

# Thinking security through the event: materiality, politics and publicity in the Litvinenko Affair

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## Abstract

While the turn towards materiality over the course of the last decade has enriched studies of security in a variety of ways, the security field continues to pose challenges for materially oriented thinking. This article argues that while recent materially oriented work on security has been concerned with events, working through the question of the event as a central analytical strategy is a promising way of addressing such challenges and developing broader insights. The article develops this argument by working through a particular event, the killing of the former Russian security agent Alexander Litvinenko in London in 2006 by means of the radioactive element polonium 210. Approaching the event via the archive and report of the public inquiry that subsequently took place into it, and reflecting further on the utility of Bruno Latour's idea of *dingpolitik* for materially oriented work on security, the article explores transformations of materiality, politics and publicity, and draws out how polonium 210 came to figure in the killing and the inquiry as actant, trace and evidence. In conclusion, the article reflects on the conceptual value of working through events and the methodological issues raised in the analysis.

## Keywords

*Dingpolitik*, Latour, polonium, public inquiries, Russia

## Introduction

Like many scholars across the social sciences and humanities, theorists of security (e.g. Aradau 2010; Adey and Anderson 2012; Walters 2014; Amicelle *et al.* 2015; Salter 2015, 2016) have in recent years become increasingly interested in questions of materiality, in terms of the roles that materials, technologies, devices, substances and objects of all kinds play in security problems and practices. While this turn towards materiality has enriched studies of security, however, the security field (Bigo 2002) continues to pose distinctive challenges for materially-oriented thinking. One challenge relates to the irreducibly political character of security, in terms of its immersion in disagreement, antagonism and contention (Walters 2014; Barry 2013a). While a consideration of these distinctively political issues is extended by attention to the ways in which they are played out via material settings, bodies, technologies and practices, they resist reduction to a *materialist* analysis. A related but distinct set of issues arises when we consider the relationship of security to questions of the public, or, to use a familiar term in a slightly unfamiliar manner, its publicity, (de Goede 2014; Thomas 2015), in that the process of making matters of security public is invariably complicated by their immersion in secrecy and deception (Barry 2013a; Horn 2013; Walters 2014, 2015). Though these issues are not unique to security, they acquire particular force because of the intimate connections between security, sovereign power and the state of exception (Horn 2003; Agamben 2005).

These issues have been framed and explored in existing work with reference to Bruno Latour's idea of *dingpolitik*, which have been used to examine controversies surrounding the 7/7 terrorist attacks in London in 2005 (de Goede 2014) and drone strikes conducted against Palestinian targets by the Israeli Defence Forces (IDF) as part of its Cast Lead operation in 2009 (Walters 2014). What this work shows is that while Latour's ideas are suggestive for exploring how materiality figures in security and how matters of security may be made public, they cannot simply be applied (Walters 2014: 112) to provide ready-made understanding of the security field (also Barry 2013a; Salter and Walters 2016). Rather, the distinctive politics and publicity of security also need working through as part of any materially-oriented analysis (Walters 2015). Material things animate, constitute and complicate security in ways that are interesting and important, but the ways in which

materiality comes to matter in relation to security, and the ways in which matters of security may be made public, are mediated by the political and public qualities of the security field itself.

This article responds to William Walters' (2014: 106) call for 'conceptual and methodological innovation' in materially-oriented studies of security to address such issues. Its main conceptual contribution lies in foregrounding the question of the event, not just as an ontological and epistemological concern, but as an analytical strategy and device. Materially-oriented inquiries into security have often been concerned with events, but work engaging with Latour has so far foregrounded his ideas on disputes and controversies rather than the event *per se*. Working not just on, but through, events is revealing, I argue, in terms of how this directs attention to the ways in which things of all kinds come to act, interact, intra-act, enact and alter each other in the course of intensive transformations. It is not just that the security field complicates the ontologies of objects, nor that objects are fluid and mutable, but that, in the course of an event, the orders of materiality, politics and publicity themselves intersect with, and cross over into, each other. Events disrupt the world as well as ways of ordering and knowing about it, and are therefore implicated in security at a fundamental level (Foucault 2007; Anderson 2010). If a central injunction of actor-network theory has been to 'follow the actors' (Latour 2005b; Barry 2013a), here the emphasis is on trying to 'follow the event' and the ontological and epistemological transformations it entails.

The arguments of the article are developed empirically by working through a particular event, the killing of the former Russian security agent Alexander Litvinenko in London in 2006 by means of the radioactive element polonium 210. The article approaches the event via the archive and report of the Litvinenko Inquiry, (hereafter sometimes 'the Inquiry'), which was launched in the context of tensions between Britain and Russia over the Ukraine crisis, and in the immediate aftermath of the downing of Malaysian Airlines flight MH17 over eastern Ukraine in July 2014 in particular. Its main methodological contribution lies in its layered reading of the archive and report of the Inquiry, which, focusing in on polonium 210 and its associations, affordances and effects, reveals transformations in

materiality, politics and publicity, mediations of security, and the distinct registers through which polonium 210 has come to figure in the event.

The article proceeds in the following sequence. First, it considers how the themes of materiality, politics and publicity have been framed in recent work on security, particularly in relation to Bruno Latour's (2005a) idea of *dingpolitik*, or thing-politics. The section then rethinks issues of materiality, politics and publicity via a consideration of the event, exploring the material dimensions to events and the ways in which they assemble, and are reassembled by, inquiries-in-public. The article then works through the Litvinenko case in three stages, showing how the orders of materiality, politics and publicity intersected with and transformed each other by tracing the multiple affordances, mutations and enactments of polonium 210 in the course of the event. Working through the case in this way shows how the materiality of polonium 210 comes to matter in the killing and Inquiry in inter-related, but distinct, registers, as actant, trace and evidence of the event. In conclusion, the article reflects briefly on the conceptual value of working through events and the methodological interest of public inquiries in light of the Litvinenko case.

