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Nonlinearity, autonomy and resistant law

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It can be a little difficult to plot a timeline of social centres when you're dealing outside of linear time.

– Interviewee from rampART collective, 2009 in [Finchett-Maddock \(2016\)](#), p. 168)

This chapter argues that informal and communal forms of law, such as that of social centres, occupy and enact a form of spatio-temporal ‘nonlinear informality’, as opposed to a reified linearity of state law that occurs as a result of institutionalising processes of private property. Complexity theory argues the existence of both linear and nonlinear systems, whether they be regarding time, networks or otherwise. Working in an understanding of complexity theory framework to describe the spatio-temporality of law, all forms of law are argued as nonlinear, dependent on the role of uncertainty within supposedly linear and nonlinear systems and the processes of entropy in the emergence of law. ‘Supposedly’ linear, as in order for state law to assert its authority, it must become institutionalised, crystallising material architectures, customs and symbols that we know and recognise to be law. Its *appearance* is argued as linear as a result of institutionalisation, enabled by the elixir of individual private property and linear time as the congenital basis of its authority. But linear institutionalisation does not account for the role of uncertainty (resistance or resistant laws) within the shaping of law and demonstrates state law’s violent totalitarianism through institutionalising absolute time. Unofficial, informal, autonomous and semi-autonomous forms of law such as those expressed by social centres (described as ‘social centre law’) remain non-institutional and thus perform a kind of informal nonlinearity, expressed through *autonomy-as-practice* and *autonomy-as-placement*, highlighting the nonlinear nature of autonomy and the central role of spatio-temporality within law and its resistance. The piece argues it is important that lawyers and other thinkers understand the role of space and

time in the practices of law, how forms of spatio-temporality shape the ideologies that determine law and how it is organised, in order to better understand the origin and trajectory of law, resistance and the world it shapes around us and the usefulness of complexity theory in demonstrating this.

Emergent Themes

Ten years have passed since Manuel DeLanda mapped his dynamics of materialism in the 2007 *A Thousand Years of Nonlinear History* (DeLanda, 2007); subsequently, the terminological focus of this chapter 'nonlinearity' has become a familiar presence in legal, social, ecological and artificial relations today, whether we are aware of it or not. DeLanda's account of history took us through geology, language and markets to explain how change in time, although appearing to happen in a linear fashion from one chronology to the next, actually moves in an indirect, baroque movement, catalysing as the world responds to unforeseeable events, changing and adapting as it shifts and morphs across space and temporalities. One society to the next can be at infinite levels of transformation at the same time as another, but no one society is more 'developed' than another. This is not the linear story of progress in history or the Social Darwinism with which we have become familiar. DeLanda highlighted how 'both classical thermodynamics and Darwinism admitted only one possible historical outcome, the reaching of thermal equilibrium or of the fittest design. In both cases, once this point was reached, historical processes ceased to count' (DeLanda, 2007, p. 15). Within the nonlinear account of history, however, history is open, multiple and unbounded, a chorus of stages, events, atrocities, celebrations, milestones and developments occurring simultaneously across the globe's ecologies and cultures. A nonlinear history does not discriminate through the binding of solely linear time and a dogma of progress.

So what is nonlinearity? Nonlinearity is a scientific term for the way complex and dynamic systems behave, where the outcome of a system cannot be reduced to its input, inferring a 'bottom-up' and unplanned motion, where something has been created in the process of a phenomenon changing and responding to its environment. Both linearity and nonlinearity are the results of these *emergent* patterns of organisation and 'complex adaptive behaviour', whereby systems form in response to the *uncertain* nature of their surroundings, creating irreducible structures from 'emergent properties', the whole greater than the sum of their parts, order out of chaos and the same vice versa. It is this element of uncertainty that can account for the apparent 'leaderlessness' of nonlinear phenomena, as it occurs in response to its environment and not the top-down decisions of something or someone organising. As DeLanda explained, it is not the planned results of

human action but the unintended collective consequences that create the world around us (2007, p. 17). This science of nonlinearity (complexity science, which we will come to in more detail later) has become central in describing not only our natural ecosystems but also our human-made social, cultural, political and economic systems and how we organise and govern ourselves as a result. The bottom-up nature of nonlinearity is of core import to this journey into the world of a so-called resistant law of social centres (radical community centres that are often squatted), given the predominantly anti-authoritarian make-up of their participants, and the legal loophole within which they can exist (if occupied without the owner's permission). For the purposes of this chapter, and for reasons of clarity, given the vastness of the scientific and non-scientific literature around nonlinearity, the chapter focuses predominantly on the spatio-temporal relation of nonlinearity and how this grounds legal (and otherwise) forms of organisation as a result.

So how is this plurivocality so prevalent in our everyday lives? It is interesting to consider the extent to which the understanding and resultant harnessing of nonlinear organisation have been incorporated into scientific and technological practice, effecting and affecting the forms of technology and interfaces we use daily. Marketised understandings of nonlinearity now propel and shape our technological lives, such as through the use of algorithms, computational models to generate predictions of peoples' tastes and preferences, sold back to advertisers and companies for marketing purposes. Social networking sites such as Facebook are a prime example, where your data are used in a nonlinear manner, their ever alternating in response to its users whilst the interfaces themselves being fine illustrations of 'emergent' networks. From the personalised adverts we receive catalysed by our interactions with social networks, through to predictive texts and weather apps, to the unfathomable growth of the internet and immense virtual and real networking platforms themselves, we can see that Stephen Hawking's prediction of the 21st century being one of 'complexity' is not too far off being proven correct (Hawking, 2008, p. 273).

