A Material Ontology of Law:
Law's materiality in concept and content

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Summary of the thesis

In this thesis, I argue that law is ineluctably material. Law's materiality can be understood at a conceptual level, as well as in terms of the content of law.

My investigation into the central research question of *how law is material* begins with a reflection upon, and rejection of, the claim that the end of law and the end of human survival are concomitant. Drawing upon the legal philosophies of Hobbes, Locke, Hart, and various evolutionary theories of law, I ultimately discard their teleologies of law and survival. I argue that these legal philosophies erroneously assume the frame of reference of an *aggrieved human individual*, when they posit that the ends of law and survival are concomitant.

Although I reject the teleologies of these survival theories of law, I take inspiration from their *ontological* engagement with material exigencies of the human body. Taking up this line of inquiry, I argue that the 'new materialisms' hold the most promise for further exploration of how law is material. New materialisms insist that agency is distributed in all matter, and that matter is both *affective* and *entangled*. The non-anthropocentric method of new materialisms provides a framework for conceptualising law's materiality beyond the human.

Thinking with new materialist ontologies (including those of Deleuze, Bennett, Haraway, and Barad), I formulate two nominal aspects for further inquiry. First, *Conditioning* encapsulates the sense of the complex contingencies of materiality. I argue that law is Conditioned both in terms of its communication, and its content. Second, *Flux* represents the sense in which materiality is constantly *re*conditioned and systemic. I conceptualise the reconditioning of law, and explore the notion of law as a material system.

Overall, I conclude that law is ineluctably material in concept and content. I call this the *material ontology of law.*

Contents

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1 Introduction

1.1 The research question

This thesis asks: *how is law material*?

The answer that I return is that law, in both concept and content, is absolutely material; in no uncertain terms, I posit law *as* matter in a fundamental sense. This thesis amounts to what I call the *material ontology of law*.

An archaeology of the research question helps to throw light upon the motivations of this thesis. During my undergraduate study of Law, it naïvely appeared to me that law has the essential purpose of the preservation or promotion of life – *survival*. I had reached this false conclusion by reflecting on some seemingly integral and ubiquitous contents of law. In this mode of thought, the law on assault and murder provided the ultimate protection of life; theft protected resources vital for sustenance and security; contracts ensured predictability and methods of dispute resolution; sanctions acted as a deterrent for deleterious behaviour; and so on. Similar arguments have a rich history in natural law theories that posit survival as the natural human end.[1] The notion that law has the essential purpose of survival, or that it facilitates human reproduction, has also been expressed in biological theories of law.[2]

However, as I will argue, this distinctly teleological view of law proceeds from a restricted mode of analysis, and as such it is an insufficient account of law. What results from a rejection of the teleology of survival is an embrace of a more expansive

[1] Thomas Hobbes, *Leviathan* (Oxford University Press 2008); John Locke, *Two Treatises of Government* (Everyman's Library 1978); HLA Hart, *The Concept of Law* (3rd ed, Oxford University Press 2012).

[2] Margaret Gruter, *Law and the Mind* (SAGE 1991); E Donald Elliott, 'Law and Biology: The New Synthesis' (1996) 41 Saint Louis University Law Journal 595; Paul Bohannan, 'Some Bases of Aggression and Their Relationship to Law' in Margaret Gruter and Paul Bohannan (eds), *Law, Biology & Culture* (Ross-Erikson 1983) 147.

ontological approach to law. Specifically, I argue that *new materialist* ontologies provide a potent lens for a theoretical rendering of law's ineluctable materiality, both in terms of concept and content. It is this new materialist approach to law that initiates the main theoretical moves of the thesis.

The meaning that I ascribe to 'matter' and 'materiality' will be dealt with at length in **3**, and this meaning is given further context and shading throughout subsequent chapters. While my approach to 'law' will similarly be developed throughout the course of the thesis, it is necessary at this introductory stage to consider some preliminary issues concerning definitions and concepts of law.

1.2 My approach to 'law'

1.2.1 The indeterminacy of law

I argue here that the inability to neatly determine 'law' is not an impediment to investigation, but rather a vindication of the position that I will be taking in this thesis.

To begin with, I will employ the term 'legal philosophy' in this thesis to capture the general sense of abstract thinking about law. This includes such terms as legal theory, philosophy of law, and jurisprudence. While these terms are often used interchangeably, either explicitly[3] or implicitly,[4] there are some who vehemently resist forms of conflation.[5] They argue that the term *legal philosophy* 'aspires to rise above

[3] See as examples JW Harris, *Legal Philosophies* (Butterworths 1980) v; Margaret Davies, *Asking the Law Question* (Sweet & Maxwell 1994) 1; Suri Ratnapala, *Jurisprudence* (3rd edn, Cambridge University Press 2017) 4. Ratnapala here describes legal theory as 'a specific project within jurisprudence' that seeks to answer 'what is law?').

[4] See as examples Brian Bix, *Jurisprudence: Theory and Context* (6th edn, Sweet & Maxwell 2012) 1; Jules L Coleman and Scott Shapiro, *The Oxford Handbook of Jurisprudence and Philosophy of Law* (Jules L Coleman, Scott Shapiro and Kenneth Einar Himma eds, Oxford University Press 2004) v.

[5] Roger Cotterrell, 'Why Jurisprudence Is Not Legal Philosophy' (2014) 5 Jurisprudence 41; Michael Robertson, 'More Reasons Why Jurisprudence Is Not Legal Philosophy' (2017) 30 Ratio Juris 403.

any local context and grasp universal and timeless truths', which is a greater ambition than that of sometimes parochial 'jurisprudence'.[6] It will become clear that I share in this approach to law, and explains why I have opted for the more general term of legal philosophy. However, I do not accept, at least for my purposes in this thesis, that there is any *strict* dividing line between terms like legal philosophy, philosophy of law, jurisprudence, and legal theory. As Harris writes, 'labels do not matter in assigning the proper fields for "jurisprudence", "legal theory", and "legal philosophy". It is the won't-go-away questions which count.'[7]

One of these persistent questions of legal philosophy is no less than a definition of 'law' itself;[8] Williams writes that the meaning of the word law is 'perhaps the largest of jurisprudential controversies'.[9] It is unusual for textbooks on legal philosophy to open with anything other than statements on the futility of defining law. Freeman believes that there is 'little sign of obtaining that objective';[10] McCoubrey and White deem that it is 'an illusion to imagine that there is a simple answer to the question '[w]hat is law?';[11] and Cairns writes that '[a]lthough the question "What is law?" is still asked by jurists, the history of the efforts to respond to it show that there is little likelihood that it can ever be answered in the [Platonic] sense'.[12]

