

Seeing Red: Entropy, Property, and Resistance in the Summer Riots 2011

Finchett-Maddock, Lucy

Law and Critique

DOI:

10.1007/s10978-012-9111-z

Published: 01/01/2012

Peer reviewed version

Cyswllt i'r cyhoeddiad / Link to publication

Dyfyniad o'r fersiwn a gyhoeddwyd / Citation for published version (APA): Finchett-Maddock, L. (2012). Seeing Red: Entropy, Property, and Resistance in the Summer Riots 2011. Law and Critique, 23, 199-217. https://doi.org/10.1007/s10978-012-9111-z

Hawliau Cyffredinol / General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private
 - You may not further distribute the material or use it for any profit-making activity or commercial gain
 You may freely distribute the URL identifying the publication in the public portal?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Seeing Red: Entropy, Property, and Resistance in the Summer Riots 2011

Lucy Finchett-Maddock

© Springer Science+Business Media B.V. 2012

Abstract This paper explores the thermodynamic property 'entropy' as a metaphor for aesthetics and politics, law and resistance in the case of the Summer Riots 2011. The aim of the paper is to use the framework and structure of entropy to demonstrate a political aesthetics of property. This shall be done by firstly linking entropy with aesthetic concepts of order, disorder, symmetry and equilibrium. Works on complex adaptive systems to account for collective behaviour, combined with Benjaminian and Adornian accounts of the commodity, shall be used alongside the relevance of crowd theory in explaining not the riots themselves but the *sentencing* of collectivity in the case of *R v Blackshaw & Others* [2011] EWCA Crim 2312. Following Rancière and the arts and crafts movement, utility and beauty, the breaking down of the divisions of art, life, philosophy and science are summarised as the lesson of entropy for law. This re-visiting of the Summer Riots 2011 hopes to re-evaluate the sentencing procedures in light of 'Riot-Related Offending' through an aesthetic politics of collectivity, property and commodity.

 $\textbf{Keywords} \quad \text{Entropy} \cdot \text{Property} \cdot \text{Commodity} \cdot \text{Riot-related offending} \cdot \text{Sentencing} \cdot \text{Summer Riots } 2011$

Perhaps they are right, and disorder is always around the corner.

(Bhattacharyya et al. 2012, p. 4)

There exists a specific sensory experience – the aesthetic – that holds the promise of but a new world of Art and a new life for the individual and the community.

(Rancière 2002, p. 133)

School of Law, University of Exeter, Exeter EX4 4RJ, UK

e-mail: L.C.Finchett-Maddock@exeter.ac.uk

Published online: 12 August 2012



L. Finchett-Maddock (⋈)

For three nights in August 2011 London set herself ablaze, lit from the underbelly up. Community members from Tottenham to Ealing, from Brixton to Hackney came onto the streets in a show of wanton violence and thuggery (if the mainstream media are to be believed) or an unconscious, or conscious, form of protest (if more sympathetic voices are favoured). The following pages will attempt to chronicle these events, focusing on Blackshaw and Sutcliffe (two cases relating to youths convicted of riot-relating offences), in order to highlight their disproportionate sentencing. Why such an inflamed response from the sentencing judges and what does this tell us about law's understanding of resistance in numbers? When the rioters crossed the divisions of private property, committing acts of petty crime, there was a lucid display of biopolitical behaviour: a theatre of the commodity fetish. This was a spectacle of capitalism with impressive choreography from the realms of both legitimacy and illegitimacy. According to Walter Benjamin, fascism leads to an aestheticisation of political life (Benjamin 2008, pp. 36–37). Following Benjamin, this paper hopes to affect an aesthetic exploration of entropy, by understanding the catalytic place of the commodity and ultimately property within the riots' performance of law and resistance.

Entropy, as a property and metaphor, has been used across the disciplines to describe natural, organic, as well as social systems and theories. Most eloquently, this has been done by Nobel Prize winner Ilya Prigogine in his landmark exploration of thermodynamics, *Order Out of Chaos* (1984). By its very nature, entropy is readily adaptable to describing phenomena outside its traditional subject areas of thermodynamics, macro/microstructural theories and, more recently, information theory. In order to understand the application of entropy to law and resistance, the events of the Summer Riots will be introduced, followed by an explanation of entropy and its aesthetic manipulation. This will lead to an account of aesthetics and politics in terms of collective action and the predictably reactive dialectic of law.

Summer Riots 2011

The Summer Riots of London 2011 were a spectacular event for those living in London or any of the cities affected, where there was a distinct atmosphere of heat, of something burning, energies disturbed. From an open window on one of those balmy late August evenings five or so miles south of Tottenham you could hear a chorus of sirens drift across the hot city sky from the smouldering streets of the nearby borough. Those three days were exceptional ones.

The stages of the riots have been well-documented but, following the sentencing of those involved, wider conversations have begun to take place. A particularly comprehensive report has been put together by a Joseph Rowntree Foundation-funded project. *The Guardian* newspaper in conjunction with the London School of Economics (LSE) has produced a detailed study entitled 'Reading the Riots'. This looked into the origins of the riots first and published its initial findings as a report (Reading the Riots 2012). The ongoing second stage of the project focuses on the sentencing procedures that followed the unrest. *The Guardian* and the LSE have based their research on a groundbreaking project in the aftermath of the Detroit riots



in 1967 by the Detroit Free Press newspaper and Michigan's Institute for Social Research (Kellner 2012: 29). The research sought to, '... uncover voices that are [...] unheard' (Bhattacharyya et al. 2012, p. 4). In this same vein, Reading the Riots has insisted on more complex causes of the riots, such as one report presented on BBC *Newsnight* on the weekend of 10–11 December, emphasising an anti-police dimension to the uprising, which, according to Kellner, 'document[ed] that many participants in the English riots consciously described how their actions were directed against the police and political system' (Kellner 2012, p. 26).

Most of the reports identify the origins of the riots as a police shooting of a 29-year old black man, Mark Duggan, in Tottenham, North London. The incident occurred when armed officers, searching for illegal weapons, stopped and searched the minicab in which Duggan was travelling (Kellner 2012, p. 18). The police defended the shooting claiming that Duggan was carrying a loaded gun, which he had fired. However, there was no evidence released that the weapon had been used for such reasons. For the local community this was another example of excessive police brutality (Kellner 2012, p. 18) and, given the sentiment that Duggan's death caused, it seems that this was one extremity of police behaviour that incensed an already raw community.

