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Witnessing riot: a political ecology of digital things

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Abstract:

This paper revisits academic commentary on the English Riots, 2011, as an entry point for re-imagining the political agency of the digital camera, and advancing a new materialist reading of the politics and practices of witnessing. Via Bennett's (2010) exposition of the "vital materialism" of "thing-power," two key problematics are explored: firstly, what counts as political agency in sites of riot, protest and violent disorder; and secondly, who, and importantly, *what* can and does act politically? What sense can be made of practices of witnessing - of bearing witness to riot - when agentic capacity is granted to nonhuman actants; and what happens to the politics of witnessing when "vibrant matter" is invested with political capabilities? In responding to these questions, the paper takes critical stock of the (immediate) aftermath of the English Riots, where practices of witnessing are entangled with, and co-opted into police investigative work. It is in this context that the "thing-power" of digital camera technologies stages a series of ethico-political interventions, and signals an alternative political imaginary in which heterogeneous assemblages of human and nonhuman actants mobilise an ecology of political practices predicated on witnessing, surveillance, investigation, vigilance, and the visual archive.

Keywords: digital camera technologies; new materialisms; police investigation; political ecology of things; riot; vibrant matter; witnessing.

Introduction: witnessing riot

Collectively dubbed as the English Riots, Bridges notes that "(f)or four days in August 2011, England experienced probably the most widespread public disorders in its history" (2012: 1). Ignited by the "flashpoint incident" (Waddington 2012) of the shooting of Mark Duggan in a contentious police operation, a peaceful protest outside a Tottenham police station quickly erupted into convulsive disorder, with riots, looting, arson, and violent affray spreading in a matter of days to twenty-two of London's thirty-two boroughs, and sixty-six other local authority and police force areas across the country, including Merseyside, Greater Manchester, Hertfordshire, Avon and Somerset, the West Midlands and West Yorkshire (Her Majesty's Inspectorate of Constabulary 2011; Metropolitan Police Service 2012a). The riots cost British taxpayers £133 million (Lavelle 2011), with a further £200 million paid out by insurers; approximately 2500 shops were looted (Topping and Bawdon 2011). The riots involved an estimated 13,000 to 15,000 individuals, and more than 5000 crimes were committed, including 1860 incidents of arson and criminal damage,

1649 burglaries, and 366 attacks on people (Association of British Insurers 2014). Five men lost their lives in associated altercations. By August 2012, 3103 individuals appeared before the courts: 69% (2138) were found guilty, 16% (508) were acquitted, and 66% (1405) were sentenced to immediate custody with an average custodial sentence of 17.1 months (Ministry of Justice 2012).

Academic, journalistic, governmental and popular commentary on the English Riots has been prolific, and was beginning in earnest even as the embers of urban wreckage smouldered beneath the dust and debris of shattered windows and broken streets¹. Though responses to the rioting developed along varied lines of empirical inquiry, they followed a well-rehearsed and recognisable post-riot script which filtered events through the lens of racism and the criminalisation of black youth (Jefferson 2012; Palmer 2012; Solomos 2011); deprivation, un(der)employment, and poverty (Jeffery and Jackson 2012); gang culture (Harding 2012); disproportionate and ineffective policing (Klein 2012; Waterton and Sesay 2012); social inequalities (Grover 2011; Till 2013); marginalisation, alienation, and social exclusion (Bridges 2012; Calvacanti *et al* 2012; Creaney 2014); gender and “street masculinities” (Kelly and Gill 2012); and their historical dis/continuity with the landmark urban riots of 1980/1 and 1985 which became “the commonest reference point for 2011” (Murji and Neal 2011: 2 – see also, Bateman 2012; Lea and Hallsworth 2012; Pearson 2012). While such accounts offered a prompt rejoinder to the government’s reductive and moralising rhetoric², analyses have been primarily read through the prism of the politics of inequality, exclusion, resistance and social justice, but ultimately lack the aetiological wherewithal to adequately and persuasively ground events within a collective politics of protest and grievance. Indeed, Gorringer and Rosie (2011) complained very early on that analyses overly drew from antediluvian “sociologies of the mob” and were poorly equipped to grapple with the political complexities of multi-sited, simultaneous riots.

More tellingly, Winlow and Hall have argued that by clinging to an outmoded social democratic diagnosis of social unrest, analyses remain trapped by a “self-imposed epistemological regression” (2012a: 468), and unreceptive to alternative, less politically palatable readings. Indeed, Žižek (2011) had very quickly laid the ground for a postpolitical account of the riots in which the possibility of a properly political moment is foreclosed by an over-arching acquiescence to the consumerist logics of global capitalism and the rationalities of neoliberal rule. Thus, far from being a marker of resistance and radical activism, Žižek saw only “a zero-degree protest, a violent action demanding nothing” (2011: 2); while Bauman described the rioters as “defective and disqualified consumers” (2011: 1) who, though superficially appearing to be rebels with some kind of cause, were nonetheless acting out and conforming to an underlying free market, consumerist value system – see also Moxon (2011). Across a series of theoretically nuanced and insightful articles, Winlow and Hall (2012a, 2012b – see also, Treadwell *et al* 2013), delineate a postpolitical (Žižekian) reading of events in which they reflect on the “objectless dissatisfaction” of the rioters which, in the absence of any discernible political manifesto, gave expression to a “culture of depressive hedonia, vapid consumerism, and deep cynicism set against a background of postpolitical torpor” (Winlow and Hall 2012a: 466).

¹ See, especially, a range of Special Issues published in the immediate aftermath of the English Riots: *Criminal Justice Matters* 2012: 87; *Safer Communities* 2012: 11(1); *Sociological Research Online* 2011: 16(4). See also, Akram 2014.; Briggs, 2012; Lewis *et al* 2011.