### **Materiality, politics and publicity in the field of security**

Materiality, politics and publicity form a useful conceptual triad for exploring issues of security (Walters 2014, 2015). Linking materiality with a consideration of what might be distinctive to politics on the one hand and the constitution and nature of the public sphere on the other allows us to highlight how materiality acts and is deployed, enacted and encountered amid and in relation to conflict, dispute and enmity on the one hand, and disclosure, visibility and secrecy on the other. In this section, I consider how these issues have been framed in work engaging with the ideas of Bruno Latour, before consider how working through the event as an analytical strategy can help in addressing some of the challenges that arise from this engagement.

As Walters (2014) and de Goede (2014) explore, Latour's work offers a number of resources for materially-oriented thinking on security. Actor-network theory, to which Latour has been central (but see also Barry 2013a), is highly suggestive in terms of its insistence that action always takes place through complex constellations of non-human as well as human entities, that these are only provisionally stabilised in particular arrangements, and that producing, managing and dealing with actor-networks involves highly specialised technical work. In its injunctions to follow actors (or 'actants') and to take seriously the work of expertise, actor-network theory also suggests practical methodological orientations for reconceptualising and investigating the workings of security knowledges, technologies and practices (Walters 2014). Latour's later work on *dingpolitik* (Latour 2005a) and the practices through which things are made public (Latour 2005a; Latour and Weibel 2005) is also relevant in pointing up the ways in which 'objects' may disrupt and complicate existing arrangements and how they might be more fully understood as resonant 'things' that are able to engender controversies and assemble publics in their own right.

In Latour's argument (which owes an acknowledged debt to Walter Lippmann and John Dewey, via the work of Noortje Marres, 2005; Latour 2005a), theories of politics and democracy organised around the idea of representation – of words representing things, and people representing collectives – are held to be limiting in that they constrain the kinds of objects, actors and knowledges that can be recognised as being involved in any situation and the ways in which they may appear in public deliberations. Rather than being based on assertions of fact, politics needs to be reconceived, Latour argues, around issues, objects and matters of concern in ways that are open to deliberation. There is therefore both a normative and analytical dimension to *dingpolitik*. Politics becomes a matter of assembling a 'parliament of things' that might constitute a new public around each matter of concern. As Latour (2005a: 5, also cited in Walters 2014: 104) explains, 'Each object gathers around itself a different assembly of relevant parties. Each object triggers new occasions to passionately differ and dispute. Each object may also offer new ways of achieving closure without having to agree on much else'. Latour's (admittedly, experimental) suggestion both points towards the heterogeneity of things that might be, or become, involved in politics, and invites us to

consider how they, via representatives who speak for them, might reconfigure publics and politics.

Something that interests both Walters (2014) and de Goede (2014) are the ways in which existing forms of inquiries-in-public, such as inquests or public inquiries, might be said to embody some features of *dingpolitik*. Latour's ideas have been taken up by de Goede (2014) in an analysis of the inquests that took place into the deaths of people killed in the bombings on the London transport network in July 2005. While the remit of these inquests was in principle tightly defined, de Goede argues that, in exploring the difficulty of anticipating and preventing attacks on the basis of often fragmented and ambiguous images, recordings and other information, the proceedings transformed the rationalities and practices of security, in a Latourian manner, from matters of fact into matters of concern. At the same time, however, de Goede shows how the incipiently political questions this might have raised were obviated by an imaginary of pervasive threat that was also deployed throughout the proceedings, which reinstalled the need for constant vigilance and the possibility of forceful action as preconditions of freedom. De Goede's analysis therefore shows how, while material objects can prompt deliberation on matters of concern, the extent to which such objects can reassemble politics continues to be framed by the avowed necessity of illiberal techniques of security. Here Walters (2014, 2015) reminds us that security entails secrecy, denial, qualification, obfuscation and absence, compromising our knowledge of things and the political roles they might play, or simply preventing such knowledge from having political effect.,

Related problems attend the question of the public. In Latour's thinking, publics ought to be assembled by, and in relation to, matters of concern and the heterogeneous actors and objects involved in them. In this sense, we might say that in de Goede's (2014) account of the 7/7 inquests, material evidence concerning the event was permitted to assemble certain kinds of representatives, who could speak of its significance to the chair and the audience, which included family members of people killed in the event and members of the press. The bombings and the evidence pertaining to them, it might be said, were allowed, through the technique of the inquest, to assemble a public that would engage in deliberations about the inferences and conclusions that might be drawn. While the chair

of the inquests was able to obtain an unusual degree of access to security service material and personnel, and to push the limits of her remit to explore questions not originally envisaged in the terms of the proceedings, making this a particularly interesting case (de Goede 2014), the scope of inquiry, the evidence considered, the modes in which testimony was given and the kinds of conclusions that could be drawn were constrained by legal frameworks and by exceptions obtained by the security services.

While the 7/7 inquests in some respects exceeded what might have been expected of them, the proceedings therefore fell short of meeting Latour's criteria for enacting *dingpolitik*. As Latour, channelling Lippmann, explains, the 'parliament of things' only works if 'The assembling is done under the provisional and fragile Phantom Public, which no longer claims to be equivalent to a Body, a Leviathan or a State' (Latour 2005a: 31). Officially constituted inquiries, especially those constituted in relation to security, being framed and loaded in favour of 'the state', do not meet this criterion, but they are nevertheless often occasions in which 'objects' are considered more in the manner of 'things', and some of their properties and stories disclosed. A public inquiry may not be a parliament of things, but may, as an exercise in doing politics with things, make security public in new ways.