Complexity theory is the practical science that grounds explanations of nonlinearity and the forms of *emergence* that occur as a result of nonlinear processes, describing and predicting the network's relationships in all forms of life. The commercial co-optation example of complexity is interesting because considering this chapter's non-marketised nature of nonlinear organisation expressed in the example of social centres and the resistant laws they perform. Yet at the same time what we are about to deliberate is the potential nonlinear choreography of everything, from law (whether to resistant or otherwise) to property relations to the commercial co-optation of nonlinear dynamics, neoliberalism and post-truth politics itself and back around to explaining the motherboard functions and nature of all dynamic and inert life.

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You might ask how an intuitive text message function may in any way be connected to understanding law, or why this is of any use to the study of law and the communal forms of resistance described. For any scholar of complexity, the association would not be such a mystery. In 'Protest, Property and the Commons: Performances of Law and Resistance' (2016), I argued that social centres create their own form of law, premised on the framework of complexity theory to explain communal behaviour, the organisation and resistant forms of legality created as a result.

The law was resistant on the very basis of its nonlinearity, whereby it evaded state law institutionalisation through remaining informal (bottom-up) and thus, I argued, nonlinear. This nonlinearity is expressed in the spatio-temporal practices of the centres, both in the form of time that the participants identified with (in examples such as the creation of their nonlinear timeline) and the philosophy and practices of autonomy attached to their spatio-temporal organisation. This chapter similarly hopes to explain the nonlinear nature of both state and non-state laws, state law's desire to appear organised in a linear manner and the usefulness of complexity in understanding relations of law and resistance, in general. My research led me to analyse the workings of the UK social centre scene, the portrayals of which offering the basis for the descriptions used in this work.

Ultimately, it is important that lawyers and other thinkers understand the role of space and time in the practices of law, how forms of spatio-temporality shape the ideologies that determine law and how it is organised and the usefulness of complexity theory in demonstrating this. Understandings of law (and property) are argued as supported by understandings of time, where through private property, law becomes institutionalised and linear, in distinction from its nonlinear origin of the commons. As a result, one form of organisation is discredited at the behest of another, that is nonlinear versions of time that support communal practices of leaderless networks silenced by absolute linear time that sits with the vision of capital, individual private property and progress. Social centres, and other such examples, demonstrate (within their limitations) that there may be other forms of social organisation that operate on communal, less hierarchical terms akin to nonlinear dynamics and the form of time that supports this.

First we shall introduce social centres and then look at the complexity framework and its relation to nonlinearity as a concept and framework in law. Next state law and how it seeks to appear organised in a linear manner and why, shall be considered. After that, legal pluralism is considered as an explication of informal and formal laws, the move of institutionalisation that occurs between them and the role of linearity and nonlinearity within this. We then turn to the ascribed social centre law to understand how it is performed and how the philosophical underpinnings of autonomism in social centres, and the practices that ensue, offer a description of nonlinearity and

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nonlinear law. Autonomy-as-practice and autonomy-as-placement are used to describe the innate role of time and space within the organisation of nonlinearity and the autonomous law produced as a result, as well as the moulding role of spatio-temporality in state law and what this may teach us about the nature of law, property and resistance overall.

Social centres

Social centres are communally run buildings that are either squatted, rented or owned. There are varying concerns that shape the make-up and activities within social centres, propelled by premises of community and politically based activity, creativity, inclusion and, most relevant for this discussion of social centres and nonlinearity, autonomy. Each centre operates according to its own agenda and thus has peculiar characteristics as moulded by their participants, the community surrounding them and the philosophy and politics with which they associate themselves. Some spaces see themselves as more community-driven, whereas others are more event and political meeting spaces. For instance, the Library House in Camberwell, London (now evicted), was an example of a social centre that did a lot of outreach work with the local community, whereas the 'rampART' space in Whitechapel (London) was more of a meeting space and one that held benefit events and fundraising nights. Social centres attract a pastiche of folk, from young to old, from all racial and ethnic backgrounds, genders and abilities. Despite this, the organised squatting scene of which social centres are part, has been criticised for the prevalence of its participants' privileged higher education backgrounds, where the spaces are seen as occupied less for pure need than more a social experiment. That said, the social centre and squatting scenes offer access to a rich tapestry of not just London and UK radicalism, but anti-authoritarianism and social centre traditions across the rest of Europe. They are places in which, according to the Social Centre Network (SCN) website, 'people can come together to create, conspire, communicate and offer a collective challenge against capitalism'. Within this research, the social centres of the UK have been of focus, specifically within London and Bristol between 2006 and 2011 when the project was undertaken (Finchett-Maddock, 2011).

The groups' form of organisation is markedly altered to, and to some extent, outside of state remit, although with some fundamental reliance on state Law in the UK, to allow the spaces to happen lawfully through 'squatters' rights' as per the Criminal Law Act 1977. This condoning of squatting by state law has been limited in recent years through its recategorisation as a criminal offence in residential property under the Legal Aid Sentencing and Punishment of Offenders Act s. 144; thus, this semi-autonomy from the state is only available now in commercial properties. Not all social centres are squatted, but the focus of my research became these

squatted social centres because of their contestation of space, property and the law, through their own form of alternate social organisation.

A number of interviews were conducted as the basis of the research. I distinctly remember interviewing a member of the rampART collective back in 2009 whose insights were of great value to the task of understanding a potentially law-innovating energy emanating from social centres. I remember she drew a cartographic picture of the centres on a planetary scale, saying squats and social centres find themselves within the ‘chinks of the world machine’, using a famous quote from feminist science-fiction writer Alice Sheldon (better known as James Tiptree Jnr). I was so moved and inspired by this; how were these chinks of the world machine created and how important are those who find themselves in these apertures to the workings of this world machine? What alternative way of life was being offered within these spaces and what role did law and resistance have to play? Of course, not all these questions were answered, but one way of formulating a theory around these chinks, these openings, was to look to complexity theory and nonlinearity for help.