² Notably, the then Prime Minister, David Cameron, regarded the riots as driven by “criminality pure and simple,” and energised by “people showing indifference to right and wrong... people with a twisted moral code... people with a complete absence of self-restraint.” See: Prime Minister David Cameron’s speech to the House of Commons, 11 August 2011: Text published in full in *The Guardian*, 11 August 2011. Available online at: <http://www.theguardian.com/uk/2011/aug/09/david-cameron-full-statement-uk-riots>; and Prime Minister David Cameron’s speech at Witney, Oxfordshire, 15 August 2011. Available online at: <https://www.gov.uk/government/speeches/pms-speech-on-the-fightback-after-the-riots>.

Though I am sympathetic to postpolitical accounts of the English Riots, and acknowledge their advancement over conventional narratives of social injustice and inequalities, they nonetheless do not move beyond the parameters of a very narrow and persistent formulation of what counts as political action in the context of riot. I make two key observations here. Firstly, it is not clear why the politics of riot should be so consistently filtered through the (putative) political subjectivities of those actively participating in riotous practices. Riot is a crowded and heterogeneous field of action where political engagements are predicated on a range of experiences and take multiple forms. Alternative subject positions are available – such as bystanders to the riots, business owners, police officers, motorists, residents, community representatives, reporters, film crews, photographers, television audiences and social media commentators – each of which is drawn into a differently configured, dynamic relationship with riotous subjects. In other words, the contours of the political space of riot, and the subjectivities which emerge through its eruptive energies are mapped across and captured within multiple and intersecting relationalities of witnessing and spectatorship, control and containment, victimisation and offending. Even so – and this is my second observation – while it is important to open up to scrutiny what we may mean by the “politics of riot,” and to critically explore the diversity of political subjectivities expressed through riotous engagements, there are prior questions to ask here – what counts as political agency; and who or *what* can and does act politically? To date, political agency has been exclusively located in the human subject whose capacities for political action are, on the one hand, assumed to emerge from axes of identity co-ordinated by categories of class, ethnicity, gender, and age; or, on the other, are energised by the affective and cognitive charge of motivations, desires, fears, anxieties, ambitions, memories, solidarities and resistances. Can we theorise a politics of riot without/with only human actors? What would happen to our theories of the political event if we dispensed with anthropocentric positionalities – such as alienated youth, defective consumers, vulnerable victims, outraged citizen, passive spectator, moralistic politician – as the ground of political action?

In their real-time, roaming documentary of the riots in Liverpool, Salford and Manchester, the film crew, Moosemasher, observe: “Quite a few people documenting this ... he’s gotta a big camera he’s gotta a big camera ... he’s gotta camera. This is going to be one of the most well-filmed riots that’s ever been, like. Everyone’s on it today” (2011: at 36 minutes). Indeed, the pervasiveness of digital camera devices in our everyday lives, their infrastructural wherewithal and technological connectivities, render it harder (impossible) to deny the political participation of non-human entities, but no less necessary to make it explicit through careful exposition. Beyond criminology, a number of scholars have started to address the agency of “digital things”, with critical analyses of smart photography (Kember 2014), wearable video technology (Duru 2018), police body cameras (Adams and Mastracci 2017; Wood 2017), plagiarism detection software (Introna 2011), and digital recording devices (Nordstrom 2015), all making an appearance in a dynamic and burgeoning field of research. Each of these studies makes a significant contribution to the “new materialisms”³, advancing nuanced and theoretically innovative accounts of the co-constitutive nature of human/nonhuman agency, the material-discursive nature of practice, and the proliferation of cyborgian identities – see also Barad 2007; Haraway 2008. This paper contributes to and extends this important research in three key ways. Firstly, the extant literature has tended to focus on questions of ontology, epistemology and methodology, with the effect of

³ The “new materialisms” does not signify a homogenous body of scholarship or a singular theoretical position. Science and technology studies (Latour and Weibel 2005), feminist theory (Alaimo and Helman 2008), human geography (Braun and Whatmore 2010), sociology (Fox and Alldred 2016), and political philosophy (Connolly 2013), are all represented in a cross-disciplinary literature which, broadly, questions whether the material world can be adequately conceptualised in accounts which prioritise language, discourse and culture. For nuanced debates on the key concepts of new materialist thinking see: Special issues of *Critical Inquiry* 2001: 28(1); *Cultural Studies* <> *Critical Methodologies* 2016: 16(2); *Millennium: Journal of International Studies* 2013: 41(3); and *Theory Culture and Society* 2002: 19(5/6); and 2005: 22(1).

backgrounding the *political* implications of the agential entanglements of people and things⁴. To address this lacuna, and secondly, the paper draws inspiration from Jane Bennett's (2010) new materialist reworking of political theory, and her recognition of the active participation and distributive agency of nonhuman forces in the making of public events. Thirdly, new materialism marks a new departure for criminology; though this kind of posthumanist thinking has sedimented within the academy, and across a broad spectrum of disciplinary fields, its presence is barely felt within criminological work. This paper offers an access route for criminologists keen to unsettle and loosen the anthropocentric grip of modernist thought.

In the next section, I map out the theoretical contours of new materialist thinking to make the case for reading the English Riots through the prism of the non-human – those “things” which are entangled and intertwined with human bodies and actions, but are invariably disregarded as politically active. I take particular note of Jane Bennett's (2010) contribution to the field, unpacking her questioning of the binary thinking which separates culture from nature, and life from materiality; and delineating her problematisation of an ontological outlook which not only reduces matter to a state of passivity and inertia, but also regards it as lifeless, immutable, and dull. Coole and Frost suggest this is, in part, the logical outcome of a modernist philosophical project which regards “language, consciousness, subjectivity, agency, mind and soul; also imagination, emotions, values, meaning” (2010: 2) as the exclusive preserve of the human subject. As Bennett notes, this quarantining “of matter and life encourage(s) us to ignore the vitality of matter and the lively powers of material formations” (2010: vii, *original emphasis*). Yet, by paying attention to the vibrancy, movement and energies of “things,” and investing matter with an agency, capacity, and propensity to act politically, unfamiliar political landscapes come into view. Indeed, a renewed focus on materialities not only offers an alternative “ontological diagnosis of contemporary political life” (Lundborg and Vaughan-Williams 2015: 4), but also, as Coole notes, amounts to a “political-ethical intervention ... and a reckoning of the material circuits, flows and experiences that mark the 21st century” (2013: 452-453).