What happened over the course of the next few hours on the Saturday evening of 6 August, after a protest involving Duggan's family outside the police station, sparked some of the most virulent unrest the UK has seen, spreading far beyond the borough in which it started. Through the use of secure network 'BBM' (Blackberry Messenger), alongside other social networking sites such as Facebook and Twitter: 'A pattern appeared to be emerging, in which random groups of hooded and mostly young men armed with bats or Molotov cocktails suddenly showed up in a neighbourhood and began looting stores or trashing neighbourhoods (or both)' (Kellner 2012, p. 18). Kellner likens these groups to 'flashmobs', whereby groups spontaneously gather together to perform as a form of protest. Over the coming days, the riots spread from Tottenham to other areas across London, notably Enfield, Brixton, Hackney, Clapham, Croydon, Ealing, Peckham and then on to Birmingham, Bristol, Nottingham, Leicester, Manchester and other big cities across England. As unrest spread, there was clearly a lack of police response and a majority of the crimes involved property damage and looting. By the weekend of 13-14 August, there had been 2,200 people arrested; 1,400 of them in London. There were around-the-clock magistrate courts processing the suspects, assigning many to higher courts in order to administer stiffer penalties (Kellner 2012, p. 26). As the normalities and expectancies of law were suspended, 'British society and European and global capitalism were in full-crisis mode as the UK riots spread and intensified' (Kellner 2012, p. 20).

The Reading the Riots research was conducted in order to get a greater picture of the reason for the unrest and unravel the complexities of the events rather than apportion blame to those involved. According to the report, of the 270 people interviewed 85 per cent said policing was an 'important' or 'very important' factor in why the riots happened. Central to this is the sense of a lack of respect as well as anger at what was felt to be discriminatory treatment, perhaps most notably through the notorious stop-and-searches, which are known to target unfairly and



aggressively ethnic minorities (Reading the Riots 2012). According to many of the interviewees, 'The police [are] the biggest gang out there' (Reading the Riots 2012, p. 18). Because the BBM network had managed to evade the police, the Force was made to look incompetent and unprepared. The rioters saw their effectiveness as taking control of the streets, giving them justification to do as much damage as possible to a system operating in a manner widely viewed as fascist (Reading the Riots 2012, p. 20). As one young man from Tottenham said: 'I still to this day don't class it as a riot ... I think it was a protest' (Reading the Riots 2012, p. 21).

Riots Cases and Penal Responses

The law had always leant heavily against those who use the threat that lay in the power of numbers. The acts of any individual participator could not be approached in isolation.

(*R v Caird* 1970, para. 506)

The response from the courts to the riots can be seen as something of an anomaly in itself. According to Mitchell, speaking of the Lord Chief Justice's appeal judgment in *R v Blackshaw & Others* [2011] EWCA Crim 2312, the response provides a clear example of 'the courts responding to a comparatively rare form of offending' (Mitchell 2011, p. 4). The seemingly 'exceptional' circumstances of the riots called for necessarily harsh sentences in order to deter further uprisings. There were a number of long sentences for those who had committed relatively minor crimes, such as theft and criminal damage. What, then, provoked this aberration in penal response?

The cases of Blackshaw, Sutcliffe, Halloway, Vanasco, Gillespie-Doyle, McGrane, Koyunco, Craven, Beswick, and Carter were brought to the Court of Appeal (Criminal Division) on 18 October 2011. Of the ten who appealed against their convictions for their part taken in the events in London, Manchester and other cities, only two had their appeals allowed and the excessive sentences shortened. In the cases of Blackshaw and Sutcliffe, both had been found guilty of inciting riots through the use of Facebook. On 16 August 2011 Blackshaw pleaded guilty to committing an offence contrary to section 46 of the Serious Crime Act 2007, 'encouraging or assisting offences believing that one or more would be committed' (R v Blackshaw & Others 2011, para 54). He had used Facebook to set up and plan a public event called 'Smash down in Northwick Town', inciting a riot which never took place. He was sentenced to four years' imprisonment. Perry John Sutcliffe also pleaded guilty to intentionally encouraging or assisting the commission of an offence contrary to section 44 of the Serious Crime Act 2007. He was also sentenced to 4 years' imprisonment, again for using Facebook to incite violence, despite cancelling the event prior to being arrested. Neither had their appeals allowed.

Enrico Vanasco had his appeal against a sentence of 20 months' imprisonment dismissed, having pleaded guilty to burglary. The argument on appeal was that the sentence was 'manifestly excessive in the context of sentencing guidelines and the



deterrent purpose which the sentence was intended to serve could have been achieved in any event by a shorter custodial sentence' (*R v Blackshaw & Others* 2011, para. 91). The looting was seen as intrinsic and part of the overall public disorder on the night of 10 August. His appeal was dismissed. Hassan Koyuncu appealed his conviction of burglary, given he was only 17 at the time of the offences. Furthermore, it was found that Koyuncu had learning difficulties and therefore this should have been taken into consideration when giving him 12 months' imprisonment in a Young Offender's Institute. His appeal was also dismissed.

Given the excessive nature of the sentencing, the reasoning from the courts relied on the defendants being convicted of offences committed as part of mass public disorder or riot. However, as Mitchell points out, these were not public disorder crimes, which would lead to a questioning of how assessing the seriousness of the offences and the appropriate penal response led to such excessive sentencing (Mitchell 2011, p. 4). These crimes are referred to as 'Riot-Related Offending' (RRO). According to Ashworth, the appeal judgment was, 'significantly flawed by its failure to justify its conclusions on these appeals by reference to the applicable legislation, to relevant guidelines, or to the giving of adequate reasons' (Ashworth 2012, pp. 94–95).

Having summarised the events and the responses of the authorities, central to this consideration of the riots is the need to understand what happened in light of the rioters' punishments, and how an aesthetic theory of property through entropy might describe the events sufficiently. Why does the law respond with such defensiveness in the case of collective action and attacks on private property? What does the excessive sentencing say about the assumption of the crowd as something to be feared, and not of something to be a part? Why do the courts seek to silence a crowd who is already invisible and forgotten? What does the role of the commodity play and why such a spectacle? In order to contextualise any of these questions, the first priority is to explain the relevance and functionality of the thermodynamic property of entropy in allowing for a political aesthetics of the Summer Riots 2011.

Entropy

At a very basic level (and one taken from a traditional thermodynamic view) entropy is the amount of usable energy within a system. The more complex a system becomes, the more energy it uses; the more it strives towards order, the more disordered it becomes.

Ironically, being one of the most all-encompassing forms of causation that grounds our world and surrounding universe, entropy has been primarily confined to study as a thermodynamic property, as well as within information theory. In previous years, the reliance on geometry as the key to knowledge by Descartes and Spinoza, for example, saw an era of thought not as yet bifurcated into disciplines of the social and natural sciences. Given this, entropy has found its way back into the social sciences, humanities and indeed aesthetic theory, highlighting its purchase in assessing the history of science as well as mapping the relations between science



and the history of philosophy. Entropy has also been used to assess the relations between being and becoming as well as permanence and change (Prigigone and Stengers 1984, p. 292). Entropy exists in all systems, including those that are alive and those not, as long as they possess enough energy to function (Bailey 2004, p. 1). Even theories on entropy are themselves part of the emergent systems of burgeoning thermodynamism and complexity (Urry 2003, p. 23). Indeed scientist and aesthetic theoretician Arnheim sees the law of entropy as that which makes for 'a bothersome discrepancy in the humanities and helps to maintain the artificial separation from the natural sciences' (Arnheim 1971, p. 10; 1973).