Materially-oriented work has shown, objects and the actor-networks of which they form part play a variety of roles in forming, unsettling and reconfiguring politics and publics, and that attending to such processes enhances our understanding of security. What work on public inquiries into matters of security further reveals are some of the ontological and epistemological limits and problems engendered by the security field in relation to questions of materiality. The assembling of security issues in public inquiries is in part an effect of the materiality of things, and it offers opportunities to examine the material nature and workings of security, but the assembly process remains implicated with the security field itself, which in turn mediates what is made public and how. To explore and address these issues further it is useful to foreground the question of the event.

### *Thinking materiality, politics and publicity through the event*

If a focus on objects, things and actor-networks can be revealing of what security is and how it works, this is often because of the manner in which those objects and networks are involved in intense transformations, in the course of which they act, interact, enact and are altered in relation to each other and their surroundings (Law 2004). If 'object-oriented ontology' (Latour 2005a: 4) asserts that anything can be thought of as being an object, this approach tends to under-rate the complex, energetic and processual nature of things like protests, battles, coups, revolutions, assassinations, bombings, epidemics, chemical reactions or the decay of nuclear materials. Indeed, as Gilles Deleuze (2015, p.151) suggests, an event is not really a material thing at all, but an 'incorporeal' transformation that is only expressed in the naming of intensive, energetic and often violent rearrangements and alterations of bodies and states of affairs. For Deleuze, the event is the transformation, not the agents of transformation or things that are transformed, and something of it always escapes conscious knowledge and appropriation. Events should not be reduced to material processes and transformations, then, but are recognised and inferred via them, and on the basis of the material traces that they enact, as well as the narrative accounts that they engender. Following the actors (or 'actants') and the ways in which they transform and are transformed thus becomes a way of getting at events.

The particular qualities of events that are liable to give rise to an officially constituted public inquiry in Britain are expressed in the first article of the Inquiries Act of 2005, under which the Litvinenko Inquiry took place. This states that:

- (1) A Minister may cause an inquiry to be held under this Act in relation to a case where it appears to him that—
  - (a) particular events have caused, or are capable of causing, public concern, or
  - (b) there is public concern that particular events may have occurred. (Inquiries Act 2005: 1)

The premise for an inquiry could thus be an actual event about which there is concern, or an event that might cause concern, or a concern that an event might have taken place. The key issue is not necessarily events *per se*, but their potentially public and concerning qualities.

A consideration of inquiries-in-public (of which inquests are one variety and public inquiries another) via *dingpolitik* allows us to emphasise something slightly different from



work on governmentality, which highlights the ways in which British public inquiries, taking place under the authority of a government minister but proceeding independently of them, function nevertheless as techniques of government rather than enlightenment (Thomas 2015). What I would like to draw out are the ways in which public inquiries ostensibly pursue an ontology and epistemology of the event. To the extent that they focus on objects, as well as causes and effects and acts of commission and omission, what ostensibly motivates and ties inquiries together is a sense that ‘something happened’ and the kinds of knowledge and judgements that are possible about this.

In a meditation on the nature of events following the 9/11 attacks in New York, Jacques Derrida (2003) makes a distinction between the ‘event’ and the ‘impressions’ that it makes in individual experience and media reporting, suggesting, following eighteenth century empiricism, that it is via its impressions that we try to appropriate the event. Here we can add something beyond this, noting how events are also appropriated more specifically via the material transformations in which they participate and the traces they leave. In the terms of actor-network theory and the more Deleuzian vocabulary of ontopolitics (Law 2004), these transformations and traces do not just ‘happen’, but are ‘enacted’ via specialist, technical investigations, which assemble expert knowledge about events, thus reframing our sense of what the event is. As well as hearing testimony from witnesses and interested parties, inquiries-in-public assemble such evidence and expertise as a basis for producing authoritative judgements about the event. A public inquiry is therefore a meta-level technique of the event in that it assembles, reflects upon and adjudicates between accounts produced by other techniques. In so doing, it takes place not just ‘in public’, but facilitates the assembly ‘of’ a public around objects, issues and disputes of concern, proceeding according to the logic of the event at hand. Inquiries-in-public offer a way to follow the event as it is reassembled and enacted amid ongoing disputes and struggles and in relation to claims of national security. What can also emerge from a careful reading of inquiries into events in which material things have played a significant role is a sense of how, in the course of events, materiality, politics and publics take on new forms and pass across into each other, but also of the absent presences that indicate not just limits to knowledge, but the workings of security.

## **The Litvinenko affair**

Alexander Litvinenko joined the Soviet Interior Ministry forces and Committee for State Security (KGB) and later the Russian Federal Security Service (FSB), serving during the Chechen wars of the 1990s and then in the fight against organised crime (Felshtinsky and Litvinenko 2007; Goldfarb and Litvinenko 2012; Harding 2016; Litvinenko Inquiry 2016; Satter 2016). Becoming increasingly disillusioned with what he saw as the corruption around him, and having aroused antipathy among superiors in his efforts to voice his concerns, he became a vocal public opponent of Vladimir Putin during the latter's ascendancy to the Presidency of Russia, and developed an association with the controversial oligarch Boris Berezovsky, who, having facilitated Putin's rise to power, then sought to remove him. In the face of threats to his liberty and, he believed, his life, Litvinenko fled Russia, settling in London with his wife and son. There they gained British citizenship and Litvinenko, it would appear, formed new relationships with British and European intelligence agencies, while continuing to oppose Putin in public. In mid-2006, Litvinenko made sensational personal allegations against Putin and appeared ready to testify to the nature and reach of Russian organised crime and its links with the Russian government in a Spanish court.