The dynamics of the centres are argued as nonlinear by their nature, as bottom-up horizontal structures that operate in reaction to, and as a result of, state structures and forms of individual property relations. Social centre participants directly critique the vertical hierarchies of law, individualism and capitalism, through contesting the spaces and organising themselves communally, in a radically different way to that of state law sees itself.

Complexity and the nonlinear

Complexity, as the grounding enquiry of this collection, is a theoretical framework explaining the networked relationships in all parts of life, where all material and ontological happenings occur as a result of their interface with their environment. This can be in an irreducible ‘bottom-up’ movement of cause and effect, with no presupposed order or unidirectional sequence, of which nonlinearity is an organising relation. The nonlinear nature of complex adaptive behaviour accounts for the element of unpredictability in events that may occur, their unfinished openness, as well as the leaderless, upended movement and change, where within systems their output is disproportionate to their input, creating their disordered characteristics.█

Beginning in the sixties, and yet having gathered momentum back the century before through the bio-mathematical science of thermodynamics as well as the philosophical thinking in [Spinoza \(2001\)](#) and [Schelling \(1989\)](#), work on complex adaptive systems and nonlinearity first determined itself as a science in its own right through the increasing pace of computer information and the development of cybernetics. Since then, explanations of the patterns in urban development, biological systems, cybernetic networks, law and social movements have all become subject to complexity theory

(Johnson, 2001; Escobar, 2003; Urry, 2006; Byrne, 2005), the method and metaphor for understanding the underlying nonlinear causation of social activity, as well as describing the substance of all forms of life itself.

Complexity or *emergence* thus explains bottom-up behaviour ‘when the actions of multiple agents interacting dynamically and following local rules rather than top-down commands result in some kind of visible macro-behaviour or structure’ (Escobar, 2003, p. 351). Escobar applies an analogy of the ‘swarm’ that he paints so effectively, whereby sea life sometimes amasses to create a greater shape in order to protect themselves. He treats categories of self-organisation, nonlinearity and non-hierarchy as those that are not peculiarly the products of biology but can also applied to the observance of social movement behaviour and social life, in general.²

What about complexity in relation to law? Philippopoulos-Mihalopoulos (2015) talks about there being nothing outside of law, the law being part of every ‘assemblage’ of everything else that makes up ourselves and our reality around us. This moveable feast of atomical structuring and re-structuring demonstrates law’s ‘becoming’, echoing Deleuze and Guattari (2004), Latour (2007), DeLanda (2007, 2011) and Johnson (2001), ‘whereby the actions of multiple agents interacting dynamically and following local rules rather than top-down commands result in some kind of visible macro-behaviour or structure’ (2001, p. 231). This body of Deleuzian-inspired work, as well as speculative realist thinking and Object Oriented Ontology (Meillassoux, 2008; Harman 2016; Bryant et al., 2011), works on the same nexus of non-hierarchical, plateaued principles where even objects have agential force within networks, part and parcel of a shift from humanism to post-humanism through complexity within philosophical thinking (Finchett-Maddock, 2017).

Within legal theory specifically, Jamie Murray’s Deleuzian ‘emergent law’ (Murray, 2008, p. 236) relays complexity lawyer J. B. Ruhl’s work on constitutional law, chaos theory and the overarching study of law (Ruhl, 1996). Murray and Ruhl argue nonlinear dynamics and complexity as having considerable impetus to the study of law, highlighting how the element of uncertainty in complexity, the element of unpredictability and preponderance for ‘entropy’ of ornate scales, describes law’s emergence, as opposed to the much-propounded reliability and supposedly foreseeable nature of juridical structures. This openness to systems of law being unfixed and *becoming* is a nod to emergent processes and its role in the process and as the product of law and its rules and procedures.

Underlying the study of complexity is a reliance on this scientific measurement and substance of *entropy*. Entropy is, amongst many other definitions, a scientific explanation of the relationship between order and chaos within dynamic systems and 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,³ and thus, systems strive for order but move towards

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maximum disorder. Entropy is referred to in mathematics and biology in a myriad of terms, most notably within thermodynamics, complexity science or chaos theory, and can be divided into three broad contexts: information or complexity, the arrow of time and uncertainty. The more information there is in a system, the more entropy there is and the more complex it becomes. According to the second law of thermodynamics, entropy can only ever be supplemented to and not be reduced, giving credence to the argument that time can only ever go in one direction. Entropy, however, also accounts for nonlinearity, as a result of the emergent movement and interfacing of each new part of a burgeoning system, where *uncertainty* allows for the chaotic drive of entropy production – a chance for *nonlinear* time.█

Because of this consideration of entropy, complexity theory is altered from systems theory and its emphasis on the self-producing ‘autopoiesis’, found in the work of [Luhmann \(2012\)](#) and [Maturana and Varela \(1974\)](#), whereby unity and distinction between the system and background environment collide, denoting first-order systems and second-order systems with the alternating role of the boundary as central. And it is because of this element of uncertainty that systems theory and complexity theory are so different, as complexity can argue the emergent and open nature of systems because of the instrumental role of entropy. The saliency of complexity theory has been re-asserted by Thomas Webb, as an alternative to systems theory ([2013](#)), and distinguished as quite separate from the work of Luhmann *et al.* by its *becoming* nature, its usefulness in describing the relations between law and its other, and yet setting it apart from systems theory as a body of understanding which is not closed, reliant on adaptation and a constant re-drawing, reconfiguration of boundaries. Here lies the contingent role of entropy in allowing for uncertainty, nonlinearity and change within systems and systems thinking.