Ilya Prigogine in recent years put entropy and thermodynamics back on the interdisciplinary map with his unique book Order Out of Chaos (1984), described by admiring colleague and mathematician Toffler as a work that sought to put the pieces back together again between biology, physics, necessity and chance, science and humanity (Toffler in Prigogine 1984, p. xi). As a result of Prigogine and others' work on the application of thermodynamics in the creation of systems and systems' complexities, there has been a well-documented paradigm shift of sorts towards 'complexity theory' within the humanities and social sciences. Complexity theory, evolving out of said mathematic and physical sciences, highlights the connection between the dynamics and processes occurring in material and biological life with that of social life (Escobar 2003, p. 349). Most notably, social movements and cyberspace are seen as just these hubs of 'complex-adaptive behaviour' (Escobar 2003, p. 349). These theories are all based on various understandings of entropy. At their root is the contradictory premise that the world is rapidly becoming more intricate and requiring more energy to be used, marching onwards on a treadmill of a Darwinian perfection and evolution, whilst at the same time the more complex it becomes, the quicker it moves towards a finality of heat-death. Entropy is a quantitative measure of the amount of disorder in a system (Arnheim 1971, p. 8). The more entropy there is, the more there is chaos. This is the Second Law of Thermodynamics, that energy, although constant in amount, is subject to degradation and dissipation (Arnheim 1971, p. 9), and thus systems strive for order but move towards maximum disorder. This conflicts with the First Law of Thermodynamics, that energy may change from one system to another but is neither created nor destroyed: 'The image of a world of law, order and timeless permanence [that] serve[s] theologians as a confirmation of "God's presence and action" (Tyndall in Arnheim 1971, p. 8). One of the fundamental questions of science and existence is, according to Whyte, to find 'the relation of the two cosmic tendencies: [that which moves] towards mechanical disorder (entropy principle) and [that which moves] towards geometrical order (in crystals, molecules, organisms, etc.).'

Thus, the world machine itself is, 'running down, losing energy and organisation, but biological systems, at least, [a]re running up, becoming more, not less, organised' (Toffler in Prigogine 1984, p. xiv). In previous eras, traditional science emphasised stability, order, uniformity and equilibrium. However, this was challenged by the change in pace of society in high capitalism (Toffler in Prigogine 1984, p. xi). This means that most of reality, instead of functioning in a balanced and constant state, is actually 'seething and bubbling with change, disorder, and process' (Toffler in Prigogine 1984, p. xv). In the introduction to Prigogine's



magnus opus, Toffler explains Prigogine's theory of bifurcation, whereby systems are so disordered and rapidly alternating that fluctuations can become so powerful as to 'bifurcate'. There can be no prediction as to which way a system may take itself, and thereby in the creation of a singular revolutionary moment order and organisation arise out of disorder and chaos through the process of self-organisation. Toffler underlines how this has had a direct impact on how we understand resistance, revolution, economics and even law (Toffler in Prigogine 1984, p. xv), with the resultant turn to theories of complex adaptive behavior and 'emergence' in order to explicate human constructed processes. There has been a recent focus on systems theory combined with a socio-legal configuration of law, specifically in relation to the functionality of administrative law (Trubek 1976–1977; Ruhl 1996; Hornstein 2004). Familiar within a legal context is the work of systems theorist, Niklas Luhmann, which takes a sociological account of social systems and the environment to explain legal behaviours and structures; a process he names 'autopoeisis' (Luhmann 1985). The most compelling socio-legal and legal pluralist work that uses the framework of entropy has been developed by sociologist of law, de Sousa Santos (1999, 2004), de Sousa Santos and Rodríguez-Garavito (2005). His notion of a 'sociology of emergence' and a 'sociology of absences' is indebted to the aforementioned complexity turn in the social sciences, similarly present in the work of Arturo Escobar (2003).

There are three fundamental facets of entropy and its application to organic and inorganic systems that are of direct relevance to the understanding of a political aesthetics of property in relation to the Summer Riots 2011. These are: the apparent dualism of order and disorder; entropy's confirmation of the arrow of time; and the role of information and complexity. These will be considered in relation to their analogy within aesthetics, followed by an understanding of consumerism and the aesthetic of entropy through the work of Benjamin, Rancière and Adorno in relation to the riots of 2011.

Entropy and Aesthetics

Without entropy there would be no possibility of exchange, and without entropy there would be no art.

(France and Hénaut 1994, p. 221)

Art and entropy are linked through the contemplation of form and structure in thermodynamic processes and those of aesthetics (Engler 1994, p. 207). There are specific uses of the entropy metaphor within sculpture and art through the work of

¹ It should at this juncture be noted that there are critiques of entropy that emanate from the educational origins, the supposedly universal acceptance of the Second Law of Thermodynamics, and the risks there are of applying a systemic and mechanistic account of organisms and structures to human life. Most biological and social systems are open systems, therefore according to Toffler, trying to understand them in mechanistic terms without understanding the role of complexity and uncertainty, is doomed to failure (Toffler in Prigogine, 1984: xv). Gal-Or also seeks to question the fundamental understanding of entropy and the origin of the irreversibility of nature, and seeks just to speak of energy dissipation and not entropy itself (Gal-Or 1970).



artist Robert Smithson, Paul Thek, Craig Kauffman and Larry Bell who, according to Smithson, are artists celebrating 'inactive history' or what physicists call 'energy-drain' (Smithson 1996, p. 1). As in a work of art, an entropy theorist is concerned with the totality, whereby small sets of data can determine the constructs of macroscopic states (Arnheim 1971, p. 21). Given this appreciation for arrangement and organisation, Arthur Eddington once likened this to the similar drive for beauty and melody (Arnheim 1971, p. 22). These depictions and laws of attraction in the form of order and disorder, equilibrium and symmetry are those which assume a totality, that which attests to a closed system. These are the formal structures for which systems strive. However, given their dynamics, this ultimately can never be achieved. Total order, therefore, is impossible. Why then is the link between entropy and aesthetics important and what does it say about what is beautiful and useful? And further, what can the aesthetic of entropy do to help explore and explain instances of law and resistance in the form of the Summer Riots 2011 to understand the implications for justice in light of the *Blackshaw* and *Sutcliffe* sentences?