As established by the Litvinenko Inquiry, a secret operation, 'probably' (Litvinenko Inquiry 2016: 240) sanctioned at the highest levels of the Russian government, led to Litvinenko being poisoned with a solution of the unusual and highly radioactive element polonium 210 at a meeting with two men in a hotel bar in the upscale London district of Mayfair in November 2006. The recognition of the suspicious nature of the illness that began later that day, and the subsequent finding that polonium was the causative agent, led to a rapid intensification of activity among British nuclear, medical, police, public health and intelligence agencies. While Litvinenko's work in the UK and Europe had been poised between the secret and public worlds, the event rapidly acquired an ineluctably public character, via massive media interest, the highly visible responses of policing and public health bodies to polonium contamination across London, and the propagandistic activities of Litvinenko's London-based Russian associates. While the two Russian men present at the fatal meeting, Andrei Lugovoi and Dmitri Kovtun, were charged by the British police with murder, and while the British government alleged Russian state responsibility, ministers

resisted calls for a full public inquiry into the event until summer 2014, when, in the aftermath of the shooting down of Malaysian Airlines flight MH17, it was announced that such an inquiry would take place. While decision to allow an inquiry was presumably taken on the grounds that it might contribute to delegitimising ongoing Russian government actions, its proceedings led to the disclosure of a vast amount of new information concerning the case, and it represents by far the most sustained and most extensively evidenced account of the event, which in numerous respects corroborates other accounts (e.g. Harding 2016) and adds new dimensions to them. Moreover, revolving centrally around the 'polonium trail' left in and on myriad objects around London and Hamburg and on travel routes between London and Moscow, the Inquiry was assembled in relation to, and conducted a sustained investigation of, issues of materiality and their political and public significance. At the same time, while much of the testimony was taken in public, and much of the evidence gathered was made public, some issues (notably, preventability and Litvinenko's relationship with the British intelligence services) were not considered, having been judged by the Chair not to be relevant. Furthermore, some witnesses gave testimony in secret and some evidence was not disclosed, being described in the report as 'closed', on grounds of national security. The killing and the inquiry therefore offer rich potential for exploring the issues framed in the discussion so far.

In the following sections, I work through the killing and the Inquiry three times over, drawing out three registers in which the materiality of polonium 210 has come to figure in the event, as actant, trace, and evidence. The term actant connotes the sense in which polonium operated as the focal point of an actor-network, in terms of how it was used, and worked as, a poisonous agent in the death of Litvinenko. This account of polonium as actant is dependent in turn on the ways in which it has been further enacted via expert knowledge practices as a trace of an event, into which it appears to offer unusual insight. I then consider how polonium 210 came to figure again in the juridical register of evidence, initially in terms of police investigations and in the initial inquest into Litvinenko's death, but most particularly in the context of the Litvinenko Inquiry, where traces and testimonies regarding the event were assembled, analysed and adjudicated. As I discuss, distinct enactments and transformations of materiality, politics and publicity can be identified within each register. These registers are not independent of each other, however, and the ability to identify and

distinguish them in the manner presented here is largely a product of the public character of the Inquiry itself. While much might be known and inferred from the archive and report of the Inquiry, however, these sources came to exist in the midst of a contentious international situation, and are framed by legal procedure and the exigencies of national security. Though these sources allow us to work through the event in detail and in different ways, drawing out a sense of its multiplicity and its entanglement in other events, they are also instructive in terms of the challenges of thinking materially about security more broadly.

### *Actant*

Shortly before 4pm on the afternoon of 1 November 2006, a solution of the radioactive element polonium 210 somehow made it into a teapot that was sitting on a table in the Pine Bar of the Millennium Hotel in Mayfair, in London's West End. Immediately before 4pm, Alexander Litvinenko arrived at the hotel, responding to an invitation from another Russian man, Dmitri Kovtun, who was present along with a third, Andrei Lugovoy.<sup>1</sup> After a short conversation, and as Kovtun and Lugovoy readied to leave, Lugovoy mentioned to Litvinenko that there was still some tea in the pot that he could drink if he so wished. A waiter brought a clean cup, Litvinenko poured, and drank a small amount of the liquid. At that moment, his death from radiation poisoning became inevitable. This, then, is the focal point of the event, in which actor-networks converge, interact, intensify and transform, and from which the event ripples out, altering bodies, time and space.

Litvinenko fell 'suddenly and unexpectedly' ill overnight on 1 November 2006 (Litvinenko Inquiry 2016: 33). He began vomiting continuously and early on 3 November, his wife, Marina Litvinenko, called for an ambulance. He was not hospitalized, however, but began complaining of 'pain' and experiencing 'bloody diarrhoea' (Litvinenko Inquiry 2016: 34). On the afternoon of 4 November, Marina again called for an ambulance and Litvinenko was admitted to Barnet Hospital in north London. An array of tests were carried out and Litvinenko was prescribed a course of antibiotics, but further tests on his blood determined that the platelet count and red and white cell counts were falling. His hair also began falling out. Over the next three weeks Litvinenko's condition deteriorated; by 16 November his 'bone marrow had degenerated and contained no discernible normal blood forming

elements' (Litvinenko Inquiry 2016: 35). At this point Litvinenko was transferred to University College Hospital in central London. The deterioration of his condition could not be alleviated and he died on 23 November.