In what follows, I bring conceptual form and substantive content to the strange terrain of “vital materiality” and delineate its constitutive role within what Bennett refers to as a “political ecology of things”⁵. The paper begins to trace such an ecology through the prism of the witnessing energies of digital camera devices, noting how they generate, invent, disrupt and enact relations of power which have significant political effects.

Vibrant matter

Displacing the human subject from the centre-ground of the political is not the same as dispensing with her altogether. It is people, after all, who riot, hurl bricks, set buses alight, ransack

⁴ In many ways, this is the outcome of a scholarship which privileges Karen Barad's collective writings on agential realism (1999, 2003, 2007, 2010, 2011, 2012, 2014). For some, Barad is considered to be “one of the most influential and important representatives of contemporary materialist scholarship” (Lemke 2015: 5 – see also, Hollin *et al* 2017). Yet, Barad's contribution centres on the onto-epistemological unity of nature/culture, being/knowing, and meaning/matter, with the effect that she pays far less attention to the *politics* of entangled agencies.

⁵ Bennett is one of a number of theorists who have developed politically-inflected theoretical frameworks which acknowledge the political agency of the non-human: see, for example, theses on “political matter” (Braun and Whatmore 2010); “cosmopolitics” (Stengers 2011); the “natural contract” (Serres 1995); the “politics of nature” (Latour 2004); and the “fragility of things” (Connolly 2013). See also research papers on the “politics of housing” and “mediant assemblage theory” (Appadurai 2015), and the “politics of affective infrastructures” (Knox 2017). As Lundborg and Vaughan-Williams note: “What binds this diverse literature together is a common attempt to thematise the concept of materiality, its relationship with politics, and how an emphasis on material factors might lead to a refashioning of our understanding of the concept of ‘the political’” (2015: 4).

shops, build barricades, smash windows, throw bottles, kick down doors and experience the embodied and visceral effects of these activities. Yet, as Woodward *et al* (2012) point out, we cannot assume that animated, enlivened bodies constitute everything which exists in the situation. Indeed, they talk of an “unnameable event”, an “unexpected *something else*,” an extra- or a-subjective excess which leaves “even direct participants scratching their heads and fumbling to make sense of this messy reality” (Woodward *et al* 2012: 209, *original emphasis*). For Bennett (2010: 1-19), this “something else” is “thing-power” which she figures as “a not quite human force that addle(s) and alter(s) human and other bodies ... an irreducibly strange dimension of matter, an *out-side*” (2010: 2-3, *original emphasis*). In her exposition of the force of things, Bennett reflects on and critically interrogates the multiplicity of concepts which have sought to name this power – Spinoza’s *conatus*, Thoreau’s *wild*, de Vries’s *absolute*, Adorno’s *non-identity*, and Foucault’s *unthought*⁶ - to garner a theorization of materiality which endows it with efficacy, energy, intensity and vibrancy, and grants it a vital impetus which “can *do* things, has sufficient coherence to make a difference, produce effects, alter the course of events” (2010: viii, *original emphasis*). Raging fires, splintering glass, dogs straining on leashes, the twisted metal of wrecked shutters, the soft textures and foldability of looted clothing, and the bulkiness of widescreen televisions “offer themselves to the subject as action” (Merleau-Ponty 1981: 106). In other words, materialities are not inert, passive or stable entities; though we might stop short of investing things with human will, intentionality, reason and desire, they do have agentic capacity⁷. As Bennett puts it, “so-called inanimate things have a life an inexplicable vitality of energy, a moment of independence from and resistance to us and other bodies: a kind of thing-power” (2010: 18).

Latour (2004: 237) uses the term “actant” to denote any entity which has a capacity to act; it is a *relational* rather than a foundational agency, which cannot be specified in advance and is traceable only in its performance – as Latour puts it, “(n)o one knows what an environment can do” (2004: 80). Barad (2007) refers to the “intra-action” of human and nonhuman entities as the ontological dynamic of social and political practice; while Nancy (2000) talks of a “co-existential analytic” wherein action is mutually constituted in surfaces of contact where the boundaries between life and matter dissolve – when fire burns flesh, and knives pierce skin, or when fibre optics transmit a message. Relational understandings of intra-active, co-existential actants underscore Bennett’s notion of distributed agency which, she argues, “always depends on collaboration, cooperation, or (the) interactive interference of many bodies and forces” (2010: 21). Thing-power is, then, a congregational force which assembles a confederation of material and immaterial entities, it connects people and things, biologies and technologies, and creates the conditions for joint enterprise in moments of political transformation.

Riot manifests one such transformation, and constitutes a specific assemblage of human and nonhuman actants, a hybrid co-articulation of bodies and matter; though forming temporary alignments and contingent clusters of alliances, which may stabilise and territorialise as a coherent entity, assemblages nonetheless remain a fluid and volatile affiliation (DeLanda 2002, 2006; Deleuze and Guattari 1987). As Bennett notes, “because each member-actant maintains an energetic pulse slightly ‘off’ from that exuded by the assemblage, such assemblages are never

⁶ See: Adorno, Theodor. 1973. *Negative Dialectics*. Translated by E.B. Ashton. New York: Continuum; Thoreau, Henry D. 1973. *The Writings of Henry David Thoreau: Walden*, ed J. Lyndon Shanley. Princeton, NJ: Princeton University Press; Spinoza, Baruch. 1992. *Ethics: Treatise on the Emendation of the Intellect and Selected Letters*, ed Seymour Feldman. Translated by Samuel Shirley. Indianapolis, IN: Hackett; de Vries, Hent. 2006. Introduction: before, around, and beyond the theologico-political. In *Political Theologies: Public Religions in a Post-Secular World*, eds Hent de Vries and Lawrence E. Sullivan, 1-88. New York: Fordham University Press; Foucault, Michel. 1973. *The Order of Things: An Archaeology of the Human Sciences*. New York: Vintage/Random Press.