The two cosmic tendencies, mechanical disorder (entropy principle) and geometrical order (crystallisation, organisms etc.) appear clearly within a theory of law and resistance, whereby it is the law that organises and controls, striving for a universalism of power. Yet in order for the law to achieve its purported goals, it feeds on the disorder it creates. Beat writer and aethetistician William S. Burroughs speaks of this tendency for order and disorder within our overall framework of late capitalist society, through his understanding of control. Entropy can account for Burroughs' projection of totality: it is the stop valve in a system that is ordered. On society and its excuse for infinite war, Burroughs concludes: 'In fact, the more completely hermetic and seemingly successful the control system is, the more vulnerable it becomes' (Burroughs 1986, p. 118). In Burroughs' eyes entropy has been hijacked by politics and capitalism, the treadmill of progress. In 'Freud and the Unconscious' he states: 'Time is that which ends, and control needs time' (Burroughs 1986, p. 120). What does this account of time say about the sentencing in the Blackshaw and Sutcliffe cases and how does time influence the configuration of order and disorder within law in general?

This aporia of life and organic and inorganic systems is something that is replicated within art. Arnheim analogises the differences between classical conceptions of art, and those of more modern, messy renderings. Which is more beautiful? Seemingly, order is a necessary state for the human mind to process information, and thus Arnheim emphasises the necessity for some structural features as dominant, some as subordinate (Arnheim 1971, p. 1). There are those systems that appear ordered, and yet they rely on the dismemberedness of their interior or genealogy to survive. Consider Michael Buor's depiction of the structure of New York in the 1950s (Arnheim 1971, pp. 2–3):

marvellous walls of glass with their delicate screens of horizontals and verticals, in which the sky reflects itself; but inside those buildings all the scraps of Europe are piled up in confusion ... The magnificent grid is artificially imposed upon a continent that has not produced it; it is a law one endures.



For the link between entropy and art to mean anything in relation to law and resistance, and the Summer Riots cases of *Blackshaw* and *Sutcliffe* in particular, then the tessellation of order and disorder, equilibrium and symmetry should be understood. The more orderly something appears, the more appealing it is (Engler 1994, p. 208).

For one to exist, so too must the other exist; each system relies on the other. However, this would suggest a utilitarian dimension whereby the likes of *Blackshaw* and Sutcliffe are a function of the path to a greater good; those who are to be sacrificed by the extraordinary whims of a sentencing judge. There is a violence to the maximum state of entropy, that which is thermodynamic equilibrium, or 'system death' (Bailey 2004, p. 1). In the quest for the impossible, a conquest of total control, there are those who make up the canon fodder. According to Arnheim (1971) p. 41), equilibrium connotes harmony and is 'the establishment of the greatest perfection and the most complete happiness'. But harmony and order for whom? Where are those who suffered in the determination for omnipresence? Considering the cases resulting from the riots, these are an imperfection within the grand scheme of orderliness and thus the legal response was to respond with technologies of interpretation to create new forms of offences in the form of the RRO. This is clearly law's order in the manipulation of its structures perfecting itself in the face of the riots' uncertainty and chaos. This is a familiar biopolitical manipulation of time and the future.

The effect on the least powerful (those who are invisible to the ones who navigate the flight of progress) is reliant on the irreversibility of time. In addition to order coupling with disorder, given that entropy is seen as that which can never decrease, time can therefore never be reversed; it is thus the irreversibility of time that brings order out of chaos. The flow of time in one direction means that the material world moves in ordered states to an ever-increasing disorder, which, by all accounts, strives to achieve the final happening of the universe of maximal disorder (Arnheim 1971, p. 7). What solders the forward nature of time is the role of probability and randomness.² Indeed, as Prigogine and Stengers state: 'In accepting that the future is not determined, we come to the end of certainty' (Prigogine and Stengers 1997, p. 183). Despite this apparent march towards heat-death, these energy-dissipating structures become more complex given the random nature of their stories. The thematic of decay has become clear within the artwork of Smithson, amongst others. According to information theorist Day, as with the case of Smithson, Walter Benjamin has a critique of social information which leads to a critical inversion of progressive notions of time, located in his work on the 'aura' of art (Day 1999, p. 5). Similarly, Burroughs' catabolic aesthetic is at its most penetrating at the end of Naked Lunch when speaking of time:

² It is far less likely, in fact *almost* infinitely unlikely that a cliff should turn the powers of erosion on its head, and gather boulders and rocks from the sea to re-touch its coastline silhouette. It is highly probable that erosion will cause a cliff to lose its order through the interaction with the order of the elements, forcing materials and rocks to fall and diminish the cliff. This is the irreversibility of time. For Isaac Newton, time was reversible; however, given the shift from dynamics to thermodynamics, what makes there a past and a present in systems is an acknowledgement to randomness and uncertainty.



The black wind sock of death undulates over the land, feeling, smelling for the crime of separate life, moves of the fear-frozen, flesh shivering under a cast probability curve ... power groups of the world frantically cut the line of connection ... The Planet drifts to random insect doom ... Thermodynamics has won at a crawl ... Orgone balked at the post ... Christ bled ... Time ran out ... (Mottram 1970, p. 45)

Order is a carrier of information; whilst, at the same time, the less likely an event is going to happen the more information is created. Entropy therefore grows with information and complexity. Mendès and Hénaut apply this to painting, whereby considering white noise as all the noise ever uttered and to be uttered, and that which cannot be uttered as infinite, this would appear in a painting as infinite complexity (France and Hénaut 1994, p. 220). This would ultimately be the reversal of time. In each initial condition there is information and, referring back to the question of irreversibility, there would have to be an infinite amount of information for us to reach back into the past in order to make the instance possible (and probable). Within the riots the role of information dissemination was determinant to the efficacy of the unrest, with investigators analysing 600,000 tweets and re-tweets about the riots for evidence that Twitter was used as a central organisational tool to promote illegal group action (Tonkin et al. 2012, p. 49). As a result it seemed as though both Twitter and Facebook (contrary to the outcome of the Blackshaw and Sutcliffe cases) were subordinate to the catalytic role of the secure system BBM. What does this proliferation of information say about the temporal structures in which the rioters were working. Prigogine highlights how theories of thermodynamics are based on the assumption of a system to be closed, and yet closed systems are rare in comparison to open systems. Thus there may be different levels of time experienced by differing individuals, groups and tribes across the globe, highlighting 'social time', 'individual time', 'geographical time' (Toffler in Prigogine 1984, p. xiii). Given the scientific intricacies between the Newtonian and anti-Newtonian understanding of space-time, the question would be what does this characteristic of entropy have to do with a political aesthetic of law and resistance? How does the arrow of time liken itself to our capitalist structure, and thus to any reactions of revolutionary movements as a result? Humans are not dynamic systems; however, the question of irreversibility is one of the fundamental questions to be experienced as human beings (Prigigone and Stengers 1984, p. 298). In terms of the *Blackshaw* and Sutcliffe cases, time was of the essence. They were denied the interval they needed to actually commit the offences of which they were accused (indeed, offences that were created in order to convict them). Law intervened and assumed the foreseeability of time, and yet who knows what may have happened if uncertainty had been considered in the judgments.