The Litvinenko Inquiry found the cause of death to be poisoning by polonium 210 and this element can be said to have been the central actant of the event, but one that is neither a stable object, nor independent from the myriad practices and networks through which it is created and used, and through which it comes to affect other things. Polonium 210 is a radioactive isotope that has a half life of 138 days, and in the course of its decay into lead it emits a continuous stream of alpha particles. Given their relatively large atomic size (equivalent to a helium atom), alpha particles are readily intercepted by thin screens such as paper, clothing or skin. They may, however, pass through permeable membranes, whereupon they transfer their kinetic energy into the cells they encounter, causing severe destruction and inflammation. This makes the ingestion of polonium highly dangerous. While its elemental form is metallic, polonium readily forms a number of compounds, including 'water-soluble, colourless salts' (Nathwani *et al.* 2016: 1079). Having been ingested by Litvinenko in liquid form, polonium was distributed around his body and came to inflict radiation damage on his bone marrow, kidneys, liver and other organs, 'substantially in excess of doses that could be survived by any person' (Litvinenko Inquiry 2015a: 5). It was 'cautiously' estimated that even one per cent of the dose ingested could have proved fatal (Litvinenko Inquiry 2015a: 9). Such massive quantities of polonium were detected in Litvinenko's body that it was itself treated as a hazardous radioactive object, The pathologist who conducted the post-mortem endorsed its description as 'one of the most dangerous ever conducted in the Western world' (Litvinenko Inquiry 2015b: 42).

Actor-network theory understands actants as operating within heterogeneous arrangements of things, and highlights the considerable work and multitude of practices required to make entities cohere so that they can act (Law 2004). To be sure, the very existence of polonium 210 entails a vast array of other such actors and practices, in highly specific ways: it is a 'rare and specialised commodity' that is 'difficult to produce and dangerous to handle' and it is 'only publicly available in minute quantities' (Litvinenko Inquiry 2016: 216). The production of polonium 210 requires a bismuth 209 target to be irradiated with neutrons within a specialised reactor. A chemical process is then used to

isolate the polonium. As the Inquiry found, only this process could have produced polonium in the quantity and purity that was used in the killing of Litvinenko. The Inquiry further found that the quantity and quality of polonium used was 'at the very least a strong indicator of state involvement' (Litvinenko Inquiry 2016: 225).

The event was assembled, and it converged, around polonium 210, its nuclear properties and its physical affordances. But while we can understand its production as the effect of a practices and networks, the event also emerged out of, and came to effect, distinctively political relations of enmity, via practices of deception. Litvinenko and Lugovoy (also a former KGB officer) had known each other in Moscow in the late 1990s as associates of Berezovsky, resuming contact in London in 2004 and coming to explore the possibility of working with each other and with London-based risk and security companies. Litvinenko's friendly and trusting attitude towards Lugovoy was described by several witnesses to the Inquiry, with one stating that Litvinenko had said Lugovoy was trustworthy because they had both worked for the KGB and with Russian security agencies; because Lugovoy had, like Litvinenko, worked for the oligarch Boris Berezovsky; and because he had (apparently; the veracity of this was questioned by the Inquiry) served time in jail for this association (Litvinenko Inquiry 2016: 86). Though Lugovoy subsequently denied responsibility for Litvinenko's death, he stated in a newspaper interview that he considered him to have been a 'traitor' and that, in principle, '[i]f someone has caused the Russian state serious damage, they should be exterminated' (Litvinenko Inquiry 2016: 199). Litvinenko's former superior officer in the FSB stated that he had deserved to be 'executed' (Litvinenko Inquiry 2016: 67). Poisoning by polonium can be said to have served as the material actant of a particular determination of the idea 'death to traitors' and the specific form of enactment of the intention 'death to *this* traitor'.

In the course of the event, polonium became political, coming to express and effect relations of enmity and enacting fatal consequences for what was taken to have been a betrayal (Horn 2003) and political relations were also thereby materialised. But there was also a becoming- and making-public of the event. In the early weeks of November 2006, the British media began to unravel the potential import of a former Russian intelligence agent suffering symptoms akin to radiation poisoning in a central London hospital. In the days before his death, Litvinenko expressed to detectives and associates his certainty that he had

been killed by the Russian secret services, on the orders of Putin. Two days before his death, Litvinenko's supporters arranged for a photo to be taken of him in his hospital bed, desperately ill and connected up to tubes and wires, bringing a dramatic representation of his condition into the public and the political situation that was assembling and intensifying around it. They also released a statement in his name, which thanked the British government for their care and the public for their support and interest, naming Vladimir Putin as 'the person responsible for my present condition' and accusing him of being 'barbaric and ruthless'. One of Litvinenko's associates told the *The Times* (Beeston 2006) that among his last words was the phrase 'the bastards got me. But they won't get everybody'.

The polonium continued to act, in some ways that were kept secret and others that necessarily became public. The discovery by scientists at Britain's Atomic Weapons Establishment (AWE) on the day of Litvinenko's death that polonium 210 was the cause of his deterioration sparked a major emergency response that sought to identify contaminated sites and track down every person who might have come into contact with the substance in the period in which the attack on Litvinenko had taken place (Health Protection Agency 2010). The public assembled by the event thereby proliferated, and it was transformed as a matter of concern. Sites across London were cordoned off for investigation and hundreds of people in Britain and abroad were contacted, invited to give samples for testing and offered follow up advice. This response in turn elicited massive media and public interest and, among some, affective disquiet, in turn causing health providers to offer further reassurance and support (Morgan *et al.* 2008). By this stage, however, polonium was already coming to figure in a different register, to which we turn in more detail.

### *Trace*

In *Reassembling the Social*, Latour (2005b: 53) writes:

without transformation in some state of affairs, there is no meaningful argument to be made about about a given agency, no detectable frame of reference. An invisible agency that makes no difference, produces no transformation, leaves no trace, and enters no account, is *not* an agency.

The solution of polonium employed by Litvinenko's killers made a difference and left myriad traces; indeed, the Report of the Litvinenko Inquiry devotes a whole chapter to what became known as 'the polonium trail'. Traces of polonium, when detected, measured, recorded and assembled via expert practices into meaningful form, offered detailed insight into some of the crucial spatialities and temporalities of the event. The account of polonium 210 offered in the preceding section is thus dependent on public access afforded by the Inquiry to the accounts and products of the investigations that are described and drawn upon here, as summarised in the Report and in documents contained in its public archive.