The Platonic sense of the question 'what is law?' is that there are fixed metaphysical essences to which words correspond.[13] On this view, 'law' corresponds to a determinate object of reality,[14] which may be captured linguistically in an explicit or

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[6] Robertson (n 5) 415.
[7] Harris (n 3) 5.
[8] RHS Tur, 'Jurisprudence and Practice' (1976) 14 Journal of the Society of Public Teachers of Law 38, 39.
[9] Glanville L Williams, 'International Law and the Controversy Concerning the Word Law' (1945) 22 British Year Book of International Law 146.
[10] Michael DA Freeman, *Lloyd's Introduction To Jurisprudence* (8th edn, Sweet & Maxwell 2008) 33.
[11] Hilaire McCoubrey and Nigel D White, *Textbook on Jurisprudence* (3rd edn, Blackstone Press 1999) 2.
[12] Huntington Cairns, *Legal Philosophy from Plato to Hegel* (Johns Hopkins University Press 1949) 9.
[13] '[W]e always postulate in each case a single form for each set of particular things, to which we apply the same name' (Plato, *The Republic* (Desmond Lee tr, 2nd edn, Penguin 2007) 336).
[14] Freeman (n 10) 34.

elucidatory definition.[15] It is this assumption that motivated Socrates to ask Cephalus what he meant by right action,[16] and drove Austin to determine the province of jurisprudence.[17]

However, many legal philosophers doubt either the possibility or value of a definition of law in this categorical sense. Williams writes that 'definitions have no importance of themselves… [t]he only intelligent way to deal with a verbal question like that concerning the definition of the word "law" is to give up thinking and arguing about it.'[18] Dworkin believed that legal philosophers 'cannot produce useful semantic theories of law'.[19] Raz likewise eschews semantic approaches to law, arguing that 'the meaning of the word "law" has little to do with legal philosophy'.[20] These rejections all exhibit a scepticism that there is an 'object' of law behind the *word* law, which need only be discovered through reason.[21] A more general critique of the essentialist view that 'words in language name objects'[22] was influentially developed by Wittgenstein,[23] who contended that 'the meaning of a word is its use in the language'.[24] This position has notable votaries in legal philosophy: the Wittgensteinian approach to language is adopted by Hart,[25] and it is also apparent in the legal realist movements.[26]

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[15] Richard Wollheim, 'The Nature of Law' (1954) 2 Political Studies 128, 129.
[16] '[A]re we really to say that doing right, consists simply and solely in truthfulness and returning anything we have borrowed?' (Plato (n 13) 7).
[17] 'Laws proper or properly so called, are commands: laws which are not commands, are laws improper or improperly so called' (John Austin, *The Province of Jurisprudence Determined* (John Murray 1832) vii).
[18] Williams (n 9) 163.
[19] Ronald Dworkin, *Law's Empire* (Harvard University Press 1986) 90.
[20] J Raz, 'The Problem about the Nature of Law' (1983) 21 University of Western Ontario Law Review 203, 205.
[21] Coleman and Shapiro (n 4) 316-317.
[22] Ludwig Wittgenstein, *Philosophical Investigations* (GEM Anscombe, PMS Hacker and Joachim Schulte trs, 4th edn, Wiley-Blackwell 2009) 5e.
[23] FW Garforth, *The Scope of Philosophy* (Longman 1971) 244.
[24] Wittgenstein (n 22) 25e.

[26] Ahilan T Arulanantham, 'Breaking the Rules?: Wittgenstein and Legal Realism' (1998) 107 The Yale Law Journal 1853. I return extensively to language-scepticism, Wittgenstein, and legal realism in my critique of 'legal fictions' (**4.3.2.1**).

In light of linguistic scepticism, then, some legal philosophers have instead enquired not into a definition of law, but into the *nature* of law.[27] For example, Hart argues that some of the common perplexities of legal philosophy are better resolved by transforming the question 'what is law?' into 'what is the nature of law?'[28] Bix remarks that this strategy amounts to countering the question 'what is law?' with 'why do you ask?'[29] Fuller believes that 'there is little point in imposing… some definitional fiat, by saying, for example, that we shall consider law to exist only where there are courts.'[30] Like Hart, Fuller seeks to 'discover and describe the *characteristics* that identify law'.[31]

One major unresolved debate on the nature of law concerns the question of the 'criterion of validity',[32] which asks what it is that makes law valid.[33] Generally speaking, there are thought to be two conflicting answers.[34] One answer is that law is valid even when it does not 'reproduce or satisfy certain demands of morality, though in fact [law has] often done so.'[35] On this view, a law is nonetheless valid *as* law – regardless of its content – if it is recognised as such within the particular system.[36] The opposite approach to the criterion of validity is that law must necessarily conform (or aspire to conform) to moral criteria in order to be valid,[37] and so 'a morally neutral theory of law

[27] 'One of the central problems of jurisprudence is the problem of explicating the nature of law itself' (Robert S Summers, *The Jurisprudence of Law's Form and Substance* (Ashgate 2000) 14; Wollheim (n 15) 131.
[28] HLA Hart, *The Concept of Law* (3rd ed, Oxford University Press 2012) 6.
[29] Bix (n 4) 6.
[30] Lon L Fuller, *The Morality of Law* (2nd edn, Yale University Press 1969) 131.
[31] Fuller, *The Morality of Law* (n 30) 150. Of course, this enquiry into the nature of law is resolved in extremely different ways, as I explain presently.
[32] Freeman (n 10) 38-40.
[33] This is the more universal sense of the criterion of validity (Wollheim (n 15) 132-133).
[34] This conflict is often described in terms of positivist and natural law positions (Davies (n 3) 56). I in fact reject that classic dichotomy in **2.2.1**, and so I do not employ those terms in the discussion here.
[35] Hart, *The Concept of Law* (n 1) 185-186.

