to be carried out. Concern with the risk of overstretching staff capacity led to decisions minimizing the size of the crews engaged at the different sites and also to efforts to close these sites as quickly as possible (Howgate, 2006; Waspe, 2005; Smith, 2006).

4. What to do with the hundreds of casualties?

The situation on Thursday morning remained uncertain concerning exactly what had happened, the number of incident sites, and what was going to happen next. It was however obvious that a large number of people had been badly injured and was in urgent need of care. The usual way of dealing with casualties is, obviously, to take the most critically injured ones to the hospital as quickly as possible. However, on 7/7 it was decided to move many of the more lightly injured folks from the scene first. In that way, the rescue services were able to “get rid of” many people and could concentrate on those with severe wounds. People with less serious injuries were put on a number of buses and were transported to hospital, without further drain on the already strained resources of the blue light services (Edmondson, 2005; Waspe, 2005). However, this fast way of transporting people to hospitals was brought to an abrupt halt by the bus bomb at Tavistock Square at 9:47. After that attack, Transport for London ordered all their buses back to the bus stations and closed off this possibility (Edmondson, 2005).

5. Assessing the threat to public transportation

In reaction to the damage and overall assessment of vulnerability, first the Underground trains and then the buses were taken out of operation on the morning of 7 July. The shutting down of the London Underground was one of the most important strategic decisions made during the crisis, and was in large part a decision based on the lessons from the Madrid train bombings of 2004 (Buttercase, 2005). At 9:15 in the morning, the decision was taken to get trains into stations and to wait for further information. Almost immediately after that, the instruction was given to evacuate all underground trains in all directions. Approximately 250,000 people in stations throughout London were evacuated. For a short while, the buses kept on running (Barr, 2006). However, following the explosion on the bus at Tavistock Square the decision was made to cancel bus travel and evacuate passengers. This decision was taken because the network could not be maintained safely, and because of the risks of further attacks (Agnew, 2005). A sign on the M6 motorway advised motorists to avoid London. The mainland rail service was also affected; several stations were closed and many train companies canceled services or terminated the routes before reaching the capital (Barr, 2006).

6. The show must go on

During the morning information made its way up to the ministerial level. It was thought that a public statement was needed from the highest level as soon as possible. At the time, uncertainty about the events was still widespread. When it became clear that the incidents were terrorist-related, Blair reportedly was shocked, but he very quickly made clear his determination that the G8 would not be disrupted (10 Downing Street, 2005). In hindsight, Blair expressed that he should have left the G8 meeting at once, but at the time this decision was not as obvious. Would the change of plans give the perpetrators a helping hand? Would not going to London be seen as heartless by the victims (Blair, 2010)? The following dilemma arose for Blair: On the one hand, it was imperative that the G8 conference should not be derailed by the bombings. On the other, it was essential for the Prime Minister to be fully briefed and involved in the evolving response to this crisis. As a result, Blair left the G8 meeting to meet with police and intelligence officials and other staff in London. During his absence, the G8 summit continued under the

chairmanship of the Foreign Secretary. Later that evening, the PM returned to Scotland (BBC, 7 July 2005; Blair, 2010).

7. What is the scope of the threat?

A great deal of uncertainty ensued in the aftermath of the bombings. It was not known if further attacks would be initiated or what such follow up targets would be. Other cities across England raised their state of alert immediately following the attacks. Bomb scares were reported from Manchester, Brighton, Birmingham, Edinburgh, and Sheffield, for example (Ward 2005). When Birmingham experienced a security threat two days after the 7 July bombings, the city center was evacuated, roads to the center closed down and emergency resources elevated (BBC July 10, 2005a). In Brighton, police were alerted to examine a suspected briefcase, and carried out a controlled explosion to destroy a potential bomb. In Edinburgh, suspected packages on a double-decker bus led to alerts, cordons, examinations and two controlled explosions onboard the bus. However, neither contained any explosives (Ward, 2005).

8. Resuming public transportation

With the subway closed down, all city busses rerouted to the depots and roads gridlocked, it was nearly impossible to get from one part of town to another on July 7. The situation affected the mobility of the rescue services as well as of citizens trying to get home from work. *Transport for London* executives had to consider the trade-off between peoples' safety and returning to normality. As long as restrictions of the public transportation systems were kept in place, chaos would prevail in the city streets. On the other hand, if there were more bombs placed on buses or trains the consequences of a premature restart could be dire indeed.