Significant quantities of polonium were detected not just in urine samples and in Litvinenko's body itself, but in hair he had shaved off his head after it started to fall out, which happened to have remained in a bag in his hospital room (Litvinenko Inquiry 2016: 35-36). Traces were also detected by means of a 'series of tests' conducted 'at a series of locations' (Litvinenko Inquiry 2016: 110). These tests found traces on a multitude of objects, in particular the teapot, located after exhaustive searching at the Millennium Hotel, wherein radioactive material had become embedded in residues from tea making that persisted, despite repeated washing, on regions inside the bowl and, especially, in the spout, indicative of polonium solution having been poured through it (Litvinenko Inquiry 2016: 177). There were correspondences between polonium traces and two previous visits to London, by Lugovoy and Kovtun on 16-18 October, and by Lugovoy only on 25-27 October, during which, the Inquiry concluded, attempts were also made on Litvinenko's life. Polonium traces also corresponded with visits on 28 October-3 November (by Lugovoy) and 1-3 November (by Kovtun), during which the fatal poisoning took place. Kovtun had travelled to London on 1 November via Hamburg, where traces were also discovered at more than one location and on several objects by German police. In London, traces were found, *inter alia*, on door handles, on towels, on a shisha pipe, on restaurant and bar seats, in a nightclub and in a car, and on seats at the Emirates Stadium, home to Arsenal Football Club in north London, visited by Lugovoy on the evening 1 November 2006 when Arsenal had played CSKA of Moscow. Contamination was also found on seats and on an overhead locker in aeroplanes working between Moscow and London during the period of interest, on which the persons of interest had travelled. As well as on, and in, one particular teapot and on the table upon which it had apparently sat, especially high concentrations were found amid the detritus in



the u-bend of a sink in the bathroom of a hotel room in which Lugovoy stayed on the first visit, and on a meeting table around which the three men had met in the offices of a risk and security consultancy in Mayfair; in the bin in the bathroom of a hotel room in which Lugovoy stayed on the second visit; and in the sediment trap of the sink in the bathroom of the hotel room in which Kovtun stayed on the third visit. Notably high readings of alpha radiation were also taken from the cuff of the denim jacket worn by Litvinenko on 1 November.

This brief overview illustrates the manner in which remnants of polonium distributed around London and beyond enabled a *tracing* of the event. This process involved police forensics experts but also scientists from the AWE and other agencies, who conducted tests with alpha particle detectors, which could detect both the presence and approximate strength of radiation, with swabs being taken for further testing in cases of significant contamination. The results of this investigation were compiled in a 260 page report produced to the inquiry that had remained secret but which was made public by it. An expert from AWE gave crucial evidence, distinguishing contamination levels into ‘primary’, indicative of direct contact with polonium 210, and ‘secondary’, resulting from the subsequent transfer of material. As she stated,

The transfer of polonium from primary contamination areas to other areas is dependent upon the physical and chemical properties of polonium and the surface of the materials on which it is deposited. The amount of contamination transferred is dependent upon the amount of original activity present on each successive surface to which it is transferred. (Litvinenko Inquiry 2016: 111)

Here we are well within the realm of actor-network theory; of experts, devices, materials, properties, recordings, of ‘inscription’ and related epistemic practices. As described in the report, beyond the ‘primary finding’ that contamination was attributable to polonium 210, ‘the principal questions that arose were, first, the level of each of the findings, and, second, the inferences that could be drawn from the results’ (Litvinenko Inquiry 2016: 111). The traces do not just ‘exist’, but are ‘enacted’ (Law 2004) via devices and techniques, and are assembled to support an account of the event in which they participated and whose passing they are taken to record.

The technical infrastructure and expertise making it possible to detect these traces in Litvinenko's body and beyond made a decisive difference to the case (Dombey 2007), illustrating ways in which materiality comes to matter. At the same time, the radioactive remnants of polonium should be regarded as more than traces of direct and secondary contact between a radioactive substance and a series of bodies, objects, sites and surfaces that were amenable to scientific investigation. They would not have been enacted as such without technical capabilities related to Britain's status as a nuclear state, a perceived radiation threat to public security and the suspicion of the commission of a crime affecting someone immersed in the relations of intelligence and espionage between adversary states. In other words, there are, from the beginning, political dimensions to the ways in which remnants of polonium became traces of an event in virtue of the national security implications of nuclear technology, which are further signalled by the anonymous identification of the AWE expert as 'A1' in the Inquiry. In becoming traces, these remnants acquire an epistemic quality that bears the impression of a political situation and which, in the course of investigation, serves to confirm the political nature of the event. In terms of the Inquiry's concern with the nature of the event, the presence of traces of a highly rare and toxic substance in immediate proximity to certain people, in certain settings, at certain times, in certain dispersions and concentrations, becomes explicable and comprehensible in terms of a conjunction of enmity, deception and lethal intent, which are in turn explicable in relation to other actors and events, that is, in terms of a broader political situation in which Litvinenko was also an actant.

The material traces of polonium 210 do not fully describe either the material, political or public dimensions of the event, or fully illuminate the actor-networks involved in it, however. There are many other actants (for example, phones) and traces (phone records) that were explored in the Inquiry, but also absent presences (Walters 2014). No evidence was presented, in public at least, regarding how Lugovoy and Kovtun came by the polonium used in each of the attempts on Litvinenko's life. On this point the barrister representing Marina Litvinenko as a core participant in the Inquiry, suggested that as Lugovoy and Kovtun had not had opportunity to acquire polonium between their arrival at Gatwick Airport from Moscow on the morning of 16 October and their meeting with Litvinenko that afternoon, they must have brought it with them. However, Sir Robert Owen, chairing the Inquiry,

rejected this proposition due to the lack of evidence concerning their movements that day, concluding that he could not 'exclude... the possibility that they obtained polonium 210 from some source in London' (Litvinenko Inquiry 2016: 125). Aspects of the event, and understanding of the role played in it by polonium 210, including its presumed origins within the Russian nuclear complex, therefore remain obscure, at least in terms of the official public record.

