

Government and (Non)Event: The Promise of Control

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Abstract

Control rooms routinely deal with happenings that might become events. They attempt to hide events and their possibility from the users of infrastructure by undertaking various forms of action to stop events coming to pass. Based on ethnographic research in a motorway control room, in this paper we describe how events are grasped and handled and subject to the effect of control. Focusing on how the promise of control is provisionally achieved through detection-diagnosis-response work, we show how control room action is situated on the ambiguous line between event and non or quasi event and involves making happenings that might be or might become events into their opposite: non-events, or routine occurrences. We use the case of the work of control rooms in dialogue with Foucault (2007) on the relation between 'government and event' and Berlant (2011) on 'modes of eventfulness' to challenge the emphasis on the event as dramatic transformation in some current research on securing life and some geographical work on events. Paying close attention to what control rooms do shows the multiplicity of relations between government and (non)event, and invites us to expand the 'modes of eventfulness' that social and cultural geographers learn to sense and disclose.

Keywords: Event, Control, Control Rooms, Disruption, Government, Eventfulness

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Introduction: Ambivalence and Event

A motorway control room. Something is happening, perhaps ...

The call handler answers a call from a 999 operator. The operator is reporting multiple sightings of a pedestrian on the motorway, walking somewhere between junction 4 and 7 on the M6. An exact location is not given – the callers were not sure and conflicting details were given. The call handler enters the information into a new incident log on the shared electronic system. The log is picked up by the traffic management operator who immediately turns to the CCTV system and begins to search the location. Starting at junction 4, the camera pans to the left, pans to the right, zooms in. Next camera. Pans to the left, pans to the right, zooms in. Next camera. The operator leans in closer to the CCTV monitor, points and traces an outline on the screen. “I think I see something there.” There is a pause. The camera zooms in further. “Oh maybe, maybe not... maybe it’s just a shadow.”

(Fieldnotes from 6 month ethnography of Highways Agency Regional Control Room)¹

Where is the pedestrian, if there actually is one? Is the ‘something’ seen, the pedestrian ... or just a shadow? What, if anything, is happening? And will the

¹ Fieldwork consisted of visits to all seven highways regional control rooms, with observations of control room operations conducted at each site. This included a sustained period of observational study over 6 months in one highways control room. The detailed observations were informed by ethnomethodological principles, attending to whatever happened in the setting that made up the methods operators used to make sense of network events and to detect, diagnose and respond to them.

possible presence of the pedestrian, already a logged 'incident', become something more - an event? In this paper, we reflect on social and cultural geography's engagements with 'the event' through a case of attempts to secure life; attempts including the mundane action of operators scanning for a reported anomaly. We argue that the ordinary work of control rooms, the actions of detecting and diagnosing events and responding, has much to teach geographers about events. Principally, we argue that what close attention to the work of dealing with disturbances that might or might not become events allows us to do is expand the 'modes of eventfulness' (Berlant 2011) that geographers' sense and experiment. In the work of control rooms, events are not only traumatic disruptions that shatter pre-existing frames of reference and inaugurate something new. Rather, we find potential events as well as non-events and quasi-events. We find shadows that might or might not be pedestrians and myriad other ambiguous happenings.

What are variously called control rooms or situation rooms may seem, initially, unpromising sites to think the event and eventful from. For if a minimum definition of the event is of something that surprises (Dastur 2000), the function of control rooms might appear to be to ensure that an event does not come to pass. A necessary and constant background to today's interdependent infrastructural life, control rooms are critical to the achievement of continuity. Always acting over a demarcated space (an infrastructure, a network, a site), control rooms are constantly dealing with anticipated events or happenings that might be or become events, if not yet events that have been felt and recognised as such. They are repositories of a practical expertise in dealing with all manner of things happening, with the promise

of avoiding the kind of 'overthrowing', 'shattering', 'inauguration', or 'intrusion' typically taken to define events (after Žižek 2014). The event would appear, then, to be other to the relation and effect of control. Control is precisely what is placed in question, disturbed, by events. And control is achieved, supposedly, when events are drained of their eventfulness and become recognised occurrences that can be routinely handled in existing ways. But, as our initial example hints, perhaps things are a little more complicated. For what is always at stake in control is the line between event and non-event, and much of the work of control rooms happens on the mutable, indeterminate, line that separates events from other happenings. And it is by staying with the ongoing work of attempting to end events and their impacts and effects that we can problematise and expand what counts as an event beyond the sense of dramatic 'overthrowing', 'shattering', and so on. As we shall see, in control rooms we find multiple registers of occurrence, happening, impact, and end. At the same time, paying attention to the ongoing, uneventful work of control rooms might allow us to think again about the form of events as they are governed. In the main, research on security has emphasised how a range of events are now governed as potential catastrophes against the backdrop of a turbulent world of, at best, 'meta-stability' (see Amin 2013; Aradau & Van Munster 2011; Massumi 2009). Whilst we agree that some events have been grasped and handled through a catastrophic or even apocalyptic mode of eventfulness, what interests us about control rooms is the rarity with which a sense of a terminal 'end' that shatters is present.

The paper proceeds in three sections. In section one, we stage a dialogue between Foucault (2007) on relation(s) between government and event and Berlant's

(2011) and Povinelli's (2011) work on multiple 'modes of eventfulness'. Juxtaposing Foucault and Berlant/Povinelli helps us to remain open about what an event is and stay awhile on the line between event and happenings that are almost but not quite events. At the same time, we show how assumptions about what a disruptive event is have become part of the taken-for-granted framing of geography work on securing life. Next, we summarise control rooms as a particular kind of site/process that deals with events and express and enact a particular relation between government and (quasi)event: a logic of detection-diagnosis-response. Section three is then organised around the anatomy of how one type of happening that may or may not be an event – intensified density of traffic – is grasped and handled through situated processes of detection, diagnosis, and response. We show how what might be an event becomes differently through these and other modes of action, so that the ambiguous event of congestion becomes multiple through its practices of control. As well as summarising the implications of our argument for work in geography on security, in conclusion we turn directly to the question of the event in geography. We argue for an emphasis on multiple, partially connected, 'modes of eventfulness' (Berlant 2011) as part of a social and cultural geography attentive to the dynamics of life.