Similarly, Jamie Murray argues a complexity understanding of law’s nonlinearity permits the search for “..lost, hidden, local, bottom-up, emergent modes of legality, and for a new conceptual creativity in [legal] work” ([2008](#), p. 227). This emergent understanding of law describes not just state law processes but also those of non-state laws and non-legal movements and has been used extensively in the legal pluralism of sociologist and economist Boaventura [de Sousa Santos \(2004b, 2005a, 2005b\)](#). Santos describes a ‘sociology of absences’ and a ‘sociology of emergence’ where emergent thinking can allow us to see laws that emanate from below, reaching upwards the subaltern, as opposed to the top-down structures of law with which we have become so familiar ([1998, 2003, 2004a](#)). He also proposes a ‘continuum of formalism’ mapping the movement from formal to informal legalities that is useful for understanding both linear and nonlinear juridical forms ([1997](#)).

Law and linearity

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The easiest way to understand nonlinearity is to outline the linear nature of state law (or at least its desire to be linear) and the juncture or point at which state law begins to ‘institute’ or formalise itself and to understand exactly why linearity and nonlinearity mean anything in relation to law and its resistance, in turn.

Linearity is a simple term that has a number of ascriptions, predominantly within history, aesthetics, politics, geography and the algorithmic spatio-temporal organisation grounding each and all of these. Linear projections of time have dominated conceptions of history and temporality, at the behest of other understandings (Bastian, 2014, p. 145), thus to suggest an altered stance of time is to critique linearity’s absoluteness. This preponderance of temporal understandings is evocative of E. P. Thompson’s work on the role of time in labour and the capitalist workplace (Thompson, 1967). Walter Benjamin’s allegory of the ‘angel of history’ (1999) is probably the most famous and simultaneously arrestingly beautiful critique of linear conceptions of time and historicity and our association of linearity with evolutionary progress and thus the manner in which time is predominantly understood in a monocultural form, as de Sousa Santos would say (1999). Linear time and chronological history exemplify the Western liberal concern for progress in society through developments in technology, industry as a result of accumulation, colonialism and the primordial role of capital as ‘time as money’ and the progenitor of organisation and order within society. As Robinson and Twyman (2014, p. 53) explain through the progressive trajectory of Parliamentary process,

[p]arliamentary time is inherently progressive; it presupposes constant development along a linear trajectory. To be progressive is therefore to be successful. It is to demonstrate the capacity to shape the future – or at least to anticipate it. The description of particular policies as ‘progressive’ carries the implication that they are inevitable; historical time moves on and we must move with it or be left behind. Those who do not progress can only decline.

Baudrillard similarly speaks of the congenital link between linearity and accumulation, the fixation of dominant forms of capital with perfection that leads to a total annihilation (1993). State law time seeks to be linear as it confers time as capital, time as property and time as progress with a march forwards at all costs and proclaims itself as absolute, necessitating the categorising of private property through limitations and registers, excluding all other notions of law, property and temporality as practices by resistance movements such as squatters of the social centres discussed in this piece.

This hegemony of linearity is repeated within science. According to a Newtonian conception of time that was stalwart until Einstein’s theory of relativity, there is such a thing as ‘absolute time’ that has ‘its own nature, [it] flows equably without relation to anything eternal [...] the flowing of

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absolute time is not liable to change' (de Sousa Santos, 2004a, p. 19). This differs from Einstein, whose arguments echo the possibilities of temporal nonlinearity, where time has no being outside of the system of its signifiers (de Sousa Santos, 2004a, p. 19). It can be stretched and shrunk and varies from system to system and constitutes space-time supportive of a nonlinear understanding of temporality by allowing for the possibility of time to happen spontaneously, out of uncertainty, as opposed to the linear straitjacket of forward-facing absoluteness. Time and space are four-dimensional and curved under the influence of mass, allowing such things as 'wormholes' where the past may catch up with the future, and time travel could be possible. Hawking echoes Einstein, stating,

Space and time are now dynamic qualities: when a body moves, or a force acts, it affects the curvature of space and time – and in turn the structure of space-time affects the way in which bodies move and forces act.

(1988, p. 33)

Linearity does not have to be all bad. Robinson and Twyman recount how conceptions of progress can be varied and thus open to misunderstanding (2014, pp. 51–67). Similarly, Keenan has critiqued the Torrens system of land registration for freezing the linear histories of indigenous native title in Australia, removing past entitlements through the colonial imposition of the common law in preference for formalised, registered settler claims (2017, p. 87).

Nevertheless, linearity in relation to this exposition of law is critiqued by the framework of nonlinear complex systems and an argument for the universality of nonlinearity through the prevalence of uncertainty in all things, exemplified by the changing processes of entropy. Arguably, when state law is described as linear, it is meant that state law *aspires* to be linear through institutionalisation and relies on this appearance of linearity, predictability and constancy to legitimate itself and the ideology of liberal capitalist progress that it actuates. The desired linear direction of institutionalisation occurs through a forward-facing preoccupation with progress, creating institutions through forms of force, following Weberian and Foucauldian biopolitics of rationality and bureaucracy and forms of representation and vertical hierarchies as a result. Specifically speaking of the common law (which was supplemented to and imposed on other models across the world in order to find more capital, more private property, more legitimacy), power is removed from the direct domain of the people by the organisation and central monopolisation of force (the state), leading to the people as represented by the simulacra of democracy. Vertical hierarchy is formulated through the establishment of the institutions and organs of the state. State law happens as a result of this supposedly linear

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institutionalisation, which impresses as a linear progression of pre-institutional rules and procedures at grass-roots level becoming reified, much like the progressive connotation of parliamentary pace that Robinson and Twymon speak of.