⁷ For a fuller account of the philosophical and ontological complexities of conceptualising the nature and locus of agency across human/non-human assemblages - in terms of intentionality, causality, intersubjectivity, and affect - see Bennett 2010: Chapter 2.

fixed blocks but open-ended wholes” (2005: 447). The English Riots names a collectivity (a coalition) of heterogeneous assemblages, each alive with movement and energies – from the hot-bloodedness of the mob, to the choking fumes of burning cars, and the visualising power of mobile digital camera technologies - which have both a distributive and a compositional force.

Things do their thing with or without us. We are both outnumbered and constituted by them, and thing-power effects change in any given state of affairs. There is no good reason, then, not to pay greater attention to the vibrant materialities which embroil us and shape us. Indeed, Bennett challenges us to consider “how analyses of political events might change if we gave the force of things more due” (2010: viii). In the remainder of this paper, I respond to this challenge by critically mapping the thing-power of digital camera technologies, a particular material configuration which assembles an ecology of political practices predicated on witnessing, surveillance, investigation, vigilance, and the visual archive.

A material politics of witnessing

If thing-power figured at all within academic commentary of the riots, it did so in relation to the use of smartphones and social media platforms such as Facebook, Twitter, Blackberry Messenger (BBM) and You Tube. Baker (2011, 2012), for example, took account of how the use of mobile phones and the “real-time” modes of mediated exchange which this technology facilitates, altered the spatio-temporal dynamics of the riots. Introducing the notion of the “mediated crowd,” Baker writes of a virtual arena of affective energy, which not only fuelled the speed of communication about events on the ground, but also recalibrated the geographical scale of riotous interactions. At the same time, research undertaken by the London School of Economics (LSE), in collaboration with *The Guardian*, claimed that the widespread availability of social media and mobile phone technology gave these riots a uniqueness which “distinguished them from previous civil disturbances” (Lewis *et al* 2011: 30), noting that messaging (via BBM) was a key tool for the secure and efficient sharing of information about, for example, where the riots were happening, safe exit routes, and details of police operations and logistics (Lewis *et al* 2011: 30-33). While Baker’s and the LSE/*Guardian*’s focus on mobile phones is very welcome, analyses have foregrounded the singular device of the smartphone, which not only backgrounds other, equally prevalent digital technologies – such as the digital camera, camcorder, and CCTV - but also prioritises the textual and discursive, over the visual and acoustic usages of these devices. These studies also restrict the scope of political engagement to that of rioting, omitting any reference to the policing, televising or witnessing of events which were similarly predicated on the mobilisation of a range of digital devices⁸. More importantly, these accounts pay no attention to the material power of “digital things” but, rather, treat them as (mere) tools which, in the hands of inventive and skillful humans, are used to reconfigure the spatio-temporal parameters of interaction but are accorded no active agency of their own. Once rendered as passive and inert, the vibrant materialities of these digital devices can be conveniently airbrushed out of the action, and their efficacy as participating political actants can be denied. As Bennet notes, we are thus presented with “the image of dead or thoroughly instrumentalized matter (which) feeds human hubris and our earth-destroying fantasies of conquest and consumption” (2010: ix). The task, then, is to present an alternative imaginary in which the vitality of digital camera technologies is foregrounded. As a first step in this endeavour, I map out the contours of “digital thing-power”, moving on to critically explore the triadic figuration of the citizen-camera-witness. This provides some ground to delineate (tentatively) a political ecology of digital things.

Digital thing-power

So, what counts as “materiality” when it comes to digital camera technologies, and what is meant by their thing-power? I address each issue in turn. There is certainly little controversy in

⁸ There is no evidence (public record) of their deployment during the English Riots, but it is highly likely that drones, satellites, body cameras, and helicopter surveillance technologies were also used to assist police operations on the ground.

acknowledging the “forensic materiality” (Kirschenbaum 2008) of digital devices; that is, their physical substrates such as liquid crystal display screens (LCDs), micro-drives, connectors, circuit boards, card readers, (semi-)conductors, light sensors, transistors, batteries, speakers, microphones, and silicone chips constitute the generic stuff of digital hardware. Equally, it does not require a huge leap of faith to recognise the materiality of the infrastructural architecture of digital networks such as servers, cables, fiber optics, routers, modems, and hubs, for example. Though less visible, we can also appreciate the atomic and electro-magnetic form of more volatile matter such as electrical charges, radio signals, pixels, bits, photons and memory – all of which have material properties of “mutability, persistence, robustness, spatiality, size, durability, flexibility, and mobility” (Dourish and Mazmanian 2011: 4). However, to talk of the materiality of software, or code, is a much more equivocal proposition. Chun, for example, talks of the “curious separation of software from hardware” (2004: 27), and argues that this false dichotomy functions ideologically to perpetuate and obfuscate the anthropocentric conceit that software “acts” only through the work and effort of human programmers and users. It does so, she points out, by “conflating executable with execution, program with process, order with action” (2004: 27). Kittler is more forthright and declarative with his bold assertion that “there is no software,” and that it is merely a human-friendly term which “does not exist as a machine-independent faculty” (1995: 3). Rather, it is “a thing in a process of revealing itself, which moves through materials in the form of computation algorithms that one can label ‘discursive’” (Rachev 2014: 3). Software is, then, always-already becoming in and through the operational minutiae of hardware – logic gates, silicone interfaces, switching components, microtransistor cells, electronic diffusers, and so on – such that “microscopically written inscriptions are able to read and write by themselves” (Kittler 1995: 1). In her “woman’s account” of programming on the Univac I, Koss regards the development of automatic programming as a democratising moment; here she reflects on its impact on the gendered division of labour in the computer industry:

These developments were all in the line of enhancing the basic capability of the machine and making it easier to use. Without these higher-level languages and processes such as assemblers, compilers, and generators, which democratized problem solving with the computer, I believe programming would have remained in the hands of a relatively small number of technically oriented software writers using machine code, who would have been essentially the high priests of computing (2003: 58).