[37] Proponents of this broad view (despite significant differences in detail) include Fuller and Finnis (Lon L Fuller, 'Positivism and Fidelity to Law - A Reply to Professor Hart' (1958) 71 Harvard Law Review 630, 644; John Finnis, *Natural Law and Natural Rights* (Oxford University Press 2005) 92).

is not possible, or, at least, not valuable.'[38] I maintain in **2.2.1** that this debate is largely misplaced; but by virtue of the debate in the first instance, it is clear that any approach to law is far from straightforward.

Another prominent debate over the nature of law concerns whether law is a *rule-based* phenomenon. On one side of this debate, rules have often been posited as a *sine qua non* of law. Indeed, Austin treats law and rule as synonymous,[39] and Kelsen states that law 'is an order of human behavior. An "order" is a system of rules'.[40] Hart's concept of law depends upon a bifurcation of types of rules,[41] and Raz declares that 'no satisfactory analysis of the nature of law can be given without making use of the concept of a rule'.[42]

However, even the notion that law is rule-based is contentious because, as Hart concedes, 'the concept of the rule… is as perplexing as that of law itself'.[43] Alongside challenging the possibility or value of definitions of law, Wittgensteinian approaches to language have also cast into doubt the idea that law is a rule-based phenomena. Applying a reading of the rule-following paradox of Wittgenstein,[44] Kripke doubts that we follow rules at all:

> There can be no fact as to what I mean by 'plus', or any other word at any time… When I respond in one way rather than another to such a problem as '68 + 57', I can have no justification for one response rather than another… there is no fact about me that distinguishes between my meaning a definite function by

[38] Bix (n 4) 78.
[39] 'Every *law* or *rule* (taken with the largest signification which can be given to the term properly) is a *command*' (Austin (n 17) 5-6).
[40] Kelsen (n 36) 3.
[41] Namely, that law is a union of 'primary' and 'secondary' rules (Hart, *The Concept of Law* (n 28) 81).
[42] J Kemp, 'Review of The Concept of Law' (1963) 13 The Philosophical Quarterly 188
[43] Hart, *The Concept of Law* (n 28) 15.
[44] '[N]o course of action could be determined by a rule, because every course of action can be brought into accord with the rule' (Wittgenstein (n 22) 87e).

> ‘plus’ (which determines my responses in new cases) and my meaning nothing at all.[45]

Such a position has clear consequences for legal philosophy; Benditt writes that ‘if we accept this argument, we must then agree that there are virtually no rules in any area of human activity’.[46] Schauer believes it is quite conceivable in theory that law operates also or exclusively on ‘modes of decision-making that [are] not substantially rule-based.’[47] Depending upon the conceptualisation of rules, Schauer argues that ‘there appears ample room for an idea of law without rules.’[48] White advances just such an idea; he argues that

> law is not at heart an abstract system or scheme of rules, as we often think of it; nor is it a set of institutional arrangements that can be adequately described in a language of social science; rather, it is an inherently unstable structure of thought and expression… [it is] an activity of mind and language.[49]

The American legal realists have cast more practical doubts upon law as a rule-based phenomenon.[50] They reject the idea that judges apply rules in a formalistic way, and that legal decisions can be predicted merely from a logical analysis of rules.[51] The forerunner of American legal realism, Holmes, declared that ‘the actual life of the law has not been logic: it has been experience’.[52] Taking up this line of argument, Llewellyn

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[45] Saul A Kripke, *Wittgenstein on Rules and Private Language* (Harvard University Press 1982) 21.
[46] Theodore M Benditt, *Law as Rule and Principle* (Stanford University Press 1978) 30.
[47] Frederick Schauer, *Playing by the Rules* (Oxford University Press 2002) 167.

[49] James Boyd White, ‘An Old-Fashioned View of the Nature of Law’ (2011) 12 Theoretical Inquiries in Law 381, 382. White is often cited as the progenitor of the ‘law and literature’ movement, in particular for his work *The Legal Imagination* (David Gurnham and others, ‘Forty-Five Years of Law and Literature: Reflections on James Boyd White’s The Legal Imagination and Its Impact on Law and Humanities Scholarship’ (2019) 13 Law and Humanities 95; James Boyd White, *The Legal Imagination* (University of Chicago Press 1986)).
[50] As I said above, legal realists often have debts to Wittgenstein’s philosophy of language (Arulanantham (n 26)). The point here is that American legal realists are also motivated by a scientific, observational approach to law, in line with their debts to philosophical pragmatists like James and Dewey (Davies (n 3) 121).
[51] Harris (n 3) 94; McCoubrey and White (n 11) 202.
[52] Oliver Wendell Holmes, *The Common Law* (Mark De Wolfe Howe ed, Macmillan 1968) 1.

believed that 'there is less possibility of accurate prediction of what courts will do than the traditional rules would lead us to suppose (and what possibility there is must be found in good measure outside these same traditional rules)'.[53]

Besides questions like the criterion of validity and the relationship between law and rules, legal philosophy is faced with the compounding problem that theories are often, in retrospect, distinct products of their time and place. This historical specificity is a target of the more general epistemological scepticism that perceptions of reality – and so the values and assumptions of theorists – are inherently culturally located.[54] For example, Aquinas' theory that human law participates in natural, divine, and eternal law may well be perfectly sensible and consistent in the theological and social contexts of medieval Italy.[55] However, for better or worse, Aquinas' writings lack direct transferability to the context of modern secular societies, as Aquinas uses quite different assumptions and methods.[56] Summers illustrates the same lack of transferability when he uses the example of Austin's analytical command theory of law:

> Law – the phenomenon of law – unlike elephants or triangles, is a mode of social organization and therefore is itself subject to some change, even fundamental change over long periods. Because of this, our understanding of law, our conceptions of it, may ultimately require revision. Hence, in criticizing a theory such as John Austin's that law consists of sovereign commands, there are two possible dimensions of criticism. It is not merely that Austin might have gotten it wrong in the first place back in 1828. It is also possible that some

[53] Karl N Llewellyn, 'Some Realism about Realism: Responding to Dean Pound' (1931) 44 Harvard Law Review 1222, 1241-1242.
[54] Malcolm Williams and Tim May, *Introduction to The Philosophy of Social Research* (UCL Press 1996) 111.
[55] Thomas Aquinas, *Selected Writings* (Penguin Books 1998) 623-624.
[56] Aquinas often cited scripture and Aristotle ('the Philosopher') as conclusive authorities in his arguments (see eg Aquinas (n 55) 112). More generally, Kennedy writes that '[m]ost contemporary philosophy departments do not acknowledge medieval thought as philosophy' (E Kennedy, *Secularism and Its Opponents from Augustine to Solzhenitsyn* (Palgrave Macmillan 2006) 23). This is certainly not to suggest that Aquinas' thought is not still *interesting* or *useful*; merely that his theories on the nature of law are evidently infused with a thirteenth-century, Christian view of the universe.

features of his theory might need to be revised specifically to account for basic developments since that date.[57]

The *criterion of validity* and *law as a rule-based phenomenon* are just two major questions concerning the nature of law. Many others abound, including the role of rights in law,[58] the relationship between law and custom in an anthropological sense,[59] and whether law is really the exercise of hegemonic power.[60] As I have said, responses to these issues can also not be neatly untangled from the cultural values and assumptions of legal philosophers.