Section One: The Relationship of Government and (Quasi/Non) Event

In the *Security, Territory, Population* lectures of 1977-78, Foucault tracks changes in the "relationship of government to the event" (2007: 30), tying them to a complex shift from disciplinary and juridical systems to apparatuses of security.

Immediately on introducing the “relationship” in the lecture of 18th January 1978, he moves to talk of a particular type of event - scarcity, or a state of food shortage that engenders a process that renews it and makes it more acute, unless halted. Whilst partly an effect of the lecture form, Foucault’s immediate move from *the* event to a named type of event and actual events is instructive. For what he tracks is how the relationship between government and event and what constitutes an event changes as one part of changes in apparatuses, or more precisely the redeployments (Collier 2009) and intensifications (Nealon 2008) of the heterogeneous elements that come into relation as apparatuses form and deform and reform (including changes in the ‘principles’ of government and conceptions of what is to be governed).

Foucault counterpoises the relationship in ‘security’ to an ‘anti-scarcity system’ whose emphasis was preventative of both scarcity and the event that scarcity could become and was the “major thing for government to avoid” (Foucault 2007: 30) - urban revolt. The event of scarcity is doubled in this juridical-disciplinary system: “So it is the scourge of the population on one side, and, on the other, catastrophe, crisis if you like, for government” (ibid. 31). He explains the ‘anti-scarcity’ system as a means of “preventing” (ibid. 31) the double event that is scarcity by acting on something that is slightly different - a “possible event, that could take place” - through a juridical-disciplinary system of “controls, constraints, and permanent supervision” (ibid 32):

“This system is basically an anti-scarcity system, since what are these prohibitions and obstacles intended to achieve? On the one hand, all the grain

will be put on the market as quickly as possible. [With grain] put on the market as quickly as possible, the phenomenon of scarcity will be relatively limited, and what is more the prohibition of export,* hoarding, and price rises will prevent the thing that is most feared: prices racing out of control in the towns and the people in revolt”.

(Foucault 2007: 32/33)

The event is problematised as scarcity-dearness, as scourge and as revolt. And it is rendered actionable as a possible event and acted on in advance of its happening. In addition, Foucault (2007: 33) stresses the “failures” of this system, or, put differently, how the (in)actions of government may produce, enable or continue events.

Apparatuses of security involve a different relationship between government and event. Security makes scarcity-in-general into a chimera - “the aberrant result of a number of artificial measures that were themselves aberrant” (Foucault 2007: 41) - by deploying the free circulation of grain as a ‘mechanism of security’. The event becomes two. Foucault explains this bifurcation by reference to the emergence of the ‘population’ as the “level” that is “pertinent for the government’s economic-political action” (ibid. 42). One type of event - scarcity-scourge at the level of the population - disappears, whilst another is intensified - scarcity affecting a series of individuals:

“We allow the phenomenon of dearth-scarcity to be produced and develop on such and such a market, on a whole series of markets, and this phenomenon, this reality which we have allowed to develop, will itself entail

precisely its own self-curbing and self-regulation. So there will no longer be any scarcity in general, on condition that for a whole series of people, in a whole series of markets, there was some scarcity, some dearness, some difficulty in buying wheat, and consequently some hunger, and it may well be that some people die of hunger after all. But by letting these people die of hunger one will be able to make scarcity a chimera and prevent it occurring in this massive form of the scourge typical of the previous systems. *Thus the scarcity-event is split.* The scarcity-scurge disappears, but scarcity that causes the death of individuals does not disappear; it must not disappear”.

(Foucault 2007: 42, emphasis added)

‘Scarcity’ is not the same type of event or the same type of evental problem for government across the juridical/disciplinary system and apparatuses of security. The two formulations of government involve different relationships with events, where those ‘relationships’ are part of and are constituted by apparatuses.

Foucault’s emphasis on the *relation* between government and event sits uneasily with some treatments of the event as concept in geography. Whilst we will identify other ways of thinking the event, some existing work on the event has emphasised the disruptive, or shattering, force of the event. Bassett (2008: 906) equates event with a “major political rupture or historical turning point”, or “a dramatic transformation or rupture which brings something new into the world”. Although experimenting a different ways of thinking events, Shaw’s (2012: 622) theory of ‘geo-events’ similarly emphasizes the force of transformation: “Object by

object, the geo-event de-anchors the integrity of the world. This is a process of creative destruction: a new world is made from the ashes of an old one". Whilst there are significant theoretical differences, the event is, in different ways, a non-representational excess, a rare irruptive force, that cannot be codified. Whilst there are other renditions of the event in Foucault, notably his emphasis on statements as discursive events (Foucault 1989) and comments on the Revolutionary event as both 'outside history' and 'in' history (Foucault 2000: 450), beginning with the *relations* between government and event is to start elsewhere. It is to suspend claims about the event's irruptive force and follow the multiple ways in which government relates to events of varying forms and types. 'Event' is simultaneously; that which government might, intentionally or otherwise, produce; that which is in excess of government to be feared and stopped or halted; that which changes in form and intensity through the actions of government; and that which is a more or less intense problem that government thinks-feels, problematises, and responds to.

This starting point also disrupts some of the ways in which 'the event' has been discussed in existing geographical research on how liberal life is secured today. Focusing on events of different types and forms, the emphasis has been on how security apparatuses are organised around the 'catastrophic' and how what counts as a security event has shifted as life is problematised as interdependent (on the evental time of security see Dillon & Lobo-Guerrero 2008; Donaldson 2008). The exception being work that counterpoises security and event, seeing in any effort to secure life an attempt to drain events of their eventfulness, with eventfulness being that which is never fully appropriated, that which remains incomprehensible. Whilst

there is some variability in this work, in general the presumption is that events today are problematised through the mode of the catastrophic or apocalyptic (de Goede & Randalls 2009; Aradau & Van Munster 2011), aligned to a sense of networked life as in a constant 'metastable' or 'turbulent' state (Amin 2013; Massumi 2009). In the main, the emphasis has been on how liberal lives are secured through the idea/affect of 'the end', the 'big' event, the terminal future (Povinelli et al 2014, no pagination). Foucault's account of the becoming multiple of 'scarcity' pushes analysis in a different direction. Staying awhile with how the problem of events changes as apparatuses mutate and de/reform, allows us to remain open about the form of security events. Foucault shows us that the form of an event, as well as its effects, may change as part of shifts in the relation between 'government and event'.