Yet, whatever its merits for workplace gender politics, the autonomous agency of code also signals its performative capacity - that is, “its apparent ability to ‘make things happen’” (Mackenzie and Vurdubakis 2011: 6). For Mackenzie (2005), code is more than the language of machines; rather it is a “culture-object” which enacts new configurations of socio-cultural categories, values, and norms, recalibrates what can be known and is know-able, and reinvents modes of semiotic exchange – see also, Chun (2008); Galloway (2006); and *Theory, Culture and Society*, Special Issue on Codes and Codings in Crisis, (2011: 28[6]). Code, then, is performative in the sense that in processes of circulation, and at the intersections of program protocols and transactional interfaces – such as bridges, firewalls and switches - it rewrites instructions through the successive recoding, decoding and transcoding of differentially encoded commands. As Mackenzie and Vurdubakis note, “(t)his performativity of code constantly enhances and widens the possibility of variations and deviations that are difficult to contain or control” (2011: 7).

This brief inventory of the materiality of digital devices, suggests that their status as (mere) “tools” or “media” does not even begin to capture their multiple capacities to act, intervene and participate in (ostensibly) human-led events. So, more than acting to facilitate interaction and communication, “digital things” like smartphones, cameras and camcorders, and the heterogeneity of their constitutive material elements, generate, invent, disrupt, and enact relations of power which have significant political effects – that is, they exercise thing-power.

Citizen-subjects and camera-things

The political enterprise of the non-human is perfectly captured by, and delineated through the emergence and proliferation of citizen journalism – sometimes referred to as “digital activism,”

“mobile witnessing,” or “media-witnessing” - which has redefined and transformed the politics of witnessing (Andén-Papadopoulos 2013; Reading 2009). Indeed, Andén-Papadopoulos talks of “the new powerful figure of the *citizen-camera-witness*” (2013: 754, *original emphasis*), and positions this hybrid actor at the centre of shifting political dynamics. For all this, she only gives prominence to the agency of the citizen-subject in this triadic figuration, and pays little attention to a politically active and engaged “camera-thing”. For example, within a broad spectrum of actions which constitute “practices of witnessing”, Andén-Papadopoulos notes that digital camera technologies enact “the swift translation of private sensory experience into public mediated testimony that can be infinitely reproduced and shared worldwide via wireless communication networks” (2013: 757). This somewhat understates the case. That is to say, she does not go on to elaborate or unpack the pivotal work of translation; yet, it is within such labour that the complexity of the camera-thing’s agential capacity is to be found - what processes and actions does translation actually entail; what does the conversion of “private sensory experience” involve; and, if camera-things are integral to practices of witnessing, then beyond their mediation of public testimonies, we need to ask how they co-produce them? How, precisely, can we track and trace the vibrancy, intra-activity and productive power of “digital matter” as it enters into, assembles and becomes bound up with the politics of witnessing?

The visual record of the English Riots is vast, and is widely circulated across both time and space. Some seven years after the events of August 2011, using the search term, “English Riots 2011,” a cursory sweep of new media platforms identifies 294,000 camera-generated uploads to You Tube, including amateur video, broadcast film, photography, and multi-media footage; the photo-sharing site, Flickr, indicates an inventory of 9,714 still images; Google Video hosts 750,000 filmic uploads, and Wikimedia Commons lists 839 multimedia files⁹. The point here is not to claim a precise count of discrete (or even relevant) visual entries – indeed, some of this imagery is either duplicated, or it is “riots-related” rather than contemporaneously filmed/photographed material. Rather, it is to recognise that across this vast digital repository of found visual data only a handful of still and moving images have become emblematic of this complex, fast-moving, multi-sited series of riotous events. We might include here, for example, the image of the double-decker London bus set ablaze in Tottenham High Road; the silhouetted figure of Monika Konczyk leaping from her burning first-floor flat in Croydon; and the Carpet Right Building, consumed by such a fierce conflagration that it lit up the night sky of south east London. Shot through a professional aesthetic, such imagery (arguably) carries a visceral, affective, and embodied charge; that is to say, in its conversion of “private sensory experience”, the camera-thing captures within its frame the theatricality of a Barthesian punctum which provokes, in equal measure, our outrage, empathy, despair and incredulity. In short, in collaboration with the human image-maker, the camera’s micro-technologies (zoom, focus, shutter, flash, aperture, crop, pan, tilt etc) can work to move us from a position of passive spectatorship to active witnessing which demands an ethico-political response (Boltanski *et al* 1999; Chouliaraki 2008).

However, beyond this small fraction of especially poignant, evocative imagery, the iconography of the English Riots is better described as visually nondescript and unremarkable. In Barthesian terms: “these images (have) no punctum ... I glance through them, I don’t recall them; no detail (in some corner) ever interrupts my reading” (Barthes 1981: 41). They form a studium, a visual bricolage inflected with a blasé aesthetic where practices of witnessing seem disarticulated from an unfolding narrative and devoid of the interpretative, editorial input of a film-maker/photographer. For these images, it seems as though the task of translation (of the “private sensory experience” of riot) has not only been delegated to camera-things, but also involves a far more mechanical and automated mode of witnessing where looking and listening is replaced by recording and monitoring.

⁹ These figures were generated by a search undertaken on 14 May 2018.

Stadium imagery may not engage us on an emotional level, but this does not mean that it depoliticises practices of witnessing. Indeed, through the prism of the mundane a wider range of political options come into view. Hand-held, digital camera technologies captured the energy and movement of the English Riots in a slideshow of discontinuous, fragmented, still/moving, and distributed images. Shot from multiple angles and locational standpoints, these images are of nothing in particular, and everything in general; of groups of agitated (usually) young people moving into, out of, through, and away from shops; of fire-setting, bottle-throwing, assaults, and ransacking; of burning/burnt out vehicles; of people making-off with looted goods; of police cordons, advances and retreats; and of rioters poised in stand-offs, or rushing toward/running away from the centre of the action. This is complemented by the visual capture of privately and publicly operated CCTV surveillance technologies. Productive of imagery which is grainy, partial, and sometimes blurred, these camera-things generate continuous, fixed point, time-stamped, visual data which, by virtue of their pre-defined focal scope, grant proximity to the action and a relatively close-up view of everything which passes through their visual orbits.