Lorand states that for any aesthetic theory to be comprehensive, an analysis of negative aesthetic concepts is mandatory: beauty does not have one single opposite (Lorand 1994, p. 399), turning symmetrical system death on its head. 'Parity violation' and 'spontaneous symmetry violation' (Engler 1994, p. 208) are terms referential to both entropy theory and aesthetics, welcoming the role of randomness, uncertainty, disorder, the past and the future. Symmetry breaking refers to



asymmetrical solutions of equations that themselves are based on exact symmetries (Engler 1994, p. 208), supporting a Bergsonian conception of order and uncertainty:

We say of astronomical phenomena that they manifest an admirable order, meaning by this that they can be foreseen mathematically. And we find an order no less admirable in a symphony of Beethoven, which is genius, originality, and therefore unforeseeability itself'. (Bergson 1944, p. 245)

Ultimately, there is thus beauty in order and beauty in forms of disorder, on account of its very unpredictability (Lorand 1996, p. 404). Randomness, as unaccounted-for behaviour, allows for an opening out of the totality. There does not have to be a *homo sacer* of law (Agamben 1998) because it is not law that decides; rather it is the one who resists: it is Blackshaw or Sutcliffe.

Entropic Aesthetics and Crowd Theory

To any theorist, systems theory is an obvious analogy for law and resistance, given the dialectics of disorder and order, control and chaos. Burroughs' writings are seething with the undercurrent of the violence of biopolitics, law and order, with a nod to entropy as both metaphor and determinant for the reasoning of this gradual social decay. Using a Benjaminian account of political resistance and war, and drawing from Futurist painter Marinetti (fascist acquaintance of Mussolini), an extremity of power and war leads to an aestheticisation of political life (Benjamin 2008, pp. 36–37). This situates entropy within law and resistance, and resistance to law. It also illustrates law's coercion as that which leads to the catabolic spectacle of art in suffering and suffering in art. But how does this account for the exhibition of the riots? How does aesthetics account for a politics of neglect? Why did the courts open all night after the riots, with protesters being sent for Crown Court trials as opposed to lower magistrates' courts, where penalties are less severe (Power 2012? What role does this play in the aestheticisation of politics? Why were those convicted of RRO punished even further with the threat of eviction from any social housing provisions of which they were in receipt (Prochaska 2011), fuelling an inevitability of state negligence once again in the name of certainty and order? We see resistance through the fantasised exaggeration of a gathering of people. This resistance is actualised through a series of images, originally invoked through periods in history, and the rhetoric that flows from the way in which humanity has sought to remember these events. Law and its rhetoric, its aesthetic and political permutations, are determined through the same processes; resistance and law are a series of images and symbols that are mystified, humanised and dehumanised, bringing back together art and life in a cheap thermodynamic twist on Debord's 'Society of Spectacle' (Debord 2002). One way in which entropy can help in answering some of the questions above has been more recent connections made within both political and aesthetic theory through Ernesto Laclau's genealogy of 'crowd theory'.

Laclau has tracked the conceptualisation of 'populism' from fin de siécle France where he identifies the positivist writings of Gustave Le Bon as crucial to



understanding the modern rendering of the crowd. Laclau sees this as a point of departure for the application of complexity theory and entropy (self-organising behaviour) in an effort to understand resistance: 'Like the crowd members about whom they wrote, these writers appeared mesmerised by the collective entity of the crowd, attributing to it an extraordinary psychological hold over the helpless and hapless individuals ensnared in its group' (King 1990, p. v). Apart from Gustave Le Bon (1885, 1897) (later to influence Freud's social psychology and George Lukàcs' 'class consciousness'), Gabriele Tarde (Tarde 1969) and William McDougall (McDougall 1920) are particularly important here. All these figures published at the end of the nineteenth century, an era reverberating with collective resistance and revolution. Undoubtedly this produced the conservative aesthetic and brutish theoretical descriptions of some theorists of the crowds that they or the previous generation, had witnessed: 'Bestial to some theorists, deranged to others, the crowd represented, in the eyes of those who sought to grapple with it, an evolutionary and/or mental regression in a massive scale' (King 1990, p. v).

This literature is indebted to positivism, whereby crowd psychologists sought to discover inherent, universal laws of human social behaviour. The work of Le Bon, for example, relied upon brain pathology and abnormal psychology. The mind/body unity therefore influenced the work of many of these theorists, until the intersecting role of Freud in 1922 with his 'Group Psychology and the Analysis of the Ego' (Freud 1989). Césare Lombroso's notion of the 'born criminal' (a biologically determined figure with particular physiognomic traits) echoed other works of the time, with an emphasis upon psychic automatism and the mind's subservience to physical morphology (Nye 1975, p. 27). Crowd theory was indeed thoroughly synthetic, with psychological, biological, philosophical and sociological accounts intertwined in a characteristically scientific social Darwinism. The hypnotic role of the leader, the suggestibility of illusion and hallucination, served as an aesthetic politics that was central, particularly to Le Bon's understanding of the persuasion of crowds. These illusions were propelled by mesmerising rhetoric, creating an exacting 'idiodynamism' (Nye 1975, p. 56) that formed a contagion of 'illusions and words that have influence on the mind of the crowd' (Le Bon 1885, p. 47). Replays of order, disorder, broken symmetries and closed systems emanate. This collectivity of movement and spontaneity finds itself at odds with law and with a swift exactitude of legal innovation the crowd is excluded and communally criminalised. It is here that the law allows for an appearance of symmetry, no matter how fractured its interior.

Instead of looking at crowds from this negative standpoint, Laclau used Freud to understand collective resistances as entropic encounters. In his 'Group Psychology and the Analysis of the Ego', Freud was concerned with the nature of the social tie in a group setting. According to Freud the individual is always linked to the 'other', 'as a model, as an object, as a helper, as an opponent, and so from the very first individual psychology... [it] is at the same time social psychology as well' (Freud in Laclau 2005). Veering away from the suggestion as intimated by his predecessors, Freud argued that relations within a crowd or group setting are formed from the



subconscious love, or 'libido'. The assumption is therefore that identification takes place between the members of the crowd but not between the individuals and the leader. To include a leader in this sense would mean grounds of identification as the common love of the leader. It is here, however, that a stark illustration of the superfluous role of a leader within a group situation is made clear, paving the way for the self-organising group theory. More directly, through the use of social networking media, we have seen the development of the twenty-first century 'flashmob', a further aestheticisation of 'swarming' that involves 'a public gathering of complete strangers, organised via the internet or mobile phone, who perform a pointless act and then disperse' (Gore 2010, p. 126). Swarming makes sense directly in relation to the riots, through the modern analogy of crowd theory in the form of the flash mob. To attempt to locate a leader is to misunderstand the genealogy of the riots overall and, ultimately, to misconstrue their contingency. All the gangs involved [and these were not as prevalent in the unrest as reported (Reading the Riots 2011)], put their antagonisms aside for the short duration of the riots, placing in effect a lifting of resistant laws and codes, and working together. This was not a vertical hierarchy of command but a horizontal nexus of cooperation between former enemies; a swarm of unrequited violence in response to the violent forgetting of the state.