To resolve the situation, Transport for London ultimately decided to resume traffic. On Thursday afternoon, local and public transportation that had been terminated earlier in the day, (such as London city buses and Docklands Light Railway) were back in operation. Moreover, a large part of the mainland rail network was in service. The Heathrow Express from Paddington station to the airport also resumed service. Restarting parts of the public transportation system meant that the gridlocked traffic decreased in the afternoon. However, the underground remained closed for the rest of the day. At about 19:00, the decision was taken to restart the tube network the following morning. Security checks and searches were conducted on trains in depots overnight. Service was resumed at 5:00 am the following morning (July 8) (Agnew, 2005; Barr, 2006).

9. Pressure from public to find missing loved ones

In the aftermath of the bombings confusion was widespread. The London Ambulance Service had not been able to track the casualties. People did not know if their missing loved ones were in the hospital. Within the first days after the attacks the Scotland Yard casualty hotline received more than 120,000 calls (BBC, July 10, 2005b). Meanwhile, there were a lot of reports in the newspapers and on the television of families standing around railway and subway stations and going from hospital to hospital with photographs of their relatives trying to find where they were. As a result of those pictures, the political pressure mounted on the Cabinet Office to solve the situation. Awareness of the

sensitivity of this issue was one of the lessons from New York on 9/11. The politicians wanted to avoid replaying the 9/11-scenario of “people wailing in the streets that nobody was helping them” (Gordon, 2005). The political pressure was also heightened by the G8 conference. The day after the bombings, a meeting was held at Westminster City Hall. The first point on the agenda was to find premises that could open quickly for visitors so that they would have a focal point where they could go. The Culture Secretary was put in charge of government support for the families. (She was also responsible for supporting British victims of the September 11 attacks and the Asian tsunami). The family assistance center remained open from July 9 until the end of August (McClenahan, 2005).

10. What impact could the bombings have on communities across the country?

A high priority issue was community cohesion, i.e., what impact could the bombings have on communities across the country? Agencies needed to address communities such as the Asian community and the Muslim community generally, who felt that they were vulnerable to racist attacks in the aftermath of the suicide bombings (Taylor, A., 2006). An early breakthrough in the investigation suggested that the terrorist cell was home grown, which required deployment of a new set of consequence management plans for long-term integration of ethnic communities and battling extremism at home. The politicians and the British society had to deal with the balancing act of condemning violent extremist Islamists, and at the same time reaching out to and cooperating with moderate Muslims.

A few days after the bombings, Prime Minister Tony Blair spoke before the Parliament. His statement included a section specifically addressed to the Muslim community: “We were proud of your contribution to Britain before last Thursday. We remain proud of it today” (10 Downing Street, 2005). The government’s strategy included taking security measures, such as increasing large numbers of highly visible police officers in the streets, as well as an endeavor which entailed working in cooperation with the Muslim community while harshly criticizing every sign of lenience towards extremists. In the immediate aftermath of the bombings the Home Secretary set up seven working groups to look at issues surrounding integration and tackling extremism. The “Preventing Extremism Together” Working Groups constituted an effort to promote national debate on what was behind the London bombings. The aim was to come up with practical proposals for a community-based response to extremism (Home Office, November 10, 2005). On September 21 Charles Clarke unveiled plans on for a new commission to look at ways Muslims and other faiths can better integrate into the community. Since July 7, the government has proposed legislations to make it possible to deport people who “foment, justify or glorify terrorist violence” (Cox 2005).

11. Was it a suicide attack?

A short while after the rescue response got underway on July 7, the police launched their investigation into what had happened. During the first days of the forensic investigation, the police found several identity documents belonging to the terrorists. Why had the suspects left such a clear trail? Very early on in this investigation, the police came to the conclusion that the UK had been hit by a suicide attack. In fact, already on July 7 (the day of the bombings) the police activated the pre-prepared guidelines (essentially rules of

engagement) for dealing with suspected suicide bombers. Despite this, on Friday the 8th of July, Sir Ian Blair—the Commissioner of the Metropolitan Police—indicated that the police had no evidence that the terrorist attack had been carried out by suicide bombers. He was widely quoted, for example, as having stated at a press conference that there was “absolutely nothing” to suggest that a suicide bomber had carried out the Tavistock Square bus bombing (Norton-Taylor and Cowan 2005, Sherwood, et al, 2005-07-14). On July 11, Prime Minister Tony Blair spoke in the House of Commons. He said nothing about suicide bombers. On the contrary, by speaking of “tracking down those who carried out these acts of terrorism”, the Prime Minister implied that at least some of the perpetrators (or some form of organization behind them), were still at large (10 Downing Street, 2005). The following day, Peter Clarke (the Head of the Anti-Terrorist Branch) held a press conference and revealed that the UK had in fact been struck by suicide bombers. Three of the suspected terrorists were named, all three born in the UK (Bennetto and Herbert, 2005).