Importantly, these practices of witnessing are emplaced within broader networks of digital transactions and conversions. That is to say, camera-things double as sensors (Andrejevic and Burdon 2014); as detailed above, their vibrant materialities – transducers, semi-conductors, silicone chips, micro-drives etc - act to translate “private sensory experience” not merely into a visual record, but also into readable signals, encoded protocols and processable outputs (Kalanter-Zadeh and Wlodarski 2013: 12-22). Moreover, embedded within an environment of infrastructural actants - a Global Positioning System (GPS), WiFi, the Worldwide Web, and hundreds of millions of Uniform Resource Locators (URLs), for example - digital camera technologies bear witness in and through fluid and traceable trajectories of interconnectivity, interoperability and intra-activity. A different kind of testimony is made possible, one that is animated by an electronic rather than an emotional charge, and which entails the comprehensive capture and transmission of data trails which can be systematically mined, filtered, sorted, retrieved, and triangulated to generate actionable intelligence and shareable evidence. The camera-witness is, then, not only a key actor within a confederation of witnessing circuits, but it also produces specific political effects. For Bennett (2010: Chapter 7), such effects initiate a Rancièrian (2009) disruption which unsettles received wisdoms of who, and importantly, *what* can act politically. Moreover, she reminds us that things act “in a field already crowded with other endeavours and their consequences, a crowd with which the new entrant immediately interacts, overlaps, interferes” (2010: 101). In the aftermath of the English Riots, practices of witnessing were harnessed to, and co-opted into police investigative work - a specific political ecology within which the non-human force of digital camera technologies stages a series of political interventions. I want to unpack this claim by first making a number of empirical observations.

A political ecology of digital things

By the 9 August 2011, the Metropolitan Police Service (MPS [the Met]) had launched Operation Withern, posting several hundreds of CCTV stills on the MPS website, as well as creating a dedicated Flickr account which attracted 7.8 million hits in its first 10 days (Metropolitan Police Service 2011). A day later, Merseyside Police and Greater Manchester Police (GMP) pursued similar strategies, with the Assistant Chief Constable of GMP, Garry Shewan, warning: “we have your image, we have your face, we have your acts of wanton criminality on film” (Meikle and Jones 2011). At the same time, community-spirited citizen-witnesses were enthusiastically uploading footage from the riots onto YouTube; while those who merely wanted to publicise that “they were there” were posting imagery and films across numerous social media platforms. By the end of the first day of riots, a Facebook community with 500 members, featured an accumulating collection of photos and videos complete with captions; and on 7 August 2011, an anonymous Tumblr blogger launched a “Catch a Looter” campaign, extending witness opportunities to an expansive and exponentially proliferating population of “offender identifiers”. Curating thousands of stills and close-ups of rioters in action, the campaign message was simple – “if you recognise anyone, contact Crimestoppers on 0800 555 111” (Popkins 2012). By February 2012, the Met had viewed over 75% of an estimated 200,000 hours of footage taken from both CCTV and mobile devices;

they had prepared over 5,000 packages of evidence, trawling through the detailed minutiae of the visual data to trace, track and triangulate offenders' criss-crossing movements through the time/space of the riots; and through this painstaking work, 1100 criminal identifications, sufficiently robust for initiating judicial proceedings, were confirmed (Metropolitan Police Service 2012b: 126-129). These several descriptive points mark the intersection(s) of practices of witnessing and police-public investigative effort. However, it is what they betoken of the exercise of thing-power within a field of political possibilities, which is of more critical interest. I explore three key problematics – the problem of digital excess; the matter of epistemological authority; and the diffusion of political responsibility.

Despite a veneer of success – and I will return to this below – police forces in impacted areas of the country were overwhelmed by the hyper-abundance of visual evidence. Its diffusion through multiple circuits, and its distribution by and across variegated publics rendered the visual material “ungraspable” (Marres 2005: 216); as Weinberger puts it, digitally-generated forms of knowledge may simply be “too big to know” (2011: 1). Here we are reminded of thing-power’s “excess” and “unnameability”, its “something else” which leaves everyone confounded. This is not merely a matter of volume, or of being outnumbered and outstripped by the productivity of digital things, but of being bereft of the means to respond effectively to their multi-sited, witnessing and visualizing power. Quite simply, policing authorities lacked the material and human capacity to fully inter- and intra-act with the vibrant energies of machinic and digital matter. Apart from the dedicated work of the few boroughs where Visual Images Identifications and Detection Offices (VIIDOs) had been established prior to the summer disorders¹⁰, the paucity of specialist hardware, viewing facilities, and compatible software left the Met with “no technical solution other than the manual cutting and pasting of images into posters” (Metropolitan Police Service 2012b: 128). Even if the requisite IT equipment was in plentiful supply, the numbers of police personnel skilled and trained in the use of digital visual identification techniques was exposed as wholly inadequate (Metropolitan Police Service 2012b). So, without intention, will, calculation or desire, digital things raise difficult questions concerning the efficiency of policing’s investigative practices, and especially its capacity to manage and process widely available evidential materials in ways which retain the procedural integrity of the process (Home Office 2007). In so doing, thing-power catalyses a new, fiercely argued politics around the development of “digital imagery strategies” and all this entails in terms of costs, technological investments, staffing, organizational co-ordination, procedural protocols, training, and the deployment of expertise (Association of Chief Police Officers 2012; Home Office 2015; Metropolitan Police Service 2012b; National Policing Improvement Agency 2007).