How can we make such a distinct linearity of state law and yet have an argument for nonlinearity within law? Referring back to the complex adaptive behaviour that DeLanda spoke of within his alternative account of history, I argue that all forms of law, whether resistant or institutionalised, are seen as contingent of one another; their true relation is nonlinear (2016, p. 39). In this sense, it is argued that there cannot be a pure form of law but that law is always coloured with resistance, and resistance always casts the seeds of law.

This is inspired by the work of Margaret Davies, through her *proper* and *improper* of property outlining the creation of real and imagined distinctions between formal and informal law (Davies, 2007). Davies describes very clearly the way in which the etymological connotation of being *propertied* and *proper* is the ability to exclude others, stating, 'Positive law itself is also conceptually based upon an originating exclusion, decision, or splitting which establishes a realm of law and a realm of that which is other to law' (Davies, 2007, p. 31). Any 'pure' formation of law (she gives Kelsen's pure law as that which is a law free of foreign elements) will always disallow the 'impure', or that which muddies the sleek surface and constitution of the law. Davies reveals the existence of the improper within the proper realm of the law, as through repetition, it is never unique and thus loses all purity. It is thus 'iterable', a form of mimesis and performance and never peculiar to itself:

In other words, and to simplify, the formal deconstructive argument is essentially that the proper must refer outside of itself to that which is common, and to its (improper) other. It is never itself, and is therefore a nonidentity, equally common and improper.

(Davies, 2007, p. 31)

How can we assert a cogency between linearity and purity? You only need to look to the laws of traditional Western aesthetics to understand the demoted place of unfinishedness, messiness and unpropertied notions of art and the art world up until the 20th century (when that very messiness became contemporary art at highly saleable prices). Western aesthetics has asserted the need for form, composition and completeness, in a way that attests to a colonial striving of domination, all contaminated determinations to be removed and invisibilised in an enhancement and mechanisation of purity, institutionalisation and absoluteness.

State law thus arguably concerns itself with an aesthetics of purity, order and authority in order to legitimate itself, founded on a doctrine of private

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property that has to formalise relations in order for capital to exist and flow. Law seeks to assert its cogency and authority through its linear *praxis* of institutionalisation, which is essentially myth made fact, exerting the appearance of an inherent normativity. The same is to be said for law's understanding of linear time in that it is as positive and absolute as it sees itself, in order to support conceptions of *progress* through which individual property rights in the name of capital can flourish. To talk of positive law is tantamount to speaking of absolute time, where law is time, and the same in turn (Finchett-Maddock, 2016, p. 169).

It is true that in a world of the state being subsumed by the market, by these very processes being discussed – the impurity, mixedness, dependence of nonlinearity – that the state can only ever *aspire* to be linear. The congenital role of uncertainty is even more stark, as the world alters in response to itself at increasingly rapid rates on global levels, demonstrating a nonlinearity of magnitude. And yet state law continues to incorporate individualism and totalitarianism to its extreme resulting in the institution of neoliberalism, to the detriment of any openness and plurality.

Legal pluralism

What does differentiate alternative forms of resistance or other forms of law from state law's artificial linearity? A useful body of literature and tool for understanding the burgeoning relation between state law and other forms of law is that of legal pluralism (Griffiths, 1986; Tamanaha, 2000; Engle-Merry, 1988; Teubner, 1992). Legal pluralism describes laws that exist either entirely outside of state bounds, such as 'strong' forms of legal plurality within community dispute mechanisms that have not as yet been subsumed into the state law matrix; and thus remain informal or plural forms of laws and organisation such as *Sharia* law that have been recognised and formalised by state law that have become 'weak' in light of their corroboration with state law institutionalisation (Griffiths, 1986). Forms of legal pluralism are synonymous with colonial imposition (in the weak sense), where a settler law has superimposed itself on pre-existing forms of law, as was the circumstance of both common and civil law jurisdictions, and the resultant complexities of multicultural societal make-up both in the Northern and Southern Hemispheres. Informal forms of legal pluralism arguably exist in both Western and Southern spheres, through examples such as anti-authoritarian and anti-capitalist movements synonymised by the social centre groups that seek to resist the dominant law, as well as dispute resolution mechanisms that remain outside of state law formality, such as community customs, rules and regulations specific to an area or practice, with remedies and etiquettes found in arts, sports or traffic, as examples. Santos, for instance, is not speaking of the more post-colonial forms of legal pluralist work but refers to a spatio-temporal understanding of legal

influence, where there are facets that interpenetrate in a given zone. He speaks of

the conception of different legal spaces superimposed, interpenetrated, and mixed in our minds as much as in our actions, in occasions of qualitative leaps or sweeping crises in our life trajectories as well as in the full routine of eventless everyday life.

(Santos, 1987, p. 287)

But how does an informal law become formalised? It is arguably through the linear processes of institutionalisation that place individual property rights and resource management at the heart of law, that these chaotic, informal pluralities become the order of centralised state law. A very useful means of explicating the movement from informal to formal law is found in Santos and his 'continuum of formalism', describing the processes of institutionalisation from popular forms of justice, protest and extra-state law dispute remedies to those forms of law being incorporated into state law proper. In his article 'The Law of the Oppressed: The Construction and Reproduction of Legality in Pasargada' (1977), he takes of the formation of legalities from a Southern setting which informs this understanding of *institutionalisation* of law. Santos's work is known to draw on Weberian critiques of rationality that question the edifice of institutionalisation, bureaucracy and individualism, in stark contrast to the *emergent* and *bottom-up law* of Pasargada of which he speaks.