Whilst Foucault's emphasis on the multiplicity of the government-event relation is essential, what is also clear is that the relation is not only between government and event but also between government and what is not or might not be an event (which is not necessarily the same as a stable order). When drawn into dialogue with Foucault, Lauren Berlant's (2011) attempt to articulate different registers of an event's impact allows us to think on the line between event and what she terms, along with Elizabeth Povinelli (2011), non- or quasi events. Beginning from event as "impactful experience" (Berlant 2011: 278, n17), Berlant argues that theories of the event have been organised around what she terms a particular 'mode of eventfulness', one based on a presumption about the force of an event's affective and material impact that stitches the intense to the exceptional and the extraordinary. The consequence, Berlant argues, is that:

“Event theorists use extreme and melodramatic anti-foundational languages of nothingness, shattering, cleavage, and so on to describe impact, disregarding what about the event is at the same time ordinary, forgettable, charming, boring, inconsequential, or subtle”.

(Berlant 2011: 278, note 17)

In part, her project involves thinking and sensing the ordinariness of events by staying with scenes of unforeclosed adjustment to some kind of disturbance. In this respect, Berlant therefore invents and experiments a conceptual vocabulary that by opening out to other kinds of impacts thinks on the line between event and ambiguous non or quasi events. She plays with different “genres of the emerging event ... the situation, the episode, the interruption, the aside, the conversation, the travelogue, and the happening” (ibid. 5). Take one of these - ‘situation’:

“A situation is a state of things in which something that will perhaps matter is unfolding amid the usual activity of life. It is a state of animated and animating suspension that forces itself on consciousness, that produces a sense of the emergence of something in the present that may become an event ... The situation is therefore a genre of social time and practice in which a relation of persons and worlds is sensed to be changing but the rules for habitation and the genres of storytelling about it are unstable, in chaos”.

(Berlant 2011: 5/6)

'Situation' is a genre of the *emerging* event, not of the 'event' as impact. Counterpoised by Berlant with Badiou's (2000) emphasis on the event as a radical break or shock, a situation is something that people do not know how to be in, or even what it is. And yet, something is happening. We could compare with Barry's (2013) use of the term 'situation' to describe a shifting field of past events and controversies through which lines between the political and apolitical are drawn. Whilst both are concepts for instability and emphasise that the borders and actors of a situation are emergent and so not pre-given, Berlant lays more stress on the sensing of some kind of emergent change that is felt, in part, as a more or less intense perturbation in existing resources for making sense ('rules' or 'genres'). By contrast, for Barry, a separate 'logic of abduction' changes a political situation, when, for example, a material event interrupts, disrupts or shifts seemingly stable grounds.

Berlant's critique of melodramatic language to describe impact is not entirely unheralded. It resonates with attempts to stay with "the unfolding constitution of an event as it emerges" (Dewsbury 2000: 474) by beginning with the potential introduced by what Latour (1999) calls the "slight surprise of action". Whilst this work has had less to say directly about different registers of eventfulness, the emphasis on heterogeneous singularities in work on performativity disturbs any distinction between events and the everyday, ordinary or quotidian. Likewise, for Massumi (2014: 94): "Ordinary events can release potential, in their own intensely ordinary way. They can seriate, in the tensional texture of the everyday" (see Ash (2013) on 'perturbation' or Bissell (2014) on 'slow creep/tipping points'). Berlant's work is nevertheless important because she conceptualises on the line between

event/non-event in a manner that stays in incoherence and ambivalence. Of course, indeterminacy is a theme in most accounts of the event, in particular when considering the relation between names and the force of events. For Badiou (2000: 85), for example, event is an un-nameable break for which a name must be invented - "in a situation (in a set), it is like a point of exile where it is possible that something, finally might happen". Caputo (2006: 3), glossing Derrida on the event, stresses the event as uncontainable irruption and force: "An event is distinguished from a simple occurrence by reason of its polyvalence, complexity and undecidability, by its endless nameability by other names equally eventful". As with these and other theories of the event (see Shaw 2012), Berlant emphasises the indeterminacy of unforeclosed experience. Unlike them, she expands the genres, or registers, of the emerging event and attends to the varied processes whereby something happening becomes-event or non-event or quasi-event, or something else similarly riven with ambiguity. Povinelli (2011) does something similar as she explores how 'quasi-events' - the ongoing noise and hum of disturbance enfolded into the ordinary - are transformed (or not) into 'events', through for example their magnification or glorification by media or their amplification through statistics. Likewise Stewart (2007: 4) in her description of ordinary affects stays with how "someone's ordinary can endure or can sag defeated; how it can shift in the face of events like a shift in the kid's school schedule or the police at the door. How it can become a vague but compelling sense that something is happening, or harden into little mythic kernels".

Juxtaposing Foucault and Berlant on the event leads to two starting points. First, that what constitutes an event *as* event is enfolded with the life of apparatuses,

so that nothing a-priori can be said about 'the event' and its relation to government. As Foucault shows in comparing event in discipline and security, the government-event relation is multiple and *may* differ across specific apparatuses and across modalities of power, as well as varying within apparatuses. Second, and drawing on Berlant, much of the work of securing events happens on the indeterminate, motile, line between event and its close relations, what she and Povinelli term quasi or non-events (although these are only two of many potential names for these happenings and others may be needed). Partly, this is because security involves dealing with myriad happenings that the equation between event and a traumatic disruption that shatters sense misses. But also because to secure is to move happenings and occurrences between processes of becoming (non)event, as well as working out whether and what is happening or may happen.

The following section develops these starting points by introducing control rooms as a key contemporary process/site in which sorting and handling (quasi/non)events gets done, or, put differently, a site that expresses and enacts relations between government and event. Control rooms exist as a case in this paper in two way; both express the tension between generality and singularity that animates the case study form. First, the motorway control room exists as a singular case that interrupts the becoming general of any claim about the government-event relation today. We pay close, slow attention to the detail of what was happening in *that* control room *then*. But, and second, our case of control rooms serves to exemplify a cluster of generic relations with events that circle around the promise of continuation and return by bringing something that is happening, or might be

happening, or might happen, to an end. We also, at the same time, want to expand what can become an exemplary scene for thinking the event in geography – control rooms supplementing events of singular harm and damage ('Guantànamo Bay'), events that are given names and become recognisable as major events ('9/11'), generic forms of events ('Revolution'), events fabulated in the performing and other arts (a scene in a play, a character's actions) and events that infuse and compose something like ordinary life. How, then, to characterise the specific relation or relations with events in control rooms and what do control rooms do?