An exposition of these problems – and the contestations within them – demonstrates the fundamental indeterminacy of 'law'. Save perhaps the extremely broad position that law is a social phenomenon, there is virtually no consensus on any aspect of the nature of law, or at least nothing that may be uncontested. Even then, the term 'social phenomenon' is open to question.[61] I later take issue even with the idea that law is *social*, to the extent that this view may erroneously suggest that law is exclusively or even predominantly a human phenomenon.[62]

The inability to determine a clear approach to 'law' is not a failure here, but rather a *vindication of the view of law that I establish throughout this thesis*. Law is indeterminate, chaotic, and defies easy decoding. As I will argue, law owes its indeterminacy to the unfixed material agencies upon which it is contingent.

The method of the thesis is solely one of critical engagement with relevant literature, primarily of a philosophical and theoretical nature. I do not commit myself to any

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[57] Summers (n 27) 14-15.
[58] Valerie Kerruish, *Jurisprudence as Ideology* (Routledge 1992) 139-142.
[59] Freeman (n 10) 1084-1085.
Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings* (Colin Gordon ed, Harvester Press 1980) 95-96; Gerald Turkel, 'Michel Foucault: Law, Power, and Knowledge' (1990) 17 Journal of Law and Society 170).
[61] Kazimierz Opałek, 'Law as Social Phenomenon' (1971) 57 Archiv für Rechts und Sozialphilosophie 37, 38.
[62] This is an argument maintained throughout the thesis, but main points of discussion are at **4.2.2** and **5.3.2**.

particular legal philosophy. I argue that stringent adherence to a set of assumptions and concepts restricts the ability to respond dynamically to the very indeterminacy of law that I have outlined. McCoubrey and White quite rightly comment that legal philosophy

> offers a variety of perspectives upon law and to gain fully from the richness of the material offered it is important not to allow its nature to become obscured by limitations set by particular emphases… which very rarely have the claims to exclusivity which are sometimes asserted on their behalf.[63]

For this reason, I draw upon a few different traditions and movements within legal philosophy. Natural law and evolutionary theories of law are the focus of **2**. While I ultimately reject their teleologies of survival, I find inspiration in their recognition of the material exigencies of the human body. I revisit natural law theory in a different form in **5.3.1**, which I use to develop my arguments on the impermanent and systemic nature of law. Finally, as already signalled, I am sympathetic to the claims of legal realism, especially in relation to my understanding of 'legal fictions' in **4.3.2.1**.

This multifaceted approach to legal philosophy works in tandem with my *interdisciplinary* approach to law.

1.2.2 Interdisciplinary approaches to law

In the first instance, the notion that there are fixed boundaries between areas of knowledge – often referred to as disciplines – is problematic. The perception of rigidity owes much to the historical compartmentalisation of knowledge by academic institutions;[64] but upon inspection, there are no stringent dividing lines between disciplines. Rather, disciplines are much more fluid 'than has conventionally been

[63] McCoubrey and White (n 11) 1.
[64] Steven Seidman, *The Postmodern Turn: New Perspectives on Social Theory* (Cambridge University Press 1994) 3-4; Doreen Massey, 'Negotiating Disciplinary Boundaries' (1999) 47 Current Sociology 5.

presented in the stories that disciplines have told about themselves';[65] indeed, Schaffer writes evocatively of 'indisciplines'.[66] There is not even a clear delimitation between 'science' and 'non-science'. Fuller notes that '[i]n trying to bound the boundary of scientific from nonscientific disciplines, philosophers have only come to discover that no such meta-boundaries are to be found.'[67] Popper doubted that the frequent appeal to the 'empirical' method as the hallmark of science sufficed.[68] With this in mind, I refer to 'disciplines' here only to signify the general themes and discourses of research cultures (as we generally understand, for example, a legal philosopher to be involved in something at least thematically different to a geographer).

In this sense, this thesis joins a wider contemporary move towards *interdisciplinarity*. Broadly speaking, interdisciplinarity involves employing ideas and concepts from different disciplines in a collective approach towards knowledge.[69] While interdisciplinarity has been advocated within the social sciences since the 1930s,[70] interdisciplinary research became established only at the turn of the twentieth-century,[71] and there now also exists a strong interface between social and natural sciences.[72] These trends have been no less apparent in legal philosophy. Critical legal theory, for example, understands law and legal theory as a 'deeply interdisciplinary and contextual exercise.'[73] The disciplines upon which projects of legal philosophy have

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[65] Peter Osborne, 'Problematizing Disciplinarity, Transdisciplinary Problematics' (2015) 32 Theory, Culture & Society 3, 4.

[66] Simon Schaffer, 'How Disciplines Look' in Georgina Born and Andrew Barry (eds), *Reconfigurations of the Social and Natural Sciences* (Routledge 2013) 57.

[67] Steve Fuller, 'Disciplinary Boundaries and the Rhetoric of the Social Sciences' (1991) 12 Poetics Today 301, 303.

[68] Karl R Popper, *Conjectures and Refutations* (4th edn, Routledge and Kegan Paul 1972) 33. Popper does suggest, however, that the problem of demarcation is solved by a 'criterion of falsifiability' (Popper 39).

[69] Alan L Porter and others, 'Interdisciplinary Research: Meaning, Metrics and Nurture' (2006) 15 Research Evaluation 187.

[70] Jan Faber and Willem J Scheper, 'Interdisciplinary Social Science: A Methodological Analysis' (1997) 31 Quality and Quantity 37.

[71] Richard Van Noorden, 'Interdisciplinary Research by the Numbers' (2015) 525 Nature 306.