Pasargada is a fictitious suburb of Rio de Janeiro; thus, Santos has named the legality that is created 'Pasargada Law' (Santos, 1997, p. 126). The law of Pasargada is a law that deviates; it is a vernacular dispute prevention and dispute settlement court of the 'Pasargada Residents Association' that is made as a result of social exclusion, and yet it lends and borrows from the dominant law (Santos, 1997, p. 100). It is created as a result of necessity, whereby the state system does not accommodate for the said community and therefore other methods of cohesion have been developed. The interclass legal pluralism of which Santos recalls is one that selectively borrows from the official legal system and accordingly occupies a position along a 'continuum of formalism' (de Sousa Santos, 1997, p. 90). The official law does not cater for the community because of their precarious housing status, where 'the strategy of legality tends to transform itself in the legality of the strategy' (1997, p. 104).

Although Santos does not overtly say that this continuum of formalism is linear, its illustration of the unidirectional from informal to formal through the inclusion and co-optation of state law mechanisms insinuates a linear movement of institutionalisation where enforcement, power and forms of representation start to shape the character of the resultant legality.

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Taking a legal pluralist stance is to assert that legal innovation occurring outside of state law is not limited to being shaped by the influence of state law institutionalisation, but in most instances this does happen. It certainly does not have to look like state law in order for it to be a form of law, following from a strong legal pluralist conception of legal plurality, and it is this strong legal pluralist conception of legality that is so helpful in describing the informality, and indeed nonlinearity, of resistant laws such as those of the social centre scene. The law produced by social centres, for example, is altered from that of state law, primarily on the basis that it is not constituted or institutionalised; it is a direct form of action and therefore purely present, not representational.

Legal pluralism allows us to understand other forms of laws and compare formal laws with informal laws. The work of Boaventura de Sousa Santos is used to explicate a continuum of formalism, where we can see the move from informal to formal in juridical structures, and is helpful in showing a connection between informality/nonlinearity and formality/linearity. Using a complexity framework combined with legal pluralism, we are able to understand how *all* forms of law and social organisation are subject to uncertainty thus nonlinearity, but in order for state law to appear different and unitary from other forms of law, it must *appear* to move in a linear direction. This linear movement is expressed in practices of material and spatial reality where law crystallises as an institution, as an authority, as something that is fixed and has a legitimacy, in an onward march of progress, order and property. This materialism is similarly based on the spatio-temporal organising forces of capital and liberal individualism whose reasoning relies on a linear trajectory of progress and time, thus highlighting the congenital and interlinked role of time and space within the organisation of both linear and nonlinear laws.

The point at which law becomes concerned with private property, I argue is the point at which nonlinear informal law becomes formalised, institutionalised law. Nonlinear law thus prioritises presence as opposed to representation, community as opposed to individualism, horizontal hierarchy as opposed to vertical institutionalisation, the dispersal of power as opposed to the monopoly of force; informality as opposed to formality. This makes nonlinear law entirely differential to state law – which is why the law we have been discussing as state law seeks to concern itself with a mythical linearity, to distinguish itself from its nonlinear nature, and seeks to deny pluralities of law that may take away from its authority and the legitimacy of neoliberal capitalism to which it gives agency. Laws arguably need to be collective by nature, including state law, but the practice of state law becomes fetishised with the process and product of the institution of individual property rights (as expressed through the monopoly of force, representation and hierarchy), to the detriment of its originary present and collective consciousness.

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The complicity of law, resistance and non-laws determines whether to direct a continuum of formalism as expressed by the creation of state law or to remain in a 'nonlinear informality' as manifested by examples of laws of resistance and resistant property such as those arguably expressed within the social centre phenomena.

Social centre law

There are a number of revealingly intersectional ways in which the law of social centres displays characteristics of nonlinearity. To understand this, first, we can very briefly have an illustration of what the law purports to be like, and how. Using Tamanaha to assert that law is non-essentialist (2000) and therefore there are no exact definitions of what law 'should' be like, the combination of *re-occupation* and *enactment* is used to describe some of the elements and practices of the law being recorded.

Re-occupation:

- a. the *legal or illegal occupation* of the space requiring legal knowledge of squatters'rights, as well as the actual and physical entering into the space, checking the building, organising the security and control of the building, changing locks;
- b. the *vernacular* nature of running the centres, from washing up to cleaning the toilets and cooking.

The re-enactment of the spaces:

- c. the participants' ability to understand themselves as part of a wider movement, through the recording and *archiving* of their events linked to other social centres, squatting, housing, land and activist movements around the world, predominantly through a 'nonlinear timeline' as well the internet, flyering and amotive feelings of the participants;
- d. their *self-management practices* of autonomy that put into *praxis* the philosophies of anarchism and autonomism, relying on leaderlessness, collective and consensus decision-making, hierarchies of skills as opposed to power, and the absence of monetary concern.

The processes and product of the law that were performed are altered from that of state law through its direct, informal, leaderless, anti-hierarchical characteristics, as opposed to the concern for linearity and formality with which the authority of state law preoccupies itself. Of course, social centres are not devoid of conflict and points at which this *theory* of their law can break down or not exist at all. The domination of the spaces by certain characters, genders, racial, ethnic backgrounds and hierarchies of different

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kinds occur, so this description of their 'law' obviously has its realities and must be presented within its limits.