Section Three: Controlling Events

Control rooms simultaneously hide and confront events, or their possibility. They hide events, in that control rooms monitor and manage and intervene in an attempt to achieve continuity and render disruptions, and the work of managing disruptions, invisible to users of the infrastructure that is controlled. But they confront events, or their possibility, in that they are constantly dealing with happenings that have the potential to disrupt, interrupt or stop that which the control room seeks to maintain. If that which is controlled is to continue to function in the midst of and through disruptions, then the work of the control room is to organise and coordinate action in order to anticipate and stop events. We might say, initially at least, that the promise of the control room is 'negative'; it stops, it halts, it attempts to ensure that happenings do not come to pass, or do not become events. This raises questions, though, about the relation(s) between government and event

typical to control rooms: How do control rooms come to sense and know about events? How do they grasp and handle events and make them actionable?

We have argued elsewhere that control rooms occupy a paradoxical position as both a part of and not a part of infrastructures (Gordon et al, 2015). What we mean by this, firstly, is that control rooms are sites embedded in what is controlled. For a control room to sense and make visible events so that they may be halted or stopped, it needs to maintain relations with that which it controls. Control rooms are part of the networks of human and non-human actors that must be coordinated and held together for an infrastructure to cohere, persist and function (Bennett 2005). Because of their position in this network of dynamic relations, control rooms see infrastructure as always already on the verge of breakdown. In short, the imperative to control is inseparable from an expectation that periodic disruptions to normality are a normal part of that which is to be controlled, whether infrastructure, network or site. The network of relations needs to be worked at. But this means that, at the same time, and secondly, a control room must perform a series of special functions. It must be able to organise and coordinate different actors, to initiate action at a distance and intervene in the relations between different infrastructural parts. Control rooms are therefore able to initiate and perform different kinds of action – adaption, modulation, instruction, investigation, direct control, and so on. It is through these particular types of action that the control room attempts to bring about desired effects to maintain order. It is this double status – the control room as a part which is not a part (Gordon et al, 2015) – that enables control room to ‘control’ events, or at least undertake action on/in the line between event/non-event.

Consider the motorway control room that we focus on in the paper and from which the initial example of a possible pedestrian was taken. In England, the work of managing the motorways is carried out by the Highways Agency and their network of seven regional control centres. In each centre, there is a control room, responsible for the continuous, real time monitoring at a distance of the motorway and the coordination of response to 'incidents' on the network. The motorway is made visible to operators in various ways. Beneath the road itself are thousands of inductive loops that count traffic flow. Algorithmic processing of this data by the Motorway Incident Detection and Signalling (MIDAS) system produces congestion alerts when a predetermined capacity is reached. These alerts are presented to traffic operators via electronic network diagrams on screens in the control room, pinpointing the location of traffic events. Operators also scroll through and watch hundreds of CCTV cameras positioned across the network, streaming live images of traffic flow. They also answer calls from emergency roadside telephones located across the network and take eye witness reports of motorway incidents.

The problem control rooms confront, then, is belatedness. With the exception of mobile control rooms which might inhabit the temporary scene of events, control rooms are at a spatial-temporal distance from (quasi/non)events. Whilst there are numerous attempts to erase this gap so that detection and response are one, through 'real-time' automation for example, control rooms face the problem of not initially knowing what is happening, or indeed whether anything is happening. We saw this in the paper's initial example of a shadow that might be a pedestrian. Control rooms therefore involve distributed systems of detection-diagnosis-response that generate

some kind of signal that an event or something that might become an event is happening. Connected to that which is controlled through a particular, distributed set of sensing devices, control rooms do not only sense events. Rather, they sense the present of that which is controlled for happenings that might be events. These may include emerging events, whilst there is still scope for action that alleviates harm or damage. They may include ordinary disturbances that become nothing at all. Such detection-diagnosis systems produce particular kinds of object – warnings or alerts – that may initiate diagnosis work, as attempts are made to make sense of what is happening. Warnings and alerts are indexical – in that they have an indicative relation to a real happening (Massumi 2014) – whilst also becoming what we call emergency epistemic objects. They generate concern; they demand or invite some kind of action in relation to a (possible) harm. Any control room will, then, have a series of routinised and improvised ways of sorting happenings to render them actionable – that is subject to the forms of action that achieve the effect of ‘control’. Not quite fitting with accounts of preemptive or precautionary logics that presume action occurs before an event (de Goede & Randalls 2009), nor with resilience as a near constant adaptability to unpredictable meta-stable conditions (Amin 2013), control rooms are typically organised around a responsive relation between government and event. What matters is coordinated, responsive action in an ‘interval’ between detection-diagnosis of something happening and the event’s impacts and effects intensifying to become a disaster or catastrophe.

Because the sphere of concern for any control room is always demarcated, any control room will be primarily concerned with a limited set of events (as well as

generic events – such as flooding - that are taken to cross infrastructures). Multiple events might happen, though, even within a seemingly single network or infrastructure, and those events might take multiple forms. If we begin from the detection-diagnosis-response relation in specific control rooms, there is no such thing as a paradigmatic event that defines the government-event relation today, whether the ‘integrated accident’ (Virilio 2006); ‘non-normalisable accident’ (Massumi 2009); or the ‘catastrophic event’, that spreads across event space (Cooper 2006). Rather, control rooms are sites in which (non)events are worked on; detected, diagnosed, and responded to. And (non)events may move between different ‘modes of eventfulness’ (Berlant 2011) as they are sensed, rendered actionable and subject to some form of control. But how this happens will be particular to distinct control rooms and the specifics of that which is subject to attempts to control.