Understanding the role of entropy within the aesthetics of collective behaviour highlights the manner in which refusals manifest in response to law. By drawing on the work of Laclau on populism, we can suggest that crowd theory, until the social psychology of Freud, connotes an historical and negatively associated encounter. The crowd is depicted as something to be feared, a mass that is unable to be captured by the mechanisms of control or calculation. It is the absence of a figurehead that allows for uncertainty, the actions of both law and resistance becoming difficult to place within this complex dialectic. What entropic aesthetics needs to account for in the instance of the Summer Riots is the causal element. It has so far enlightened us with a process, but not as yet with the reasoning.

The Commodification of Resistance

When Benjamin was writing of the diminishing aura within the work of art in the age of mechanical production, he connected this decline directly to the means of production, portending a shift in emphasis from the production of art to art's

³ The experience of being in love, is diverted from its original sexual drives and reconstituted as 'identification', '...the earliest expression of an emotional tie with another person' (Freud 1922, p. 46). In the case of encountering strangers, which is a common feature of the crowd phenomena, this unconscious love is manifested as a form of narcissism. However, in the case of a group situation, this narcissism is suspended and transformed into a tie with the others of the group. In the case of the forming components of identification, when the narcissistic 'ego ideal' is represented through the presence of the other members of the crowd, this is where, according to Freud, the ego introjects the object (group bond) onto itself. Therefore, 'the object can be put in place of the ego ideal' (Freud 1922, p. 47), constituting '...a primary group of this kind [a]s a number of individuals who have put one and the same object in place of their ego ideal and have consequently identified themselves with one another in their ego' (Laclau 2005, p. 56).



consumption. Essentially he cultured his theory of aesthetics to determine a theory of property relations. He relates to Marinetti's provocation that fascism rearranges property relations which the masses make it their task to abolish. This leads to an aestheticisation of political life whereby all efforts to aestheticise politics culminate in futurism and war (Benjamin 2008, pp. 36–37). Benjamin's response to this is for communism to politicise art (Benjamin 2008, pp. 36–37).

Commentators have identified the presence of looting and other petty crime (rather than public order offences) as distinguishing the recent unrest from similar uprisings (Mitchell 2011; Kellner 2012). There is a melancholic narrative that acquiesces to this story of social unrest. The evidence from the Reading the Riots surveys suggested rioters were generally poorer than the country at large. This was taken from more than 1,000 court records, suggesting 59 per cent of the English rioters came from the most deprived 20 per cent of areas in the UK. Given these statistics, it is not surprising that there was widespread looting, which in turn is motivated by capitalist desires for consumption, 'and the programmed thrill of presenting oneself in the latest fashion or showing off the latest electronics—"I shop and consume, therefore I am" (Kellner 2012, p. 22). This is coupled with a lack of respect for a system gripped in the results of its own greed, leaving behind those who are forgotten and expressing a worrying sense of lack of hope and recognition: 'It was hard not to think of the Sex Pistols' mantra "no future" or the Clash's "London's burning" while watching the spectacle of the UK riots in action' (Kellner 2012, p. 22). And it was a spectacle, where accused youths were dealt with in exceptional measures, 'leaving the courthouse with scarves or shirts over their faces or flashing defiant fingers at cameras' (Kellner 2012, p. 25); and the media poured over footage from CCTV and social networking posts from those involved. The event of the riot and the expression of person and property violence could be seen as coming from an underbelly of unrequited rage, a disenchanted masculinity or from Freudian impulses of the replication of societal greed and aggression (Kellner 2012, p. 22). This frustration and alienation was cauterised by drastic cutbacks to council budgets, resulting in closed youth clubs and diminished social support for those most in need, and stemming from the austerity measures put in place to tackle the global financial crisis: 'Indeed, England was arguably suffering a legitimation crisis at the time of the English riots of 2011' (Kellner 2012, p. 21).

Those who were part of the riots were therefore, by and large, those who were forgotten and, having heard their distrust of the police and authority in general, the role of the law was clearly something of a catalyst for the unrest. For those watching from the sidelines, this was the result of abundance rather than scarcity (Coit 2010, p. 216), and the marginal revolution of those wishing for more but with no hope of attainment. Following Marx, Ruskin and Polanyi, it is the embedded economy that is subordinate to social concerns rather than autonomous to them (Coit 2010, p. 217) and yet the economy seems to be the causal element and resultant property overall.

Echoing Benjamin's move from production to consumption, the riots speak of the commodity fetish and the disparity of wealth engrained in lowered hooded tops and saturating flames for Molotov cocktails. Benjamin's archive and the collector, 'the capitalist function of the ragpicker [...] to subject even rubbish to exchange value' (Adorno et al. 1977, p. 130), explicates an all-encompassing commodification of life



whereby even resistance and riot becomes exchangeable. Benjamin would say this is empathy with the soul of the commodity, or empathy with exchange value itself (Benjamin 1976, p. 135, 140). Equally, Adorno critiques the commodity character as diametrically opposed to art and aestheticism (Adorno et al. 1977, p. 119) and Ruskin is suspicious of any unnecessary reproduction in general suggesting we should never 'encourage the manufacture of any article not absolutely necessary' (Ruskin 2004, p. 20). Benjamin's profanation that transformation of the superstructure alters art's development under changing conditions of production, is resonant when considering the entropic aesthetics of the riots; the manner in which the system reacts to the commodification of life, leading to the commodification of art and ideas of revolutionary demands themselves (Benjamin 2008, pp. 2–3). Art moved from being underpinned by ritual to politics (Benjamin 2008, p. 12), and politics has become the collective aesthetics. What does law have to say about this, and how does it cope with a collective aesthetics of property and commodity?

Collective Behaviour and Non-average Sentencing

Having looked at crowd theory, we can see that what is at stake here is not the actions of the rioters but the assumptions of those sentencing. Which aesthetics of the crowd have the courts chosen as their methodological basis of punishment?

For Le Bon, the conception of the crowd was imbued with the hypnotic influence of the leader through collective suggestibility. The effect that the crowd could have upon the individual culminated in the intense feelings of power previously inhibited through the constructs of lone action, released within the mass and becoming contagious through the phenomenon of the hypnotic order. Le Bon described these as characteristics that were at times contrary to the actions of the isolated individual (Le Bon 1885, p. 14). McDougall asserts this formulation of the common object or leader for the constitution of the collective will: 'There must, then be some degree of similarity of mental constitution, of interest and sentiment, among the persons who form a crowd, a certain degree of mental homogeneity of the group' (McDougall 1920, p. 23).