### *Evidence*

Traces of the event came to function in a distinct, but related, way as evidence, when they were assembled via legal reasoning in the context of the Inquiry. To be sure, polonium 210 had already acquired an evidential quality before this point. The work of dozens of police officers, detectives and forensic specialists on the case was oriented in terms of the potential for the traces they detected and gathered coming to function as evidence, in the first instance in a possible a criminal trial. However, while Lugovoy and Kovtun were charged with murder, the Metropolitan Police eventually concluded that there was no realistic prospect of them leaving Russia to face trial. At this point, the Coroner's Inquest that had initially been opened into Litvinenko's death resumed its work, but was then adjourned pending resolution of the dispute over whether, as Marina Litvinenko and Owen himself argued, a public inquiry into the event should take place. Following protracted legal argument, and in the days following the shooting down of Malaysian Airlines flight MH17 over eastern Ukraine, Home Secretary Theresa May announced that a public inquiry would take place after all (May 2014).

Here it is relevant to draw out some of the ways in which the Inquiry was itself enacted as an event. The Inquiry took place within the framework of the Inquiries Act 2005, which sets out the parameters within which such investigations are to be configured and conducted, but its Chair went to great lengths to emphasise the importance of due process. One expression of this was the care was taken by the Chair concerning the kind of inferences that might be drawn from the polonium trail with regard to bodies, space and time. On the one hand, the Report records the judgement that a positive finding of contamination 'calls for explanation' (Litvinenko Inquiry 2016: 112) in terms of the

conjunction between polonium and a particular person at a particular location at a particular time. However, a negative finding might mean that the relevant person was not contaminated at a particular location and time, but it might also mean that a contaminated person did not transfer polonium onto any surface at that point, or that contamination had decayed or been cleaned away. Therefore no particular significance was to be attached to the absence of contamination. This approach was also reflected in the extent to which Owen sought to interrogate and reject conspiracy theories and other fanciful or speculative ideas concerning the event. Polonium did not speak for itself, nor was it only enacted through technical practices, knowledge and representatives (Latour 2005a), but nor was it taken, in and of itself, to indicate directly a political character to the event; rather its role in and significance for the event was made to emerge through a performative enactment of analytical process, logic and judgement.

As the *Oxford English Dictionary* (OED 2018: II.4.a) states, the word 'evidence' has come to carry the meaning of '[i]nformation (in the form of personal or documented testimony or the production of material objects), tending or used to establish facts in a legal investigation'. The word additionally carries the meaning of '[g]rounds for belief; facts or observations adduced in support of a conclusion or statement the available body of information indicating whether an opinion or proposition is true or valid' (OED 2018: III.6.a). Objects and narratives become 'evidence', or 'testimony', by virtue of their transformation in specific intentional and institutional contexts and practices, in which they are taken to point towards something, in this case an event. Objects are therefore assembled by, as well as assembling of, inquiries-in-public.

The distinctiveness and importance of the polonium evidence was recognised by the Inquiry. Having outlined the conventional forms of evidence, the Chair stated that 'in addition to' these, 'it became apparent that there was a highly unusual, in fact unprecedented, line of inquiry to be followed' (Litvinenko Inquiry 2016: 109). As the Chair further stated, 'I shall refer not only to the extensive witness and documentary evidence that has been adduced, *but also* to the body of evidence arising from the testing for radioactive contamination' (Litvinenko Inquiry 2016: 109, emphasis added). Polonium in some ways assembled the Inquiry, but it was enacted there as evidence via representations and representatives. There was a 265-page collection of radiation schedules, listing the

results of testing at 56 ‘scenes’ of relevance to the investigation and a further eight that were also tested, some of which encompassed dozens of individual surfaces and objects. Polonium further became evidence via the testimony of the doctors who treated Litvinenko, of A1, of experts on nuclear matters, and via a number of sketches, diagrams and 3D model images of some of the scenes. Polonium also appears as evidence via letters, reports and certificates concerning plane seats, and in documents emerging from medical examinations. It is further possible that polonium was mentioned in the ‘closed evidence’, which the Chair had determined necessary to the investigation and was able to access, but which could not be disclosed, having been assessed by the Home Secretary ‘as being too sensitive to put into the public domain’ (Litvinenko Inquiry 2016: 181). Some kinds of evidence were therefore material to the public findings of the Inquiry, but did not themselves become public.

Interpreting such things along with other materials, polonium was adduced (that is, cited as evidence) in the Chair’s narrative of the event, which set out a chain of reasoning as to what was either supported or excluded by the available material. The Report of the Inquiry thus moves from enacting the event as a matter of concern (Latour 2005a; de Goede 2014) to ‘findings of fact’, expressed according to a series of legal standards, explained by the Chair:

In making findings of fact I have adopted the ‘flexible and variable’ approach to the standard of proof ... I add that where in this Report I state that ‘I am sure’ I will have found a fact to the criminal standard. When I use such expressions as ‘I find’ or ‘I am satisfied’ the standard of proof will have been the ordinary civil standard of proof, namely the balance of probabilities. Where it is obvious that I have found a fact but I have not used one of these terms, the standard will have been the civil standard. All other expressions, such as a reference to a state of affairs being ‘possible’ will not be a finding of fact, but will indicate my state of mind in respect of the issue being considered. (Litvinenko Inquiry 2016: 10)