The following section explores how the Highways Agency regional motorway control room detects, diagnoses and responds to (non)events. As we saw with the example of the passenger-shadow in the introduction, the motorway control room routinely deals with what operators refer to as ‘incidents’. Incidents are the control room’s way of dealing with something that is happening – or is reported to be happening – that may or may not be an event. They can be indications or suggestions of network events, only tentatively known or unverified, such as verbal reports or congestion alerts, or they can be, quite evidently, network events, like a CCTV sighting of a road traffic collision. Incidents in the control room, then, occur at different registers of eventfulness (from the dramatic to the boring). They may have happened, be happening, or are yet to happen. They may be ambiguous and require

further work to determine whether or not an event is taking place. But what they have in common, what connects them and categorises them as incidents, is that they are recognised as occurrences that warrant some kind of next action.

Based on six months ethnographic research in the control room, we go slowly in our description of how control rooms deal with events. Being interested in actions that might seem to be uneventful even as events are dealt with, we pay close attention to the mundane work that happens to end or foreclose events. We focus on just one type of (non)event that is at once a normal, expected and prepared for feature of the network *and* disruptive: 'congestion events'. Congestion may, initially at least, appear to lack some of the qualities that are usually taken to make up events: principally it often lacks a clear start or end, in part because the lines between congestion and normal traffic circulation are blurred as the two states tip into each other. Creeping up, coalescing in slowing or stopped traffic, before dissipating as the rhythm and density of traffic changes, congestion lacks a sense of dramatic, exceptional interruption that ruptures and transforms a world. And, yet, *in effect* congestion may have an evental status; normal/normalised circulations and interdependencies may be blocked, inhibited, slowed, disrupted, and so on.

In the control room, there are multiple ways of detecting congestion, some of which are often used in combination. Congestion may be reported by eye-witnesses, such as a radio call from a mobile traffic officer or a telephone call made by a roadworks contractor at the scene. The status of these observational reports is often only preliminary and needs to be verified by the operator by some other means. Live CCTV feeds of traffic are widely used to investigate or corroborate reports of

congestion. They are also used to proactively monitor traffic to identify changes in behaviour, speed or density. Perhaps the most interesting means of detecting congestion is through the production of MIDAS queue alerts, which are displayed as locational markers on the motorway network map. Through algorithmic processing, these alerts pinpoint traffic events that are deemed at odds with normal traffic flows. In the first two examples we start with a MIDAS queue (Q) alert. Q alerts may be indicative of traffic events that require an intervention of some kind to maintain order. They may be suggestive of events previously unseen. But, as we shall see, they may also indicate nothing at all.

Section Three: Detection-Diagnosis-Response and Events

3. a) Detecting Events: Being Alert to Congestion

Example 1: A MIDAS Q Alert

It's Thursday afternoon at the traffic management desk. The operator has been monitoring the MIDAS Q alerts along the M6 motorway. "It's particularly bad today – congestion is stretching all the way from junction 9 to junction 11 now. Look at it there." She points to the network map which shows a line of densely located yellow Qs. "I'll have another look." She reaches to her right and grabs the CCTV controls on her workstation. The CCTV feed is showing traffic around junction 11. "I think I'd better sign for it."

(Ethnographic notes from observation of Highways Agency control room)

MIDAS, the Motorway Incident Detection and Signalling system, works by capturing traffic data from a distributed network of thousands of traffic sensors. These sensors, consisting of pairs of induction loops embedded in the road surface, provide electrical readings when vehicles pass over them. This traffic data is then algorithmically processed and a MIDAS Q alert is produced when the loop is occluded for longer than the pre-determined threshold, indicating the presence of slow moving or stationary traffic.² The alert is displayed as a yellow Q on the overview network map in the control room. In this example, the traffic management operator has been aware of the steady production of congestion alerts at this location for some time. She tracks the MIDAS Q alerts as they creep further along the M6 towards and past junction 11, using the CCTV feed to corroborate the MIDAS detections. She looks again. This particular case of congestion straddles the line between event and non-event. On a Thursday afternoon, around junction 9, dense traffic conditions are expected. Congestion is a routine feature of this journey. Today, however, conditions are seemingly different, somewhat surprising, given that the density of traffic has exceeded the MIDAS threshold and stretches as far as junction 11. This leads the operator to describe the traffic conditions as 'particularly bad' in an attempt to express how conditions are not quite as expected. This assessment prompts her to check the CCTV again. She considers what her next

² Known as the HIOCC algorithm, which is an abbreviation of Hlgh OCCUpancy, it produces a Q alert when it detects several consecutive seconds of high detection occupancy on its loops. The output from each detector is scanned at one-tenth-of-a-second intervals to determine whether the detector is occupied or not. For each second, the detector is assigned a value between 0 and 10 (which represents 0 to 100% occupancy), which is called the instantaneous occupancy. If 100% occupancy has been reached and it lasts for as long as the pre-determined threshold (typically two seconds) then an alert will be produced. Parameters control the behaviour of the algorithm, including signal on and off times, a smoothing constant and flow/speed alert thresholds (Collins et al. 1979; Collins 1983; Rees et al. 2004), to prevent the quick changing of signs and signals that may confuse drivers.

action should be: "I think I'd better sign for it." The detection warrants a response, albeit tentatively expressed. This deliberation, this considered indecision, supported by direct monitoring, is a routine feature of congestion management given the indeterminacy of the congestion event. The detection-response relation occurs over time, as the congestion event changes and the operator attempts to make sense of it.

MIDAS was introduced to the control room as an automated queue protection system to improve safety at congestion events. Its original purpose was to slow traffic in congested conditions by setting warning signs and advisable speed limits to drivers as they approached queuing or slow moving traffic. If drivers take heed of the automated advice, they should experience a reduction in abrupt braking on approach to the back of congested traffic and the smoothing out of the typical accelerate-brake-accelerate driving pattern which is observed in stop-start congested traffic conditions (Rees et al. 2004). All in all, the system should reduce the number of minor events and accidents that occur in congested traffic – the shunts, bumps and fatal collisions that can and do happen at the back of queues. What this tells us about congestion is that not only can it be particularly tiresome and tedious for travellers stuck in it, but it can also seriously endanger life on the motorway. Congestion curiously occupies the ambivalent line of the (non)event, tensed between routine, familiar traffic behaviour and something more threatening to life.