Mitchell refers to the doctrinal question of culpability in justifying aggravated associated offences committed in the context of rioting, and what appropriate quantum of aggravation should be imposed. To what extent, then, should a judge reflect the wider looting and violence in the aggravation of punishment, with regards to conventional offences of crimes against commercial properties (Mitchell 2011, p. 5)? Both Mitchell and Ashworth comment on there being little evidence of tougher sentencing acting as a deterrent on future offences of the same nature (Mitchell 2011; Ashworth 2012). Despite the fact that Section 142 of the Criminal Justice Act (2003) requires the sentencing courts to regard public protection as being part of their five considerations, it has been noted that, 'when aggravated, the total amount of harm done throughout the country was considerable is not per se a good reason for putting such a high priority on protecting the public when sentencing individual offenders' (Mitchell 2011, p. 5). Blackshaw and Sutcliffe were charged with encouraging and assisting in the commission of crime under



sections 44 and 46 of the Serious Crime Act 2007 and the judgments took into account the surrounding circumstances and therefore did not treat the crimes in isolation. The reasoning for this was that they still continued to take part even though, and perhaps because, they knew of what was being committed around them. Thus, the argument was that they must have been aware that the criminal damage and looting they were inciting would have affected the community as a whole (Mitchell 2011, p. 5). This highlights a liminal between collective offending and individual offending (Mitchell 2011, p. 5).

It seems as though the sentencing judges in the cases of *Blackshaw* and *Sutcliffe* were using a social Darwinism of sorts to inform their penal responses. The judgments suggest a negative castigation of collective behaviour which highlights the unaccommodating nature of law for any disturbances affected in numbers. It also places the primacy of private property over that of the welfare of the youths involved, and tends to support a role of calculation and a level of culpability that reflects a command-control structure within the organisation of those who were rioting and looting rather than one that spontaneously erupted as a result of randomness and being without a leader. This is evidenced by the creation of the legal anomaly of RRO. We see here the work of the state in a time of unforseeability where constancy is maintained through criminalising those who cannot be sacrificed; it seems as though the only way the common law can accept collective action is through criminalisation. The riots are just one example, along with the Criminal Justice and Public Order Act 1994 (regulating numbers of people collectively enjoying electronic music at any one time⁴) and the move to criminalise squatting⁵ as other such instances of law reacting to numbers, disorder, chaos and uncertainty. Through the accession of the individual over the collective, private property over welfare state, the rioters are caught in a legal loop that directs the arrow of time.

Conclusion

One of the inspirations for exploring the thematic of entropy in relation to the Summer Riots concerns the demarcation of the energy dissipated within a system as 'useless' and, therefore, of no utility other than its ultimate function as maintaining the existence of the system itself. This appears, thus, as contradictory and violent to the extent that the work done is invisible with a lack of acknowledgement of the soldering function of the dissipated energy within the structure. This speaks again to an aesthetic of utility and beauty, the excluding nature of order, the useful, equilibrium and symmetry, at the expense of the ugly, the chaotic and the random. In 'The Political Economy of Art' Ruskin claims there needs to be a balance of care that sees both utility and splendour (Ruskin 1857, p. 20). Adorno, however, goes so

⁵ See Legal Aid and Sentencing Bill (2012) which has received Royal Assent and when in force will make squatting in residential buildings a criminal offence.



⁴ This refers to Section 63 regarding powers to remove persons attending or preparing for a rave, a gathering on land in the open air. Subsection (1A) (a) refers to a gathering on land of 20 or more persons who are trespassing on the land, thus allowing the authorities to intervene based upon numbers.

far as to characterise the collector as he who liberates things from the curse of being useful (1977, p. 113). Drawing on thoughts of the arts and crafts movement (Ruskin and Morris with their belief in the utility in art), there seems to be a need for clarification over which part of the system is the useful and the unuseful, whether disorder can be beautiful and therefore useful at the same time.

There is a distinct sense of injustice in assuming that those involved in resistance are useless, which is how the riots were depicted: boredom and emptiness, a waste of human energy. And, yet, there are other narratives. Stephen Craven, one of the ten appellants in *Blackshaw & Others*, had set up a football club for his local community to relieve boredom on the part of local dispossessed youths. The closing of youth clubs has been well documented as a trigger for the release of misspent tension and energy that was seen during the riots. Craven took the situation into his own hands by providing for his peers, giving them hope and encouragement through the provision of communal sport. Craven and others then went further and took the law into their own hands by re-configuring the functions of private property for a suspended duration of time: they were the collectors, the rag-pickers, making use of their 'uselessness' and freeing the commodity from the realms of individualism.

The aim of this piece has been to highlight the usefulness of entropic aesthetics in illustrating relations of law, resistance, commodity and property relations. Indeed this approach hopes to have illuminated questions of justice and injustice in general. It is hoped that by assimilating theories of order and disorder in complexity theory and art theory, in tandem with the works such as Benjamin, Adorno, and the arts and crafts movement, an alternative depiction of the structures and constructions of law and resistance accounting for a political aesthetic of property can be developed. By illustrating the split between late nineteenth century crowd theories and those based on Freudian social psychology and complexity, a similar division between art theories of order and disorder, the presumption of beauty as symmetry and the neglect of incompleteness and unforseeability, is revealed. It also accounts for ways of seeing collective behaviour through the leaderless and the leader. By demonstrating the two versions of entropic aesthetics, the sentencing of the riots as that relying on a deranged 'useless' mob lead by a figure-head, with implications of culpability at the state of exception, underlines the conservative and discriminatory pigeon-holing of judgment's reasoning, whilst demonstrating an inherent exclusion of the collective from within law.

By allowing for a political aesthetics in the time of crisis, this does not have to be the aesthetics of war of which Marinetti speaks (Marinetti 2009). In 'The Nature of Gothic' (1853), Ruskin states that all labour should be creative labour, thus in a healthy society art should be indistinct from production at large (Ruskin and Morris 2008). Morris follows with a configuration of counteracting the dissipation of energy through art: 'The restraining of restlessness, therefore, is clearly one of the essential aims of art, and few things could add to the pleasure of life more than this... Restlessness makes them hapless men and bad citizens' (Morris 1947, p. 82). The breaking down of divisions of art and life, science and philosophy, is the hope of changing life itself (Rancière 2002, p. 134). Indeed, 'there exists a specific sensory experience—the aesthetic—that holds the promise of but a new world of Art and a new life for the individual and the community' (Rancière 2002, p. 133).



The hope would be to remember the beauty in the useless and to question those who proclaim themselves as useful to the detriment of others, for, above all, locating grace in the silenced is the fundamental task for law.

References

Adorno, Theodor, Walter Benjamin, Ernst Bloch, Bertolt Brecht, and George Lukács. 1977. Aesthetics and politics. London: Verso.

Agamben, Giorgio. 1998. *Homo Sacer: Sovereign power and bare life*. Stanford: Stanford University Press.

Arnheim, Rudolf. 1971. Entropy and art: An essay on order and disorder. Berkeley: University of California Press.

Arnheim, Rudolf. 1973. On entropy and art. Leonardo 6(2): 188-189.