All this said, investigative work using visual identification techniques did yield appreciable numbers of successful prosecutions, and by August 2012, 3103 individuals had appeared in English and Welsh courts, resulting in 2138 findings of guilt, and 508 acquittals (Ministry of Justice 2012: 3). Some of the more serious and complex cases were very loudly trumpeted – most notably, the cases against Junior Saunders, who played a leading role in the Hackney riots (Metropolitan Police Service 2012b; Owen, 2011), the “scooter looter”, Ryan Kichenside (Huffington Post 2011), and Gordon Thompson, the House of Reeves arsonist (BBC News 2012). However, much of this success relied on the triangulation of digital visual evidence with other evidential actors, such as clothing fibres, DNA, blood, saliva, hair, fingerprints and, importantly, human “recognisers” (Metropolitan Police Service 2012b: 126). Here it is worth remembering that digital camera-things have a propensity to spontaneously generate various modes of “image noise” – such as Gaussian, salt-and-pepper, speckle, poisson, photon, quantization, dark current, and anisotropic noise (Gonzalez and Woods 2008) – which produce fluctuations, deviations and distortions in their visual output. Quite autonomously, then, digital devices can act randomly and unaccountably to degrade

¹⁰ A VIIDO unit had been established at Southwark Police Station in 2006, largely through the efforts and moral entrepreneurship of one detective chief inspector, Michael Neville. Its early success encouraged a greater use of such units which, by August 2011, had been established in eleven other London boroughs (Evison 2015).

the readability and quality of their own imagery. Put another way, the evidential power of digital camera-things lacks sufficiency and admissibility unless it is brought into coalition with forensic *and* human actants. As Evison notes:

CCTV image identification relies on eyewitness recognition – rather than forensic analysis. DNA profiling evidence is evidence of fact supported within a comprehensive experimental and theoretical scientific paradigm. Dermatoglyphic fingerprinting evidence is based on rigorous empirical comparison between marks In the VIIDO process, identifications are made by facial recognition. They are evidence of opinion supported neither by empirical comparison nor empirical science (2015: 527).

Evison is drawing our attention to a politics of authority in which science and probability theory grant epistemological credibility to the evidential agency of some things (DNA and fingerprints), but not others (digital imagery). Put another way, the prolific and endless circulations of digital imagery (as a distributed body of visual evidence) enter the crowded jurisprudential terrain of due process with a deficit of authority to “know” and give evidence on its own behalf. This latter (still) remains dependent on the subjective, interpretative work of human eyewitnesses or “recognizers”, typically police officers or members of the public who claim to recognize the face, clothing or other attributes of depicted individuals. Moreover, eyewitness identification is acknowledged and understood by judicial and legal professionals, human rights groups, and academics, to be a particularly problematic form of evidence which compromises core principles of justice (Edmond *et al* 2009)¹¹. Given the sheer volume of cases which overly relied on visual identification techniques, and the widespread and ongoing skepticism of their efficacy in due process terms (Bruce and Young 2012), it is little wonder that their unbridled use should provoke a contentious, critical politics which goes to the heart of doctrinal law on the rules of evidence and the universal right to a fair trial. As Latour might put it, digitally-generated circuits of imagery articulate a politically disruptive “proposition” which “induces perplexity in those who are gathered to discuss it ... those whose habits it is going to modify” (2004: 123).

However, matters do not rest there. Under the broad banner of “citizen journalism”, the proliferation of “citizen-camera-witnessing” has been regarded positively (Frosh and Pinchevski 2009; Reading 2009; Tait 2011), and as nurturing a democratic and inclusive public sphere with the potential to “stare down the state” (Wall and Linnemann 2014). But it is the more pejorative terminology of “digital vigilantism” (Author XXXX), “web sleuthing” (Yardley *et al* 2018), “crowdsourcing for justice” (Nhan *et al* 2017) or “cyber-vigilantism” (Smallridge *et al* 2016) which not only signals a far more pernicious and problematic politics, but also troubles wider political ecologies of accountable, consensual, and legitimate modes of witnessing and investigation. Moreover, such terms signify how networked spaces engender a dispersed and pluralized investigative assemblage, where the power to witness is not only diffused across multiple sites, both real and virtual, but is generated through the joint enterprise of digital *and* human actors. To paraphrase Foucault, witnessing/investigative/surveillant effort is now fragmented across hundreds of thousands of “tiny theatres of (vigilance)” (Foucault 1977: 113), most of which lack any legal and moral authority to operate in this way. Denounced as procedurally unsafe; as opening and extending the investigative terrain, rather than closing and solving cases; as bringing the criminal justice process and policing into disrepute; and as harmful to both victims and suspects (Nhan *et al* 2017), “digital vigilantism” has been widely discredited as a twenty-first century version of “true crime infotainment” (Yardley *et al* 2018), and as a form of “weaponized visibility” (Trottier 2017). These are well-rehearsed debates which I will not dwell on here; suffice to say that there

¹¹ Consider, for example, the case of Dane Williamson: charged with the arson of the Miss Selfridge store in Manchester, Williamson was remanded in custody at HMP Forest Bank, but released after nine days with all charges “sensationally dropped” (Keeling 2011). Described as “wearing similar clothes to the arsonist, but slightly different” (Carter 2011), Williamson was mis-identified from CCTV footage by a police identifier which his solicitor denounced as a blatant form of “instant justice” (Carter 2011). Matters were made worse by Facebook groups who not only circulated Williamson’s image, and identity, but also subjected him to abuse and incited the burning down of his home whilst on remand (Carter 2011; Keeling 2011).

has been no recognition hitherto of the complicity of human *and* non-human agencies which co-produce and enact these investigative efforts. Mirroring Andén-Papadopoulos's excision of a politically complicit "camera-thing," Yardley et al talk of digital-things in very instrumental and utilitarian terms, and present them as a passive, environmental infrastructure which facilitates and, in their words, "hypermediates" networked interactions, enhancing "opportunities not only for people to *consume* cases but to *participate* in collective investigations and *create* their own representations" (2018: 85, *original emphasis*).