[72] Denise Lach, 'Challenges of Interdisciplinary Research: Reconciling Qualitative and Quantitative Methods for Understanding Human-Landscape Systems' (2014) 53 Environmental Management 88.

drawn include such diverse areas as biology,[74] neuroscience,[75] geometry,[76] economics,[77] architecture,[78] and art.[79]

It is not simply that expanding horizons beyond 'traditional' subject matters of legal philosophy will invite intellectual vibrancy. I have already said that 'law' is indeterminate, and so recourse to concepts and tools outside of the traditional box is necessary for any developed theory. Moreover, interdisciplinarity is crucial in light of the particular and pressing problems of the current age. Human activity has had direct and devastating polluting, disrupting, and unbalancing effects on ecological and climate systems.[80] In the face of these ecological crises, to which law and policy can contribute and sustain,[81] there is now a compelling case for legal philosophy to adopt a broader scope of enquiry in response. Philippopoulos-Mihalopoulos summarises the call to interdisciplinarity in legal philosophy thus:

> We are in trouble if any legal scholar is still asking 'what's this got to do with law?' – a seemingly innocent yet haunting question that has clipped many a daring wing that might have been trying to think of other laws and other societies. It is time, therefore, to acknowledge what the world has to do with

[74] Margaret Gruter and Paul Bohannan, *Law, Biology & Culture* (Ross-Erikson 1983); Wojciech Zaluski, *Evolutionary Theory and Legal Philosophy* (Edward Elgar 2009); John H Beckstrom, *Evolutionary Jurisprudence* (University of Illinois Press 1989).
[75] Michael S Pardo and Dennis Patterson, *Minds, Brains, and Law* (Oxford University Press 2013).
[76] Gommer advances a theory of the emergence of law on the basis of fractal patterns (Hendrik Gommer, 'The Molecular Concept Of Law' (2011) 7 Utrecht Law Review 141).
[77] Robert Cooter, *Law and Economics* (3rd edn, Addison-Wesley 2000).
[78] John Brigham, *Material Law* (Temple University Press 2009) 145-163.
[79] Peter Goodrich, *Legal Emblems and the Art of Law* (Cambridge University Press 2013).
[80] World Wildlife Fund, *Living Planet Report 2018* (M Grooten and REA Almond eds, 2018) 7; Intergovernmental Panel on Climate Change, *Climate Change 2014: Synthesis Report* (RK Pachauri and LA Meyer eds, 2014) v.
[81] Preston enumerates several environmentally 'regressive' legal codes and judicial decisions (Brian J Preston, 'The End of Enlightened Environmental Law?' (2019) 31 Journal of environmental law 399 407-409); Ashford and Hall describe certain industrial land-use regimes as environmentally unsustainable (Nicholas A Ashford and Ralph P Hall, 'The Importance of Regulation-Induced Innovation for Sustainable Development' (2011) 3 Sustainability 270, 289); and Yamineva and Romppanen criticise the inadequacy of European air pollution laws (Yulia Yamineva and Seita Romppanen, 'Is Law Failing to Address Air Pollution? Reflections on International and EU Developments' (2017) 26 Review of European, Comparative & International Environmental Law 189).

> the law, and the law with the world… This requires of the law a reconceptualisation, not only of the nonhuman (including the inorganic) agent and its capacity for legal action, but also a reconceptualisation of the human in ways previously unthinkable for the legal science of consciousness and legal capacity.[82]

It is this call to interdisciplinarity that is enthusiastically answered in the *new materialisms* movement, which critically engages with notions of materiality and corporeality.[83] I shall introduce the new materialisms at length in **3.3**; in brief, the new materialisms prioritise the processes and interconnections between matter and materialities in their critical enquiries.[84] As *all* matter is conceptualised as agentic[85] – which then problematises binaries like human/animal and organic/inorganic[86] – new materialisms are inherently interdisciplinary in their outlook.[87] In response to the indeterminacy of law, engagement with the new materialisms is therefore a positive step towards expanding the scope of legal philosophy.

Having laid out my central research question – *how is law material?* – and my interdisciplinary approach to law, I will now summarise the principle arguments of the thesis.

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[82] Andreas Philippopoulos-Mihalopoulos (ed), *Routledge Handbook of Law and Theory* (Routledge 2019) 4.
[83] Philippopoulos-Mihalopoulos (n 82) 4.
[84] Diana H Coole and Samantha Frost (eds), *New Materialisms* (Duke University Press 2010), 7; Rosi Braidotti, 'The Politics of "Life" Itself and New Ways of Dying' in Diana H Coole and Samantha Frost (eds), *New Materialisms* (Duke University Press 2010) 206.
[85] Chris Fowler and Oliver JT Harris, 'Enduring Relations: Exploring a Paradox of New Materialism' (2015) 20 Journal of Material Culture 127, 128; Thomas Lemke, 'New Materialisms: Foucault and the "Government of Things"' (2015) 32 Theory, Culture & Society 3, 4.
[86] Emilie Cloatre and Dave Cowan, 'Legalities and Materialities' in Andreas Philippopoulos-Mihalopoulos (ed), *Routledge Handbook of Law and Theory* (2019) 434; Karen Barad, *Meeting the Universe Halfway* (Duke University Press 2007) 32 and 214.
[87] Joss Hands, 'From Cultural to New Materialism and Back: The Enduring Legacy of Raymond Williams' (2015) 56 Culture, Theory and Critique 133.

1.3 Argumentative narrative of the thesis

A detailed discussion of content will be found in the overview and conclusion of each chapter. This section provides a summary of the argumentative moves against the backdrop of critical engagement with the relevant literature.

In **2**, I reject the view that the end or purpose of law is concomitant with the end of human survival, a view central to several natural law and evolutionary theories of law. Of these natural law theories, the social contract theories of Hobbes and Locke are notable for positing human survival as the explicit purpose of law (**2.2.2**),[88] and Hart's 'minimum content theory' also represents a concession to this natural law position (**2.2.3**).[89] Finally, despite the disputed role of teleology in the biological sciences (**2.3.1**), several theories of law and biology take the position that law is an evolved mechanism for human survival (**2.3.2**).[90]

In **2.4**, I ultimately argue that the appearance that the ends of law and survival are concomitant derives from erroneous assumptions concerning the determination of survival chances. The first assumption – which is independently quite sound – is that certain circumstances (or set of affairs) have a likelihood of either increasing or decreasing the chances of survival, when survival is understood as the everyday notion of the continuation of life. I explain this assumption tabularly in **2.4.1**, and introduce the idea that the determination of survival chances depends upon the *contextual specificity* of a given circumstance. The second assumption is that law modalises circumstances in the form of discrete *contents* (**2.4.2**; I later return to this assumption critically in **4.3.1**). On the view that law possesses contents, it is then possible to determine the theoretical likelihood that a law will either increase or decrease the chances of survival.