Ashworth, Andrew. 2012. Departures from the sentencing guidelines. Criminal Law Review 2: 81–96. Bailey, Kenneth. 2004. Entropy systems theory, Encyclopaedia of life support systems (EOLSS). Paris:

UNESCO.
Benjamin, Walter. 1976. *Charles Baudelaire: A lyric poet in the era of high capitalism.* London: Penguin. Benjamin, Walter. 2008. *The work of art in the age of mechanical reproduction.* London: Penguin.

Bergson, Henri. 1944. Creative evolution. New York: Henry Holt.

Bhattacharyya, Gargi, James Cowles, Steve Garner, and Ajmal Hussain. 2012. Communities, centres, connections, disconnections: Some reflections on the riots in Birmingham. *Sociological Research Online* 17(1): 1–4.

Burroughs, William S. 1986. Freud and the unconscious. In *Burroughs*, ed. S. William. The adding machine: Selected essays New York, Arcade Publishing.

Coit, Emily. 2010. This immense expense of art: George Eliot and John Ruskin on consumption and the limits of sympathy. *Nineteenth-Century Literature* 65(2): 214–245.

Day, Ronald. 1999. Information and entropy in the Cold War and its present: Emergent meaning in the art of Robert Smithson. Presented at 'Sociality/materiality: The status of the object in social science conference, 9–11 September, Brunel University, UK.

Debord, Guy. 2002. The society of the spectacle. Canberra: Hobgoblin Press.

de Sousa Santos, Boaventura. 1999. The fall of angelus Novus: Beyond the modern game of roots and options. At www.eurozine.com.

de Sousa Santos, Boaventura. 2004. A critique of lazy reason: Against the waste of experience. In *The modern world-system in the Long Durée*, ed. Immanuel Wallerstein. Colorado: Boulder.

de Sousa Santos, Boaventura, and César Rodríguez-Garavito (eds.). 2005. Law and globalization from Below: Towards a cosmopolitan legality. Cambridge: Cambridge Studies in Law and Society.

Engler, Gideon. 1994. From art and science to perception: The role of aesthetics. *Leonardo: Art and Science Similarities, Differences and Interactions: Special Issue* 27(3): 207–209.

Escobar, Arturo. 2003. Other worlds are (already possible): Self-organisation, complexity, and post-capitalist cultures. In *The world social forum: Challenging empires*, ed. Jai Sen, Anita Anand, Arturo Escobar, and Peter Waterman. New Delhi: Viveka Foundation.

France, Michel, and Alain Hénaut. 1994. Art, therefore entropy. Leonardo: Art and Science Similarities, Differences and Interactions: Special Issue 27(3): 219–221.

Freud, Sigmund. 1989. [1959]. Group psychology and the analysis of the ego, New York: W. Norton & Company.

Gal-Or, Benjamin. 1970. Entropy, fallacy and the origin of irreversibility: An essay in the New Astrophysical Revolutionary School of Thermodynamics, Annals NY of Academic Sciences, Art 6: 307–325.

Gore, Georgiana. 2010. Flash mob dance and the territorialisation of urban movement. *Anthropological Notebooks* 16(3): 125–131.

Hornstein, Donald. 2004. Complexity Theory, adaptation and administrative law. *Duke Law Journal* 54: 914–960

Kellner, Douglas. 2012. The dark side of the spectacle: Terror in Norway and the UK riots. *Cultural Politics* 8(1): 1–43.



King, Erika. 1990. Crowd theory as a psychology of the leaders and the led. New York: Edwin Mallen Press.

Laclau, Ernesto. 2005. On populist reason. London: Verso.

Le Bon, Gustav. 1885. The French revolution and the psychology of revolution. New Brunswick: Transaction Books.

Le Bon, Gustav. 1897. The psychology of peoples. London: T Fischer Unwin.

Lorand, Ruth. 1994. Beauty and its opposites. *The Journal of Aesthetics and Art Criticism* 52(4): 399-406.

Lorand, Ruth. 1996. Bergson's concept of art. British Journal of Aesthetics 39(4): 400-415.

Luhmann, Niklas. 1985. A sociological theory of law. London: Taylor and Francis.

Marinetti, Filippo. 2009. The futurist manifesto. In *Futurist manifestos*, ed. Umbro Appollonio. London: Thames and Hudson.

McDougall, William. 1920. The group mind: A sketch of the principles of collective psychology with some attempt to apply them to the interpretation of natural life and character. London: Cambridge University Press.

Mitchell, Barry. 2011. Sentencing riot-related offending: Considering Blackshaw and Others. Archbold Review 10: 4–7.

Mottram, Eric. 1970. The algebra of need. New York: Intrepid Press.

Morris, William. 1947. On art and socialism. London: Purnell & Sons.

Nye, Robert. 1975. The origins of crowd psychology: Gustave Le Bon and the crisis of mass democracy in the Third Republic. London: Sage Publications.

Power, Nina. 2012. From kettles to courtrooms: The police crackdown on protest, *Red Pepper Magazine*. Prigogine, Ilya, and Isabelle Stengers. 1984. *Order out of chaos: Man's new dialogue with nature*. London: Flamingo.

Prigogine, Ilya, and Isabelle Stengers. 1997. The end of certainty: Time, chaos and the new laws of nature. New York: The Free Press.

Prochaska, Elizabeth. 2011. UK riots: Should the rioters lose their entitlement to benefits? *The Guardian*, 11 August 2011.

Rancière, Jacques. 2002. The aesthetic revolution and its outcomes: Employments of heteronomy and autonomy. *New Left Review* 14: 133–151.

Ruhl, J.B. 1996. Complexity theory as a paradigm for the dynamical law-and-society system: A wake-up call for legal reductionism and the modern administrative state. *Duke Law Journal* 45(5): 849–927.

Ruskin, John, and William Morris. 2008. The stones of Venice. London: Euston Grove Press.

Ruskin, John. 1857. The political economy of art. In *The works of John Ruskin*, vol. 16, ed. E.T. Cook, and Alexander Wedderburn. New York: Longmans.

Ruskin, John. 2004. On art and life. London: Penguin Books.

Smithson, Robert. 1996. Entropy and the new monuments. In Flam, Jack, ed. Unpublished writings in *Robert Smithson: The collected writings*, Berkeley: University of California Press.

Tarde, Gabriel. 1969. On communication and social influence: Selected papers, ed. Terry N. Clark, Chicago: University of Chicago Press.

Tonkin, Emma, Heather Pfeiffer, and Greg Tourte. 2012. Twitter, information sharing and the London riots? *American Society for Information Science and Technology* 38(2): 49–57.

The Guardian and LSE. 2012. Reading the riots: Investigating England's summer of disorder.

Urry, John. 2003. Global complexity. Cambridge: Polity.

Cases

R v Caird [1970] 54 Cr. App. R 499.

R v Blackshaw & Others [2011] EWCA Crim 2312.