Theatres of vigilance are, then, figured as wholly embodied and dematerialized spaces, where *people* rather than things take centre stage as the progenitors of witnessing energies. Disentangled from digital matter, this kind of anthropocentric bias glosses over the material dynamics of witnessing and loses sight not only of the *conjoint* actions of corporeal-affective-cognitive *and* machinic-electronic-digital entities, but also the complex and diverse ways these entities intra-act to produce specific witnessing practices.

Conclusion: towards an immersive prospectus

A new materialist account of witnessing does not amount to a one-sided celebration of the productive agency of digital camera devices – and the concomitant displacement of human efforts – so much as an acknowledgement of the breadth and diversity of agencies which can and do act politically. I have traced some of this diversity through a delineation of the nature and scope of differently configured witnessing entities. So, for example, in contrast to the human witness, camera-things are not called upon to revisit personal trauma, or to recount, reflect on, write and/or speak of their sensory, affective or corporeal experiences of significant events. Digital devices bear witness without the benefit of cognitive, interpretative or embodied insight; rather, their capacities to act are energised through the forensic materialities of machinic bodies, the volatility of electronic matter, and the autogenesis of code. As such, a different kind of witnessing agency comes into play, one which works in an automated and mechanistic way to convert pixels into images, electrical signals into readable output, and random access memory into visual record. Moreover, camera-things mobilise multiple agencies which cut across and through fluid and transactional trajectories of a myriad of intra-active, interconnected, motile actants, collectively assembling the capture, storage, retrieval, transmission and triangulation of data. This has implications to the *forms* of witnessing knowledge in circulation, and how they may be engaged with. So, where film-makers/photographers lay claim to a visual testimony predicated on an emotionally-compelling and selective iconography of symbolic imagery, camera-things generate a highly granular bricolage of heterogeneous, discontinuous and fragmented visual elements. While the former can be intersubjectively viewed or made narratively meaningful, the latter compels a search for the idiosyncratic devil in the microscopic detail, and relies on a range of algorithmic protocols capable of mining, mapping, ordering, filtering, and scanning a vast visual repository. Taking (comparative) stock of the diversity of witnessing agencies at work here underlines the pivotal notion of witnessing as a thoroughly distributed and co-productive practice to the point that the assumed distinction between politically active witnessing subjects and inert camera-things, is permanently ruptured.

When witnessing is pressed into the service of post-riot, police investigative work, a specific ecology of confederated political agencies comes into view, and a heterogeneity of political actors – from a CCTV monitor to a bystander member of the public, from anisotropic noise to a television film crew - jostle, collide, inter-/intra-act, and compete to intervene across the congested political space(s) of witnessing practices. Though this paper offers only a very preliminary sketch of these interventions, three salient features of their political effects come into view. Firstly, the (over-)abundance of digital camera devices engenders an excess of visual data which catches investigative actors unaware, and puts policing strategists on the back foot as they scramble to close the gap between operational capacity and intelligence overload. Secondly, even when policing actors gain traction over the prolific witnessing agencies of digital materialities, this, it turns out, is only with the help of other non-human (forensic) actants who shore up the

epistemological deficits of visual evidence. Indeed, the tendency for digital matter to autonomously and spontaneously distort its own authority “to know”, is made more complex by its capacities to do its own thing and propagate new “knowledge objects,” to adapt Mackenzie’s (2005) phrase. To be sure, it is human actors who are motivated to search for information, upload imagery and videos, comment upon and debate cases, identify suspects, engage with policing authorities, and attempt to fashion a law enforcement role. However, and thirdly, they do so in collaboration with a myriad of other “things” such as self-calibrating algorithms which sort, filter and hierarchise continuous flows of visual data; protocols which internalize and naturalize social prejudices and political distortions; multiple platforms which generate different kinds of analytics (of user profiles, viewing frequencies, data-shares, followers, geographical locations, and timelines); visualizing tools which alter the pixelation of images, and transform not only how they are displayed, framed, streamed and viewed, but also how they are profiled, organized, prioritized, shared and known. In so far as this shapes and informs what is regarded as urgent, important, significant, or even relevant to an investigative gaze, this sets the agenda for how witnessing practice across a myriad of engaged publics may be performed.

Ruppert *et al* remind us that digital devices are materially implicated in the making of worlds and “the creation of new knowledge spaces” (2013: 34). Witnessing is one such knowledge space where the productive and performative energies of a hybrid collective of people and things reconfigure the methodologies, agencies, apparatuses and practices of investigative labour, but in ways which may trouble liberal-democratic models of policing. That is to say, if we acknowledge (accept) that witnessing agencies are distributed across a heterogeneous assemblage of inter-/intra-acting human and non-human actors, then it is difficult to isolate a singular locus of agency and, by extension, attribute responsibilities for politico-ethical interventions which may have harmful or negative effects. Loss of memory, selective recall, embellishment, deliberate omission, bias and prejudice can compromise the integrity of such interventions; in each case, however, the burden of responsibility, and the source of perceived failings and injustices, is conventionally laid at the feet of human actors. In a political arena where witnessing is performed through energetic assemblages of interconnected agencies, human exceptionalism becomes untenable, and cannot be disentangled from a field alive with cross-cutting vital forces. There is no claim that digital camera devices act with intention, desire, affective impulse, instinct or rationality, but they *do* participate in and contribute to witnessing practices, and thereby induce an array of transformative political effects for which “we humans” are not entirely responsible. As Barad notes, the entanglements of matter and meaning, and the co-constitutive agencies of nonhuman/human actors are “irreducible relations of responsibility there is no fixed dividing line between `self’ and `other’” (2010: 265). Indeed, Barad’s call for an ethics of “*response-ability .. (in which) each of `us’ is constituted as responsible for the other, as the other*” (2012: 215, *original emphasis*), prompts a re-imagining of our research and political agendas. That is, when normative politico-ethical imaginaries of justice, fairness, transparency and accountability are at stake, perhaps a more immersive prospectus is called for, one which seeks out the co-articulation of bodies and matter, and cultivates a politics of alertness and responsiveness to the assemblages in which we are enmeshed.

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