12. Not again – the second wave

On 21 July, four new attempted suicide attacks occurred. In much the same fashion as on July 7, four men carried backpacks with explosives onboard the subway and a bus. The men tried to detonate their homemade bombs, but only the detonators went off, not the main charges. The attacks did not cause any serious harm. The bombers managed to flee, but were identified by Closed Circuit Television and arrested a few days later. Prime Minister Tony Blair heard about the events when he was in a lunch meeting with the Prime Minister of Australia. He then chaired a meeting in the Cabinet Office Briefing Room, COBR. While the police did not try to downplay the events, the political level appealed for the public to keep calm. Tony Blair urged Londoners to go about their business as normal, saying: “We have just got to react calmly” (BBC, July 22, 2005b). After a large police operation during the following weeks, 17 people were charged (BBC, January 27, 2006). Five men were accused of plotting to murder passengers on London’s transport network on 21 July 2005. They were convicted to long sentences in a series of trials that also led to the conviction of 11 men and women for assisting the terrorists (BBC, July 11, 2008).

Step 4: Thematic analysis and comparison

The fourth step of our process tracing and case reconstruction analysis is to examine the case from one or more thematic perspectives. We will provide illustrations of thematic analysis based upon two of the themes emphasized in Boin et al (2005): *sensemaking* and *meaningmaking*.

The concept of sensemaking derives from scholars arguing that organization studies were preoccupied with decision making to the extent that it was made to also include critical processes of meaning before the actual decision making and explain various outcomes (Weick, 1993). Weick argued that the concept of sensemaking, understood as an interpretative process of creating order and upon experience reflecting on ongoing realities could be that bridge of meaning (Weick, 1993; Gioia & Chittipeddi, 1991;

Nathan, 2004). *Sensemaking* in crisis refers to the challenging task of developing an adequate interpretation of what are often complex, dynamic, and ambiguous situations (cf. Weick 1988; 1993). This entails developing not only a picture of what is happening, but also an understanding of the implications of the situation both from one's own vantage point and from that of other salient stakeholders (Stern, 2009). In the words of Alberts and Hayes (2003, p. 102), "Sensemaking is much more than sharing information and identifying patterns. It goes beyond what is happening and what may happen to what can be done about it."

Our case analysis identified multiple challenges of *sensemaking* for government leaders, first responders and citizens during the crisis which developed in the wake of the bombings. The first as we have seen had to do with resolving the initial ambiguity about what had transpired (accident or terror-attack) and regarding the number and location of the affected sites. Another problem of sense-making—largely based on forensic examination of the bomb scenes and suspected perpetrator remains—involved determining the nature of the bombing attacks (conventional or suicide attacks). Assessments regarding the nature of threat were also difficult: was this an isolated, local, one-time event or potentially part of a larger, nation-wide/global and ongoing threat? It is important to note that these are but a few examples of the ongoing challenges of sensemaking which occurred at all levels of government and across sectors during 7/7.

Note that this case vividly demonstrated the importance of social media, personal communications and surveillance technology for crisis management and counter-terrorism. Among the first available images of the crisis scenes came from cameras built into the cell phones of citizens and instantaneously emailed—a harbinger of things and many crises to come (c.f. Liu et al, 2008; Olsson, 2014). Similarly, the dense coverage of London by surveillance cameras proved an invaluable asset in tracing of the movements of the 7/7 perpetrators before the bombings and facilitated the identification and subsequent apprehension those involved in the bungled encore attempt on July 21.

Meaning-making refers to the fact that leaders must attend not only to the operational challenges associated with a contingency, but also to the ways in which various stakeholders and constituencies perceive and understand it. Because of the emotional charge associated with disruptive events, followers look to leaders to help in understanding the meaning of what has happened and place it in a broader perspective. By their words and deeds, leaders can convey images of competence, control, stability, sincerity, decisiveness, and vision—or their opposites.