This last statement is important in terms of how the Report stated only that the polonium ‘could’ have come from Russia. However, the Chair felt able to state that he was ‘sure’ that the cause of the cardiac arrest as a result of which Litvinenko died ‘was acute radiation syndrome’ (Litvinenko Inquiry 2016: 184) and that this ‘was caused by Mr Litvinenko ingesting approximately 4.4GBq of polonium 210 on 1 November 2006’ (Litvinenko Inquiry 2016: 185). As rephrased ‘in everyday language’, the Chair stated that ‘I conclude that Mr

Litvinenko was fatally poisoned with polonium 210 on 1 November 2006' (Litvinenko Inquiry 2016: 185). He was further 'sure' that this happened while drinking tea in the Pine Bar on that date, given the primary contamination found there and other corroborating evidence. The pattern of contamination further allowed the idea that Litvinenko had accidentally poisoned himself or committed suicide to be ruled out. Based on the hair sample and other evidence, the Chair also expressed himself 'sure' that Litvinenko had earlier ingested a smaller dose of polonium, and that this was 'likely to have been received' at the meeting on 16 October. Crucially, the Chair stated that he was 'sure that Lugovoy and Kovtun placed the polonium in the teapot at the Pine Bar on 1 November', that 'they did this with the intention of poisoning Mr Litvinenko' and 'that they knew they were using a deadly poison', while believing that they did not know precisely what the substance was or 'the nature of all its properties' (Litvinenko Inquiry 2016: 192). Through this evidentiary reasoning, the materiality of polonium was publicly established to have been deployed, and to have acted, in accordance with the intention of targeting and killing Litvinenko, as it in fact came to do.

The use of polonium was also taken to point beyond Lugovoy and Kovtun, not only towards a nuclear complex from which it must have emerged, but also to political actors and intentions. As the Chair found, the two had neither the means to obtain the quantities of polonium used, nor a plausible personal motive to kill Litvinenko. As he stated, '*[a]ll the evidence points in one direction, namely that, when they killed Mr Litvinenko, Mr Lugovoy and Mr Kovtun were acting on behalf of someone else*' (Litvinenko Inquiry 2016: 209, emphasis added). Here the Inquiry found that 'the use of polonium 210 is at the very least a strong indicator of state involvement'. In exploring this, the Chair made reference to a 'pattern of events' that was taken to suggest that 'the Russian state may have been involved in the assassination of Mr Putin's critics' and that it 'may have sponsored attacks against its opponents, including radioactive poisons' (Litvinenko Inquiry 2016: 231); it also noted that 'leading opponents of President Putin, including those living outside Russia, were at risk of assassination. One of the risks they faced was that of being poisoned' (Litvinenko Inquiry 2016: 233). Overall, the open evidence was taken to establish 'a strong circumstantial case that the Russian State was responsible for Mr Litvinenko's death'. A further difference that 'security' makes to our understanding of materiality and events here, is indicated by the fact that it was having considered the 'closed' evidence that the Inquiry found Lugovoy to have

been, with 'strong probability', acting under the direction of the FSB, as had Kovtun, 'possibly indirectly through Mr Lugovoy but probably to his knowledge' (Litvinenko Inquiry 2016: 240). Taking account of 'all of the evidence and analysis available', the Inquiry concluded that the operation was 'probably' approved by the director of the FSB and by President Putin (Litvinenko Inquiry 2016: 240, emphasis added).

Polonium 210 was the central material actant in the event, which it enacted in ways that were amenable to tracing. While this tracing was already 'evidential' in a number of ways, the Inquiry enacted a particular kind of evidential reassembly of the event, not just in terms of matters of fact, but of likelihood, probability and possibility. In evidential terms, the strength of associations between polonium and other aspects of the event, and the corresponding level of 'facticity' asserted by the Inquiry, intensify as one moves closer in space and time towards the fatal convergence of the event in Litvinenko's body. In this convergence there is no distinguishing between politics and materiality. Polonium becomes politics and politics becomes polonium; nuclearity and enmity are enacted in new ways and the event begins to assemble new publics.

## Conclusions

The poisoning of Alexander Litvinenko by means of polonium 210 in London in 2006 was an event that proved fatal to Litvinenko himself and which devastated his family and associates. It also activated a range of official agencies concerned with security and disrupted life in the heart of a global city. Investigations of the event reached into airline networks and cities in Russia and Germany, and the workings of post-Soviet Russian politics as well as the affairs of risk and security consultancies serving a range of interests. In assembling testimony, expertise and evidence and coming to a reasoned series of judgements, the Litvinenko Inquiry offers an opportunity to revisit the event with which it was concerned, and to consider the processes whereby matters of security become, and are made, public.

Approaching the killing of Litvinenko via the Litvinenko Inquiry suggests a number of qualifications to ongoing work informed by materially-oriented approaches and *dingpolitik* in particular. As some writers have emphasised, such approaches cannot simply be applied

to the field of security, but they are useful in drawing attention to things that are under-specified or bracketed out of conventional theories of politics and the public and because they are concerned precisely with ontological and epistemological multiplicity and instability. They are also useful in directing us to work through the details of specific cases, paying attention to the role of expertise and the ways in which things morph, as issues, disputes and controversies unfold. Here I have suggested making the idea of the event not just an ontological and epistemological concern, but a central analytical strategy in such work. Working through events in detail allows us to explore the ways in which intensive transformations animate, unsettle, and are mediated by, the workings of the security field. Public inquiries into matters of security are particularly useful here not just because they are assembled in relation to questions of materiality, but also to the extent that they themselves forward an ontology and epistemology of the event. While following events through inquiries is in some ways an indirect way of approaching things, it allows us to explore how the materiality of security is enacted, mediated and made public in a number of different registers amid, and in relation to, myriad other occurrences and happenings.

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<sup>1</sup> These sections draw primarily on the report and online archive of the Litvinenko Inquiry, at <https://webarchive.nationalarchives.gov.uk/20160613090305/https://www.litvinenkoinquiry.org/>.