This is why MIDAS Q alerts are of interest to operators. Under the logic of detection-diagnosis-response, congestion has a double status. On the one hand, congestion is a legitimate case for a response because of the unpredictability of its effects on traffic. While it can be familiar and routine, it can also change quickly, and

produce conditions that lead to future collisions and unambiguous events of death and injury. This possibility is sufficient enough to demand some kind of preventative action – an intervention which is made to limit the likeliness of further disruption. On the other hand, congestion can be a secondary effect or trace of other types of events that are of interest to the control room. A vehicle that breaks down in the live lane, or a collision scene spread across the carriageway, can cause traffic to slow down, swerve, stop or filter into a reduced number of available lanes, triggering the congestion detection. The significance of this is that an automated detection-response could actually be associated with another type of event that has occurred or is occurring. What is problematic is that the system cannot be witness for all the substantive and situational details of a detection which an operator needs to respond. Is it traffic volume? Is there an obstruction in the carriageway? Is it related to a traffic collision? Is it a false detection?³ The challenge for the control room then is to make sense of individual automated detections for the purpose of rendering them available for response – and the right kind of response – given the inherent ambiguity, or double status, of an automated-detection of a (non)event. It is this double status – or what we could call the ambiguity of the (non)event – that enables and demands further investigation by control room operators.

Example 2: Making sense of a MIDAS alert

³ One of the most common occurrences of a false Q alert is attributable to slow moving vehicles, such as a heavy goods vehicle, going uphill, whereby the slower speed of these vehicles, combined with their length, occludes the inductive loops for a longer duration. Translating this occlusion as queuing or stationary traffic, the queue alert is then triggered. Technical malfunctions are also possible.

The operator notices that a number of MIDAS Q alerts have appeared on the motorway network map. He pulls in his chair and leans forward. Holding the mouse, he double clicks on an alert. The screen zooms in to provide a detailed map view. Here, it shows the MIDAS readings for each lane of the 3-lane motorway. It is showing /Q/ - denoting that a queue has been detected in the middle lane. "What's happened there?" he mumbles. "Has anyone else seen this MIDAS? Junction 3, M6," he shouts up in the room. He quickly turns to the CCTV interface, on his right hand side, punches in the corresponding camera number on the keypad, and swings the camera to point at the location identified by the MIDAS Q alerts. "That rings alarm bells, that's not normal congestion."

(Ethnographic notes from observation of Highways Agency control room)

In Example 2, we observe the traffic management operator, sitting back in his chair, looking around the room, when his gaze shifts to the motorway network map. Here, a number of Q alerts are displayed along a stretch of motorway. Given the time of day, mid-morning on a Wednesday, the operator does not expect congestion to happen here. It is this discrepancy between what is expected and what is observed that first prompts further action. It is "not normal congestion." To take a closer look, the operator double clicks on the alerts to zoom to the location on the map. On the screen, this opens the detailed map layer where operators can access lane-specific readings that make up the detection. The readings are made up of a mixture of symbols (consisting of / for no queue, Q for queue detected and F for loop fault) that can reveal clues about the make-up of the congestion detection. Here, a reading of /Q/ indicates that congestion has been detected in the middle lane - in lane 2 of a 3-

lane motorway. Immediately this is recognisable as an unusual form of alert, but at this point it is not known why the alert has been produced. After all, the MIDAS Q alert can only provide a partial indication of the (non)event, through the frame of algorithmically processed traffic data, and cannot reveal substantive detail. Given its unusual form it could have been triggered by an obstruction located in the middle lane – a road traffic collision, a broken down vehicle or fallen debris – causing traffic to slow down, swerve or stop on approach to it. It could also be a false detection.⁴ Its ambiguity then prompts the operator to investigate further, to create an account of the substantive circumstances surrounding the detection. Under the logic of response, at this stage, this is eventful-enough to prompt further action, without yet being an ‘event’ in the sense of exceptional world interrupting transformation. The operator calls out to colleagues and begins to search CCTV for a resolution.

The example begins to show that the work of securing (non)events is multiple and not always obvious as there is no stable relation between a detection and a type of event given its possibilities (congestion, a road traffic collision, a vehicle breakdown, a momentary delay in traffic, a false detection, a technical fault). So far, whatever is happening on the motorway has been recognised and anticipated as a potential event – the detection-event coupled with an understanding of its situated production within the setting’s referential frame. In this case, it has also been considered unusual enough to “ring alarm bells” and to initiate and qualify further investigative action. Something unusual that might be an event is happening. Unlike Example 1, where new Q alerts were monitored for change over time as part of an

⁴ Slow moving vehicles, such as heavy goods vehicles, where their speed combined with their vehicular length, can occlude the inductive loops for a longer duration, simulating slow or queuing traffic under the algorithm. A MIDAS alert is then produced.

extensive case of congestion on the M6, in Example 2 this single and unusual Q alert demands prompt investigative action stemming largely out of concern for what it could possibly be – in order to give the potential event a name. This next stage of naming and working to secure the event as a defined type or class is what we refer to as diagnostic work (following Büscher, Goodwin & Mesman 2010).

3. b) Diagnosing Events

Abandoned vehicle, pedestrian on the network, traffic collision, fire, abnormal load – these names offer a mutually recognised account of events so a response can be decided and successfully coordinated in the control room. These names are only provisional as the emergent event is investigated or a response debated, but at this point, their use serves to secure the event in familiar terms and move the work along to a resolution in which the event ends. As such, the act of naming this or that event-detection is a significant part of the response logic in the control room. By making familiar, it removes surprise, making detected events recognised occurrences that can be handled in routine ways. As it is provisional, and sometimes representative of an ambivalent category, a diagnosis need only be ‘sufficient enough’ in order to grasp the sense of what is happening, enrol operators into investigative action, and thus justify that action, even if it turns out that the event requires no further action or intervention subsequent to that investigation. This is particularly apparent in the example of congestion. How is congestion diagnosed? Is it slow moving, standstill or stop-start? We know that congestion can

be detected in various ways (MIDAS alerts, CCTV observations, verbal reports) which makes it difficult to identify and consistently define. In turn, we know that congestion can be both a normal, predictable feature of motorway life, as some parts of the network are routinely congested during peak times in known locations, and an unpredictable event resulting from a hitherto unforeseen spike in traffic demand or a secondary effect of a prior occurring event such as a road traffic collision or vehicle obstruction. In all these cases, it is not straightforwardly clear that what is happening and observed as congestion will continue or worsen and whether or not a traffic intervention of some sort is therefore required. Generally, cases of recurrent congestion or cases expected to be short-lived will not be responded to given that drivers are mostly aware of peak time traffic and excessive or unnecessary signage on the motorway network can diminish impact (see Foo and Abdulhai 2006). The control room needs to make a decision – does it allocate resources, dispatch a mobile crew, set warning signs and speed restrictions, or wait to see what happens? This work is further problematised by the challenges of control room work. The very dynamic quality of the motorway, the fact that traffic is always on the move, means that events and circumstances can quickly change. Congestion can be a fleeting occurrence – and any intervention made must have purpose to have an effect. This means that (non)events sometimes undergo a lot of work in order to make them cohere. In this next example, a report of congestion is made by a traffic officer on patrol. What is interesting about this example is the different ways in which congestion is described and defined – leading to competing diagnoses of the event (and resultant responses). The event is, in short, made multiple as it is governed.