This case is very striking in the differential quality of the crisis and risk communication demonstrated by the actors in question. A key backdrop to the case was the communications posture adopted by the Blair government and UK law enforcement with regard to the risk of post-911/Iraq/Madrid Jihadi attacks in the UK. In the words of one British Transport Police Superintendent. "Most of us had spent the previous year going around telling our own people and anyone else who'd listen: it's not a matter of if but when. It's definitely going to happen" (Trendall, 2005). By avoiding the temptation to downplay the risk and rather emphasizing the difficulty of completely protecting an open

society in the face of determined, capable and creative adversaries, the government helped to lower expectations and prepare the public for the likelihood of a Jihadi attack (Alexander, 2010). Similarly, campaigns emphasizing individual responsibility for providing information to the authorities, which might prevent attacks as well as for household emergency preparedness are thought to boost psychological and functional resilience (Drabek, 2013; c.f. Mythen and Walklate, 2006).

Similarly, the Prime Minister and his government were relatively sure-footed in their communication during the crisis, finding ways of balancing different considerations and forging an inclusive message designed to counter the risk of backlash against the Islamic Community. By contrast, the Metropolitan Police seems rather less sure-footed. Initial statements seemingly downplaying the indications of suicide attacks were contradicted in a matter of days by authoritative and better substantiated determinations by national counter-terrorism specialists. Similarly, clumsy attempts to whitewash the circumstances surrounding the police killing of Jean Charles de Menezes, mis-identified as a potential suicide bomber further detracted from the credibility of and public/media confidence in the Metropolitan Police (IPCC, 2007)

Thematic analysis also facilitates benchmarking and structured, focused, comparison of cases. For example, to continue with the meaning making theme, the relatively successful crisis communication by Tony Blair stands out in comparison to the performance of Spanish Prime Minister Aznar during the Madrid bombings of 2004. Aznar, who faced an election in close proximity to the attacks on his capital city, bet his political fortunes on a narrative casting Basque terrorists as the likely culprit in the 3/11 attacks. This narrative did not bear close scrutiny and was widely perceived as disingenuous and self-serving and helped cost Aznar a previously expected re-election (Olmeda, 2008). Such comparative analysis is very helpful in evaluating (and specifying scope conditions for) candidate best (or worst) practices and/or propositions derived from the literature.^[3]

Concluding Reflections

It is an all too common practice in public discourse to engage in binary thinking about the performances of our leaders, systems, and communities when tested by crisis. Cases are aggregated and characterized as overall successes or failures. For somewhat different reasons, this temptation may at times be hard to resist for political leaders and journalists alike. When one examines a case more closely—as we have begun to do in this article—it becomes clear that crises entail multiple challenges to multiple actors within and across organizations, levels of government and/or sectors of society. Generally speaking, close analysis reveals areas of strength and weakness in our leaders, organizations, systems, and communities. Some perform well; others less well. Some are prepared for the difficulty of the task and some are not.

Tendencies toward black and white thinking about cases should be resisted. Cases often (mis)represented as near total failures may contain best practices and cases heralded as unmitigated successes may contain mis-steps and sub-standard practices which should not be repeated in the future. The Cuban Missile crisis, often seen as the epitome of effective

foreign policy crisis management in fact contained serious lapses of coordination/messaging which could have under slightly different circumstances resulted in a catastrophic escalation (e.g Sagan, 1993). Similarly, though Hurricane Katrina is often remembered for the collapse of crisis governance in New Orleans and a controversial Federal response, the case also contains examples of highly effective response measure such as an extremely effective car-borne evacuation of the New Orleans area using contra-flow (Wolshon, 2006; Parker et al, 2009).

The rise of social media and personal communications devices has very significant implications for crisis research and practice. The process tracing methodology above has always relied upon print and broadcast media as complementary empirical sources which can be compared and contrasted to official accounts and interview data. Social media accounts and contemporaneous audio-visual documentation produced and communicated by personal communication devices further expands the alternative record available to and increasingly exploited by crisis analysts and researchers.

In order to learn the lessons necessary to more effectively respond to future crises—as an organization, a government, or a society—it is necessary to process past crisis events in a more systematic and discriminating fashion making use of the full array of available empirics. This approach is conducive to developing a richer experience base and establishing better conditions for improving crisis management processes and practices over time. Our hope is that the four step approach suggested above can be a modest but helpful step in that direction.

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¹ See <http://www.hydrafoundation.org/hydra-methodology/10-000-volt-debriefing> accessed July 25, 2014.

² For reasons of space we will omit an additional ‘spin-off’ decision occasion centered upon the killing by London police of an innocent Brazilian electrician (De Menezes) mistakenly thought to be a suicide bomber.

³ See e.g. Stern et al (2002) for a comparative analysis of crisis management in transitional (post-communist) societies. See also Svedin (2009) on organizational cooperation and conflict.