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[88] Hobbes (n 1) 86-87; Locke (n 1) 180.
[89] Hart, *The Concept of Law* (n 1) 193.
[90] Gruter (n 2) 4; Bohannan (n 2) 147; Michael D Guttentag, 'Is There A Law Instinct?' (2009) 87 Washington University Law Review 269.

I then move in **2.4.3** to show that it is a synthesis of these two assumptions that motivates the survival theories of law that I have identified. For Hobbes, laws that prohibit violence – and thus promote the end of survival – are central to his theory of the social contract.[91] When positing survival as a rational end of law, Hart considers prohibitions on 'the use of violence in killing or inflicting bodily harm' to be 'the most important for social life';[92] he asks rhetorically, '[i]f there were not these rules what point could there be for beings such as ourselves in having rules of any other kind?'[93] Otherwise, Locke centralises the regulation of property as the key to securing the end of human survival.[94] Evolutionary theories of law similarly assume that the adoption of certain rules in social groups will increase the chances of survival.[95]

In **2.4.4.1** and **2.4.4.2**, I move to show that the *aggrieved human individual* acts as the frame of reference for these survival theories of law. Ultimately, in **2.4.4.3**, I show that there is no compelling reason to prioritise the frame of reference of the aggrieved individual over any other frame of reference (for example, a communitarian frame of reference).[96] For this reason, the position that the ends of law and survival are concomitant collapses.

While I reject the teleology of survival theories of law, I take inspiration from their engagement with material exigencies of the human body. In **3**, I therefore develop an ontology of matter for theoretical deployment in the subsequent arguments of the thesis. In **3.2**, I look to past ontologies of matter, ranging from Jainist,[97] atomistic,[98] Aristotelian,[99] Cartesian,[100] and the general approach of modern science.[101]

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[91] Hobbes (n 1) 87; Alice Ristroph, 'Criminal Law for Humans' in David Dyzenhaus and Thomas Poole (eds), *Hobbes and the Law* (Cambridge University Press 2012) 103.
[92] Hart, *The Concept of Law* (n 1) 194.
[93] Hart, *The Concept of Law* (n 1) 194.
[94] Locke (n 1) 180.
[95] Gruter (n 2) 4; Elliott (n 2) 607; Bohannan (n 2) 147.
[96] Michael Sandel, 'The Procedural Republic and the Unencumbered Self' in Shlomo Avineri and Avner de-Shalit (eds), *Communitarianism and Individualism* (Oxford University Press 1992) 13; Alasdair MacIntyre, *After Virtue* (3rd edn, University of Notre Dame Press 2007) 69.
[97] JC Sikdar, *Concept of Matter in Jaina Philosophy* (P V Research Institute 1987) 17 and 49.
[98] CCW Taylor (tr), *The Atomists: Leucippus and Democritus* (University of Toronto Press 1999) 9; Lucretius, *The Nature of Things* (AE Stallings tr, Penguin Classics 2007) 10.
[99] Aristotle, *Physics* (Robin Waterfield tr, Oxford University Press 1999) 54.

While it is useful to visit these past ontologies of matter in overview, I ultimately argue that *new materialist* accounts of matter and materiality hold the most promise towards a considered answer to the central research question of how law is material. First, as I have just argued, new materialisms are inherently interdisciplinary in their outlook, and this accords with my own approach to law (**1.2.1**). Second, the new materialisms do not restrict themselves merely to analysis of human materialities, but also recognise the 'affect' of non-human materialities (a term that I shall explore in **3.3.3**). This allows me to move beyond the anthropocentricity of the survival theories of law that initially inspired my investigation into the materiality of law. Third, and relatedly, the novelty of new materialisms allows the possibility of fresh avenues of investigation for legal philosophy.

For these reasons, I consider new materialisms in depth in **3.3**. I begin in **3.3.1** to describe the new materialist project as developed largely in objection to the postmodern 'cultural turn',[102] à la Foucault and Derrida.[103] This background helps to understand why new materialisms centralise *matter* in their theoretical investigations.[104] In particular, new materialisms insist on the *agency* of all matter. I consider the various meanings that have been ascribed to material agency in **3.3.2**, drawing upon the works of Deleuze,[105] Bennett,[106] Barad,[107] and Haraway.[108] While

[100] René Descartes, 'Principles of Philosophy' in John Cottingham (tr), *The philosophical writings of Descartes*, vol 1 (Cambridge University Press 1985) 224.
[101] This was instigated by Locke's sensory understanding of matter (John Locke, *An Essay Concerning Human Understanding* (Thomas Tegg 1841) 124; Howard Robinson, *Matter and Sense* (Cambridge University Press 1982) 112-113).
[102] Lemke (n 85) 4.
[103] Michel Foucault, *Discipline and Punish* (Alan Sheridan tr, Allen Lane 1977); Jacques Derrida, *Of Grammatology* (Gayatri Chakravorty Spivak tr, Johns Hopkins University Press 1997); Susan Hekman, 'We Have Never Been Postmodern: Latour, Foucault and the Material of Knowledge' (2009) 8 Contemporary Political Theory 435, 436-438.
[104] Coole and Frost (n 84) 1; Charles Devellennes and Benoît Dillet, 'Questioning New Materialisms: An Introduction' (2018) 35 Theory, Culture & Society 5, 7.
[105] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus* (Brian Massumi tr, University of Minnesota Press 1987).
[106] Jane Bennett, *Vibrant Matter* (Duke University Press 2010).
[107] Barad (n 86).

there is no canonical conceptualisation of material agency, new materialisms invariable posit that matter is never merely inert or subject to ultimate human control – rather, it is full of vitality, recalcitrance, and unpredictability.[109] All matter has diverse trajectories, propensities, and tendencies in what Bennett calls *the force of things*.[110]

On the basis that all matter is agentic, a monistic ontology ensues, which I explore in **3.3.3**. This monistic ontology problematises the dualism of human/non-human, which has been drawn on such bases as rationality or language.[111] New materialists rather point out the deep entanglements between all matter – reality is such that there are no neat ontological categories. By this measure, Haraway proclaims that 'we have never been human';[112] others like Braidotti and Tsing similarly break down the human/non-human binary on the basis of universal agency.[113] The monistic ontology goes further, in that it also questions the assumptions underlying binaries of living/non-living and biotic/abiotic. Bennett, for example, explores the material contingency of humans on foodstuffs and metals in order to 'gnaw away at the life/matter binary'.[114] Overall, a monistic ontology of matter opens up novel and nuanced routes for exploring the question of how law is material.