How these practices and performances observed in the social centre scene create a form of nonlinearity is firstly organisational, and secondly spatio-temporal. These two corollaries are interchangeable as expressing nonlinear informality, orienting the way social centres of the kind visited for the research, situated their practices and performances of law, temporally and spatially organised. This is referred to as *autonomy-as-practice* and *autonomy-as-placement*, in turn. Autonomism is the philosophical organising force of the social centres discussed, with autonomy argued as being a form of nonlinearity. *Autonomy-as-practice* and *autonomy-as-placement* are used to describe the similarities between autonomy and nonlinearity, highlighting the agential spatio-temporality of both. *Autonomy-as-practice* relates to the form of social organisation, and *autonomy-as-placement* refers to the spatio-temporal distance the organisation takes from the state.

Autonomy-as-practice

Social centres specifically are known for their autonomist and anarchist leanings, forms of social organisation that directly repeat nonlinear relations expressed by complexity. Social centres' use of autonomous methods of organisation not only describe the distance they situate themselves from the state but also demonstrated the key elixir of time and space within the practices of the participants and the squats they occupied. The emergent, spontaneous and bottom-up nature of autonomy operates in an exact formation of nonlinearity, where autonomy is demonstrably a form of organisation as well as an expression of nonlinear spatio-temporality.

According to Pickerill and Chatterton, autonomy is a principle that concerns movements seeking freedom and connection beyond nation states, international financial institutions, global corporations and neo-liberalism (2006, p. 746). Accordingly, 'autonomy is a socio-spatial strategy, in which complex networks and relations are woven between many autonomous projects across time and space, with potential for trans-local solidarity networks' (2006, p. 732). The recurrent conceptions used by the social centres include those of a lack of central force of power, delineating vertical hierarchies as unnecessary and making redundant any position of leader and leadership. This is altered greatly from the false linear architectures of state law that we have been speaking of thus far.

Crucial is the notion of mutual aid, based on a trust in the goodwill of social organisation, thus rendering any coercive power as unnecessary. Social centres and squats self-organise themselves, through self-management, where they believe in a collective who decide on the initiatives and the rules of the centre, according to consensus. According to Chatterton

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and Hodgkinson, self-management and the characteristic organisational traits of social centres and squats are horizontal formations of open discussion, shared labour and consensus channelled through to generate ‘a “DiY politics” where participants create a “social commons” to rebuild service and welfare provision as the local state retreats’ (2007, p. 211).⁸ A characteristic of self-management and self-organisation is this very *leaderlessness* that is key in the self-organising and spontaneous nature of nonlinearity. This performance of self-organisation, or leaderlessness, through the self-management practices of mutual aid, *trust* and cooperation, are the key values in anarchist and autonomist thought. These are played out in *praxis* and those that operate as a performance, an immanency that relies on autonomy-as-practiced and placed. Other examples may be alternate commons-based, non-vertical hierarchies such other resistance movements, peer-to-peer networks, (Dulong-Rosnay, 2016)).

A further useful way of seeing autonomy’s praxis intertwined within spatio-temporality is how social centres and squats see themselves in relation to the state, having some autonomy taken away through the law partially allowing squats to occur even in limited form, where their law is always cushioned and defined by the disappearing doctrine of squatters’ rights that enables it. Squatting and social centre movements are a clear example of a movement that shifts up and down a continuum of formality or along nonlinear versions of informality, dependent upon the level of autonomy from the state. This is a crucial part of understanding social centres and their forms of organisation due to their proximity to the state and simultaneous seeking of autonomy, it still remaining a lawful activity if within a commercial premise (as per Criminal Law Act 1977 s.6; Legal Aid Sentencing and Punishment of Offenders Act 2012 s.144). The less illegal the spaces are (according to the state), the longer they are likely to occur given their acceptance/distance from the state and thus enact forms of ‘semi-autonomy’ (Falk Moore, 1973). As soon as a space is rented or owned, one can arguably see the processes of individual property occurring through the imposition of capital in the necessity to pay rent, accounting for materials and supplies for the centres, having to consider paying rates, as examples.

Autonomy-as-placement

Autonomy is thus by its nature a nonlinear socio-spatial strategy, as outlined by Chatterton, performing a moment or coordinate of presence or re-presentation in proximity to (or within) the coercion of the state. The nonlinearity of autonomy also relates to its spatio-temporality, where nonlinear accounts of space and time inform autonomous and informal forms of law, just as linear accounts of time influence state law structures and formalities. It becomes clear here how semi-autonomy works at a temporal and spatial level, specifically through the guise of complexity theory.

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The role of time and space combined in the nonlinear character of autonomy is congenital. This occurs through the presence of *uncertainty* which is key in both the autonomous and self-organising behaviour of social centres and their conception of time. Uncertainty, or what Meillassoux would term as 'hyperchaos' (Meillassoux, 2008), within nonlinear time speaks of the spontaneity of social centre law and can account for its collective unpredictability as well as its lack of formality, its transient nature always evading institutionalisation. It is here that nonlinearity and uncertainty come together as one within both social organisation and time itself, thus reasserting the central role space and time plays in social organisation, as well as law.