Example 3: An eye-witness report is received by the control room

It is Thursday afternoon on the Congestion Desk. The operator has been transferred a call from a traffic officer who is currently on patrol around junction 11 of the M6. He reports that there is "pretty bad congestion round here" and because he cannot identify any other incidents in the area that would be contributing to the congestion, such as a road traffic collision or live lane vehicle breakdown, he concludes that "it must just be the volume of traffic." With this the traffic officer requests that the operator sets congestion signs for it to warn other drivers. The operator asks "Is it stop-start or is it just busy?" The traffic officer replies "well, it's moving but it's still really congested."

The operator turns towards the CCTV interface. She asks the traffic officer to confirm, "Around junction 11, M6 did you say? And are you going northbound or southbound?" She selects the nearest CCTV camera, zooms in, and moves it around. After a short pause she says, "Oh right, I see. Leave it with me and I'll see what I can do for you," and ends the call. She then turns to a traffic management colleague sitting behind her and says, "What do you think of junction 11? Do you think it's congested?" She explains that a traffic officer has requested congestion signs to be set and that she is not sure that the scene is actually congested. Her colleague finds the location on CCTV and gives his verdict, "No I don't think that's congested either, it's moving isn't it?" He adds "And anyway, we're talking about Thursday afternoon here, it's always busy around there." The operator agrees and she declares "Yeah I'm not signing for it then."

(Ethnographic notes from observation of Highways Agency control room)

In the example above, the operator is positioned at the Congestion Desk and assigned with the primary task of identifying, tracking and tracing congestion, intervening where appropriate by setting traffic management signs and recording all observations and interactions in an electronically shared incident log. She receives a call from a traffic officer on patrol who reports congestion. In response to this event-detection, the operator engages in diagnostic probing and questioning in order to ascertain whether this report really counts as congestion that warrants traffic management intervention. The question “is it stop-start or is it just busy?” serves to press the traffic officer to describe the traffic conditions in more specific terms as appropriate to the phenomenon of congestion, as it is understood by the operator to be a legitimate case. The operator then finds the location on CCTV to help substantiate the report. However, she makes no comment on the conditions she observes on screen and her response is deliberately vague and non-revelatory of a next action, “Leave it with me and I’ll see what I can do for you.” The diagnosis is left open. What we see here is that operators do not simply ‘discover’ what is happening on the motorway network by virtue of instantaneous detections. Instead, operators need to actively create a version of the event through naming and diagnostic work, in the here and now, to help them make a response decision. This creates opportunity for thinking the possible event, or the not-yet event, as it awaits corroboration, verification and discussion. Compared to other event-detections that the control room deals with, such as an emergency call for a live lane vehicle

breakdown (its status as an emergency call legitimises and demands immediate action), congestion is unpredictable, transformable and unfamiliar in its situated context. The type of event that this detection represents is ambiguous under the logic of response. At this point, the operator sounds out a diagnosis with a colleague. The reply is “it’s moving isn’t it?” which denies its diagnosis as congestion for the purpose of response and supports her hesitancy to commit. The discussion then explicitly invokes a situated and mutually constructed understanding of the situated specifics of this non-event of congestion – it is a Thursday afternoon, on the M6 motorway, which they consider to be “always busy around there,” suggesting that no intervention is necessary. This use of practical expertise, appealing to background expectancies of what the network should be like, comes at a decisive point in the activity of diagnosing congestion. In effect, this time, the report is not an unusual enough deviation from normal network conditions, and results in a non-event, following a series of quasi-events/actions: a telephone call is taken, a report is made, a CCTV scene is observed, a discussion takes place. It is in and through these various actions that operators deal with the ambiguity of the event and the constantly changing parameters that determine what qualifies as an event in its specific and situated context. Here, what was provisionally named as congestion is not formally recorded as an event in the incident log – as yet anyway – and no further action is required.

3. c) Responding to and Ending Events

If the promise of the control room is to secure and normalise that which it controls, then how does the event that might not be an event end? There are some events in the control room that are straightforwardly responded to and ended; the broken down vehicle which has been towed from the carriageway by the rescue truck, or the reopening of the carriageway following clean-up of the debris left by the road traffic collision, for example. Ending these events supposes the restoration of a level of normality and normal activity that had been disrupted. As we saw in the previous example, the end of congestion is more difficult to pinpoint because the line between what is normal and what is abnormal can be ambiguous. In Example 3, for the traffic patrol officer who reports the congestion sighting, the last thing they are told by the operator is "Leave it with me and I'll see what I can do for you." It suggests the next action will be investigative, considered and perhaps debated, but what decision will be made is unclear. In the control room, we observe the operators discussing whether or not this is an abnormal case of congestion. They consider it to be routine and typical of a Thursday afternoon – "it's always busy around there." At this point, they decide no direct intervention is necessary, no motorway signs need to be set, no special instructions sent to the traffic patrol officer. The event appears to end in this particular moment. What might have been an event has become a recognised, normal, occurrence. But is this non-action the end given the fleeting and changeable nature of congested traffic? There is always the possibility that conditions will change and congestion will become event.