For the purposes of focussing my exploration into law's materiality, I then formulate two aspects of the new materialist ontology of matter that I set up in **3.3**. I term these aspects *Conditioning* and *Flux*. These aspects are only to be considered *nominal* thematic departure points, as they are conceptually interdependent. First (**3.4.1**), Conditioning captures the sense in which all things are contingent upon material agencies for the way that they are, no more or less. I use the extended example of a painting to illustrate the complexity of material contingencies. Second (**3.4.2**), Flux

[109] Fowler and Harris (n 85), 128; William E Connolly, 'The "New Materialism" and the Fragility of Things' (2013) 41 Millennium 399, 400.
[110] Jane Bennett, 'The Force of Things: Steps toward an Ecology of Matter' (2004) 32 Political Theory 347; Bennett (n 106) xvi-xvii.
[111] For *rationality*, see Immanuel Kant, *Anthropology from a Pragmatic Point of View* (Robert B Louden tr, Cambridge University Press 2006) 15; for *language*, see Wittgenstein (n 22) 16e.
[112] Donna Haraway, *When Species Meet* (University of Minnesota Press 2008) 42.

[114] Bennett (n 106) xvii.

captures the senses of the reconditioning of materiality, and the systemic nature of materiality. Together, Flux captures the sense in which matter is not coherent and stable *in and of itself*, but is rather always entangled in continuous, systemic processes.

To conclude **3**, I pay due diligence to two particularly perennial metaphysical debates that concern matter. First, in **3.5.1**, I describe the supposed tension between 'mind' and 'matter'. This debate is usually posited in terms of philosophical idealism versus realism,[115] and more recently panpsychism.[116] In relation to this debate, I conclude that it is not the place of this thesis to reconcile the putative tension between mind and matter. I thus advocate a pragmatic position, which I argue is more than sufficient to account for the materiality of law.

Second, in **3.5.2**, I consider the problem of defining matter in terms of that which is directly perceptible by human senses. I argue that, applying new materialist ontologies, there is no theoretical inconsistency in recognising that the 'microscopic' – like molecules, ionising particles, and viruses – are no less materially agentic. This multi-layered approach to matter is what Hüttemann describes as 'pragmatic pluralism',[117] and in the same spirit as Delueze and Guattari,[118] I advocate pragmatic pluralism in order that no one particular level of ontological analysis is prioritised over any other. In practice, this allows for more expansive and richer avenues of inquiry.

In **4**, I then apply my first aspect of Conditioning in order to explain some foundational ways that law is material: namely, in its communication (**4.2**) and its content (**4.3**). In past legal philosophy, *communication* has been variously understood as the promulgation of natural law principles into human understanding;[119] an essential analytical component of law;[120] a moral requirement for law under deontological

[115] Peter K McInerney, *Introduction to Philosophy* (Harper Collins 1992) 31-32.
[116] Freya Mathews, *For the Love of Matter* (State University of New York Press 2003) 25.
[117] Andreas Hüttemann, *What's Wrong with Microphysicalism?* (Routledge 2004) 125.
[118] Deleuze and Guattari (n 105) 40-41; Serge F Hein, 'The New Materialism in Qualitative Inquiry' (2016) 16 Cultural Studies ↔ Critical Methodologies 132, 134.
[119] Harris (n 3) 7; Aquinas (n 55) 617.
[120] Jeremy Bentham, *The Works of Jeremy Bentham*, vol 1 (William Tait 1843) 157; Austin (n 17) 6.

ethics;[121] central to the rhetorical nature of law;[122] and as conceptually equivalent to law – ie, that law *is* communication.[123]

In spite of these diverse understandings of communication in legal philosophy (**4.2.1**), and in order to remain consistent with my new materialist ontology, I conceptualise communication as *affect*, a term that I consider in detail in **3.3.2**. In **4.2.2**, I apply the understanding of communication as affect to describe the Conditioning of law. In the very first instance, I recognise that communication is always Conditioned by agentic materiality. There is often a focus on the *linguistic* communication of law in such respects.[124] Linguistic communication is undoubtedly extremely significant for law: writing, printing, and speech are integral to statutory codifications, contract formation, legal procedure, argumentation, and so on. However, I expand the analysis of the materiality of the communication of law to non-linguistic forms, including non-verbal 'body language' and behaviour, the *medium* of communication, and material 'artefacts' of law.

I then turn in **4.3** to the second of the two avenues of investigation into the Conditioning of law – *content*. In **4.3.1**, I establish a nuanced position on the 'content' of law. Because I have conceptualised communication as affect, I reject the notion that law contains discrete informational content *per se*. Rather, I argue that the 'content' of law must be understood solely in terms of agentic materiality. For example, a sign in a park which reads 'no vehicles in the park' is communicating law by virtue of the *affect* of the sign itself. While I maintain this ontological view on the content of law, *methodologically* I concede that it is expedient (and reflective of everyday treatment) to consider law *as if* it possesses discrete, abstract contents.

[121] Fuller, *The Morality of Law* (n 30) 185-186; David Luban, 'Natural Law as Professional Ethics: A Reading of Fuller' (2001) 18 Social Philosophy and Policy 176, 178.
[122] Aristotle, *The 'Art' of Rhetoric* (E Capps, TE Page and WHD Rouse eds, John Henry Freese tr, William Heinemann 1926) 7.
[123] Jan M Broekman, 'Communicating Law' in David Nelken (ed), *Law as Communication* (Dartmouth 1996) 45.
[124] Marianne Constable, 'Democratic Citizenship and Civil Political Conversation: What's Law Got to Do with It?' (2011) 63 Mercer Law Review 877; Andrei Marmor, *The Language of Law* (Oxford University Press 2014) 1; Peter M Tiersma, *Parchment, Paper, Pixels Law and the Technologies of Communication* (University of Chicago Press 2010) 221.