Not only that, the nonlinear nature of the autonomous informal laws of social centres as explicated in theories of emergence and complexity, are not just a body of theory describing all forms of organisation but are also a formula for understanding the basic movements of chaos, order and time itself based on processes of entropy mentioned earlier (and thus the underlying role of the fourth dimension – time and space). Linear time prefers the scientific explanation of the arrow of time and the gathering of entropy as the measurement of disorder within a system, with no room for the possibility, and reality, of nonlinearity. It's not to be forgotten that in entropy, in fact, supports the possibilities of *both* linear and nonlinear time. Prigogine highlights how theories of complexity and emergence open up the acceptance of different levels of time experienced by differing individuals, groups and tribes across the globe, highlighting 'social time', 'individual time', 'geographical time' (Prigogine, 1980, p. xiii). This experiencing of time as different between different groups confers with the idea of autonomy as practice and autonomy as placement, where social centre law's time is different to that of the state – the more institutionalisation, the more absolute time becomes; the more informal and collective the law, the more nonlinear the more heterogenous time becomes. The social centre participants' nonlinear timeline gives a very interesting indication of how they saw themselves in relation to their counterparts and that they did not see their progression in history as something occurring in a Darwinian unidirection.

Nonlinearity denotes there may be concurrent contingencies of time and thus law as opposed to an absolute, positive time, with plural ways of understanding a form of disordered thinking and ontology distinct from the control fetish of capital, much as legal pluralist thinking asserts the same over law. Whether all social centre law is nonlinear or not, it highlights the integral role of time in autonomy, and this spatio-temporality in our distance and relation to forms of authority, and the surrounding natural and non-natural environment. It further reasserts the superficial character of linearity, the synthetic nature of individualism, the artifice of private property, progress, capital and institutionalisation.

Conclusion

It is hoped this piece has demonstrated the import of considering the role of spatio-temporality within law, particularly scientific views of time, and the manner in which these versions of time are turned into ideology to support a given form of law, based on the spatio-temporal organising force of property. Linearity and nonlinearity described through complexity theory were posed to demonstrate a distinction between formal state law and its informal resistance, the preponderance and plurality of forms of law and social organisation.

Complexity was proposed as revealing how understandings of law and property are supported by understandings of time, where through private property, law becomes institutionalised and linear, in distinction from its nonlinear origin of the commons. As a result, one form of organisation is discredited at the behest of another, that is nonlinear versions of time that support communal practices of leaderless networks silenced by absolute linear time that sits with the vision of capital, individual private property and progress. As a result only the voice of individualism, hierarchy and institutionalisation is heard, creating the violence of totalitarianism.

By demonstrating this reification of linearity through using complexity theory to describe law and its resistance, it is hoped that movements such as those of social centres, and the autonomy-as-practice and autonomy-as-placement they instil, may not always be demoted as a mere *chink* in the world machine but understood and accepted as offering real, radical and alternate ways of being, law and property, despite all.

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¹ Thank you so much to Steve Wheatley, Tom Webb, Jamie Murray for including this piece as part of their collection on complexity theory. Thank you very much also to Ting Xu and Sarah Blandy for offering the research environment in which this original piece was written, and Donald McGillivray, Anne Bottomley and Nathan Moore for their support and inspiration over the last few years with this spatio-temporal exposition on law, time, the communal and complexity. Thank you to Andres Guadamuz and Tarik Kochi for their invaluable comments on this piece.

² Thank you very much to Andres Guadamuz for assistance in explaining the scientific basis of the relations of linearity and nonlinearity. See Guadamuz's excellent Creative Commons licenced 'Networks, Complexity and Internet Regulation' for an in-depth explanation of the science behind complexity (2011).

³ Emergence and assemblage is conspicuously found in the work of Deleuze and Guattari (2004), Latour (2007), DeLanda (2007) and Johnson (2001), with regard to cyberspace, urban studies and, of course, assemblage and actor/network theory and more directly in relation to law in the work of lawscaper Philippopoulos-Mihalopoulos (2015).

⁴ This is the second law of thermodynamics: that energy, although constant in amount, is subject to degradation and dissipation (Arnheim, 1974, p. 9).

⁵ For example, it is far less likely, in fact, almost infinitely unlikely, that a cliff could reverse the forces of erosion, but 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. Nevertheless, there

still exists that possibility of time moving in nonlinear directions in the face of the preponderance of irreversibility in time.

- 5 A fascinating example of strong legal pluralism was demonstrated in 2016 through former lawyer now artist Jack Tan's 'karaoke court', involving an exhibition and performance at a theatre in Hackney Wick, London, where those bringing a case to the court have to sing for a resolution to a given conflict in front of a real judge and jury, the most convincing performance being the successful party, with a legally binding contract thereafter. This method is similar to the Inuit method of dispute resolution (see [Tan, 2016](#)) and <https://jacktan.wordpress.com/art-work/karaoke-court/>, accessed 2 October 2016.
- 6 Re-occupation denotes the symbolic taking of space and the requiring of the sense of loss, a re-justification of property through its occupation and a configuration of spatial justice ([Finchett-Maddock, 2016](#), pp. 92–119). The element of re-enactment implies not only the repetitive nature of the law but also its re-staging and archiving of the law of movements of the past, the present and the future, the retelling of a story where alternate conceptions of law are re-animated through the practices and actions (performances) of the social centre participants ([Finchett-Maddock, 2016](#), pp. 92–119).
- 7 The research was undertaken as part of my PhD 'Observations of the Social Centre Scene: Archiving a Memory of the Commons', between 2006–2010, at Birkbeck Law School. It combined participant observation, interviews and theoretical investigations of social centres in London, Bristol and around the UK, including the rampART (Whitechapel), the Library House (Camberwell), 56a Infoshop (Elephant and Castle), and Kebele (Bristol), amongst others ([Finchett-Maddock, 2016](#)).
- 8 They argue that self-management is 'horizontality (without leaders); informality (no fixed executive roles); open discussion (where everyone has equal say); shared labour (no division between thinkers and doers or producers and consumers); and consensus (shared agreement by negotiation)' (2007, p. 211).