The multiplicitous nature of this work of grasping, diagnosing and responding to events shows that there is no stable relation between a detection (a congestion

alert, an eye-witness report or a CCTV feed), an intervention (resource dispatch to the scene or traffic sign and signal setting) and an end independent of some kind of investigative work that legitimises and qualifies response. This brings us next to the work of incident logging as a way of dealing with (non)events. At the dedicated Command and Control software screen, any operator can log a new incident, log an action they have performed, update an existing log by changing or adding detail and close a log when the incident has ended. For handling events, the log has three purposes: it creates the emergent event and normalises and legitimises responses to it, it acts as a repository for information relating to the event and it supports the delegated organisation of work between co-located operators in the control room (for any single event, it is possible that two or more operators will be working on it, more or less simultaneously, so their actions need to be recorded and coordinated). Our final example focuses specifically on the work of congestion tracking and a particular way of ending an ambiguous moving event.

Example 4: Congestion tracking

*It's Friday afternoon in the control room on the Congestion Desk. The traffic management operator has been scrolling through the CCTV feeds on her workstation monitor. She clicks next, looks at the screen, clicks next, leans in. "Yeah it's definitely getting better there." She turns to the incident logging screen. The congestion log is open. She types **CONGESTION NOW AT M6 J5.** "I think I'll take down the signs. I don't think we need them anymore." She types **REMOVING*

*CONGESTION SIGNS J6-5**, moves towards the network system map and clicks to remove the signs. "I'll probably check back in a bit."*

During busy periods, a congestion desk is set up in the control room with a dedicated traffic management operator whose job it is to track and record congestion in the congestion log. Today, around junction 5 of the M6, there has been ongoing congestion which has stretched beyond junction 6. Considered somewhat abnormal, the traffic management operator has been monitoring its progress and setting location specific signs to warn drivers of congested traffic conditions ahead. So how does the event end? Is it the observation that traffic flow "is definitely getting better"? Is it the removal of congestion signs? Or is the end as yet unspecified given that traffic conditions may change? What is interesting about this tracking work is that an end can be difficult to determine. Congestion is typical of the emergent event, tensed between an event that disrupts traffic, posing a threat to the safety of life on the motorway, and a non-event that slips away without us really noticing. The indexical language used to describe conditions works to justify the decision to remove congestion signage – congestion is *now* at junction 5 – therefore congestion signs will be removed. At this moment in time, the response is legitimised, and for now the event appears to have ended and the motorway returned to normal.

Concluding Comments: What is an event?

We end, then, with the uneventful work of bringing events to an end. Or, rather, with the promise of control rooms: that events can become non-events even if those events are, like congestion, ambiguous and multiple. In the final example, the disruptive effects of the congestion event have become something else. And this has been achieved through a series of attempted adjustments of traffic flow that contrast with the direct intervention necessary for other events (e.g. the rescue of vehicles, the clean-up of an accident, the reopening of a closed carriageway). Modulations that remind us that control room operators know events. But it is easy to miss this, because how they know and relate to events is often uneventful. By going slowly, by paying close attention, we have aimed to evoke this uneventfulness. Ending events is about keeping an eye on a happening, scrolling through cameras, adjusting congestion signage and so on. Through control room work, the event is made actionable by establishing a series of provisional determinations of what is happening. What is dealt with is not a single happening, but a series of actualities and potentialities, each of which has an established, recognised sequence of 'next step' actions whilst also remaining imbued with ambiguity. Events are ended, then, by becoming their seeming opposite: collections of recognised occurrences. For this reason, control rooms are interesting to think with. Their emphasis on bringing events to an end, of achieving continuity, contrasts with the emphasis in recent work in social and cultural geography on the creative fabulation of events. Finding resource in varied forms and practices of artistic experimentation (e.g. Roberts (2014) on an 'experimental object'; McCormack (2003) on participatory dance), the emphasis in work has been on learning to be affected by the potential of events and,

in various ways, remaining open to the emergence of something new. Control rooms remind us, by contrast, of a different way of being affected based on a particular government-event relation. Detection-diagnosis involves becoming sensitive to traces of ambiguous (non)events, in order to end them. Control rooms are, then, one of innumerable ways in which events do not come to pass. It is not simply, though, that they enact a 'negative' rather than 'positive' power. Through varied modes of action, 'control' means making a difference to events. Beyond the scope of this paper, we might ask, then, how effects are created through the actions of 'control' and how they become part of the 'scenes' and 'situations' through which spheres of emergency action are demarcated. This leads to two wider conclusions.

First, the problem of the event for geographical and other work on security looks a little different from the perspective of control rooms. Thinking about the range of events control rooms deal with, it is clear that events are not just problematised in the mode of the catastrophic or apocalyptic (c.f. Amin 2013). Far from it; the concern in the motorway control was with myriad 'incidents'. With an 'incident' being a happening that might be or become an event, or nothing at all. To recognise an 'incident' is to diagnose that some kind of change may be on the way. However, it is not only that events are problematised in non-catastrophic ways; it is also that the work of securing involves acting on and through events. What we see in the example of the motorway control room is that securing life involves, first, continuous, provisional determinations on the ambiguous line between event and non-event and, second, action that effects, or hopes and promises to effect, transformations between (quasi)event and non-event. Contrasting with the

emplotting of named events ('911', 'Charlie Hebdo' and so on) into recognised genres ('war on terror') that legitimate particular security responses, control rooms secure by producing the effect of normality, of nothing happening.

The event and evental have become key terms for a revitalised social and cultural geography sensitive to and immersed in the dynamics of life and living. The lesson of control rooms is not simply that there are multiple 'modes of eventfulness' (Berlant 2011), such as 'incidents', which extend beyond a dramatic transformation. Thinking from control rooms in dialogue with Foucault and Berlant allows us to pose the question of how events end, never come to pass, or become something else. Attuning to events has become one way for social and cultural geography to sense and disclose forms of non-linear change - tipping points, shattering, and so on. As well as reminding us not to romanticise change per se, starting with control rooms as a scene for thinking events centres questions of who or what ensures, or attempts to ensure, the (re)production of continuity in the midst of potential disruption. How are happenings drained of their potential? How are events adjusted to and lived with so their impacts and effects are dampened? How are events de-actualised? Let us return, then, to the shadow that might be a pedestrian we started with. As well as events of revolution, or traumatic disruptions that remake worlds and cannot be lived through, a geography of events might stay on the ambiguous line between event and non-event and trace how (non)events are produced and by whom. It might also attend to pedestrian-shadows and other ambiguous (non)events.

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