4.3.2 advances this view to consider the fundamental material Conditioning of the content of law. I investigate this by placing under scrutiny what Hart termed 'necessary preconditions' of law.[125] Hart asserts that certain truisms of human nature afford a *reason* why law should contain some minimum content[126] (for example, human vulnerability necessitates the prohibition of violence, and limited resources necessitates institutions of property).[127] Hart argues that this is entirely different from material preconditions, such as '[b]eing fed in infancy in a certain way', because they do not yield *reasons* for law.[128]

Owing to my rejection of any particular teleology of law, however, I reject the basis for Hart's distinction between necessary and material preconditions. I argue that this rejection allows me to subtly recognise that, indeed, materialities *are* the preconditions of the content of law. To illustrate, I re-render parts of Hart's minimum content of law. Laws against violence are Conditioned (at minimum) by the mutable material body; likewise, material agencies like mud, rocks, and water Condition the content of property ownership laws. This material Conditioning is often not apparent from a mere analysis of the *linguistic* content of law. Property laws, for instance, are often Conditioned by local, and even global, geographies and ecologies. I employ here Chomba and Nkhata's study of variant property regimes at materially variant places along the Barotse floodplains.[129] I extend such analysis of complex Conditioning to the further example of the materiality of immigration laws, which I argue are preconditional on the dynamic interplay of material borders, territories, bodies, and so forth, often in unexpected ways.

Following on from this general discussion of the Conditioning of the content of law, I then take a closer look at the notion of legal 'fictions' (**4.3.2.1**). Fictions have meant

[125] Hart, *The Concept of Law* (n 1) 194.
[126] Hart, *The Concept of Law* (n 1) 193.
[127] Hart, *The Concept of Law* (n 1) 194-195 and 196-197, respectively.

[129] Machaya Jeff Chomba and Bimo Abraham Nkhata, 'Property Rights and Benefit Sharing: A Case Study of the Barotse Floodplain of Zambia' (2016) 10 International Journal of the Commons 158.

various things in legal philosophy, encompassing evidentiary,[130] doctrinal,[131] and typological senses.[132] 'Voidable marriages' or 'patent rights' are given as examples of what have been understood as legal fictions by lawyers and legal philosophers. Investigating legal fictions has the purpose of demonstrating in greater depth my notion of the Conditioning of the content of law.

Using Pottage's notion of 'forensic materiality',[133] I show how fictions, in their doctrinal modes, may be reified. This involves stripping fictions of their often distracting terminology, and investigating their underlying and ineluctable material Conditioning. 'Patents', for instance, are highly material; they are textual, technical, and involve a complex entanglement of agencies.[134] I also recall the ineluctable materiality of 'borders' from my earlier discussion of immigration laws.[135] There is no obvious reason why the reification of fictions cannot extend beyond my examples of patents and borders.

A second angle to my exploration of legal fictions concerns a deeper scepticism towards the epistemology of language and words that insistence on legal fictions presume. This involves a sympathetic engagement with the Wittgensteinian criticism of the view that 'words in language name objects',[136] and of philosophical pragmatists like James.[137] Pragmatic language-scepticism finds its home in legal realism – championed amongst others by Llewyllwn,[138] Hägerström,[139] and Olivecrona[140] – who

[130] Angus Stevenson (ed), 'Legal Fiction', *Oxford Dictionary of English* (3rd edn, Oxford University Press 2010) 1008.
[131] Louise Harmon, 'Falling off the Vine: Legal Fictions and the Doctrine of Substituted Judgment' (1990) 100 The Yale Law Journal 1.
[132] Wesley Newcomb Hohfeld, 'Fundamental Legal Conceptions as Applied in Judicial Reasoning' (1917) 26 The Yale Law Journal 710; Harris (n 3) 77.
[133] Alain Pottage, 'Law Machines: Scale Models, Forensic Materiality and the Making of Modern Patent Law' (2011) 41 Social Studies of Science 621, 635-637.
[134] Laura A Foster, 'The Making and Unmaking of Patent Ownership: Technicalities, Materialities, and Subjectivities' (2016) 39 Political and Legal Anthropology Review 127 129.

[136] Wittgenstein (n 22) 5e.
[137] William James, *Pragmatism* (Harvard University Press 1975) 51.
[138] Llewellyn (n 53).
[139] Axel Hägerström, *Philosophy and Religion* (Taylor & Francis 2004) 74.
[140] Karl Olivecrona, *Law as Fact* (Oxford University Press 1939) 96.

are motivated by the 'desire to eliminate metaphysics' from legal philosophy.[141] I take a similar view towards unravelling the fiction and illusion surrounding law. In line with my approach towards the communication of law, I stress that there is no meaning behind the *linguistic* representation of 'legal fictions' – rather, I will argue that the words of legal content have 'meaning' only insofar as they are materially affective.

In **5**, I move away from the aspect of Conditioning to consider *Flux*. This second aspect captures the entangled, multi-directional, and contingent processes of materiality. Under this more general concept of Flux, I identify two thematic departure points for my investigation into the materiality of law: namely, Flux in the sense of material reconditioning, and Flux in the sense of material systems.

I explore the first of these senses of Flux in **5.2**. Material reconditioning is carefully conceptualised in **5.2.1**. As materiality is constantly (re-)Conditioned, I recognise that matter is never static. As such, material permanence and endurance are merely *relative* notions: all matter, including the examples I employ of human bodies and the pyramids at Giza, are not absolutely resistant to affect. This is often understood in terms of change, transformation, decay, birth, and so forth.

I argue that reconditioning has great importance for understanding law's materiality. In the first instance, there are fundamental conceptual implications (**5.2.2.1**). In the way that I have conceptualised communication as affect, law *is* impermanent Flux, because it is contingent on ever-shifting material agencies. Otherwise, material reconditioning can throw light upon the changing content of law (when content is understood as per my qualifications in **4.3.1**). Theories of legal change have ranged from evolutionary,[142] Marxian,[143] and Weberian models;[144] these all recognise the way in which the content of law shifts with particular social conditions. I further this

[141] Freeman (n 10) 1038.
[142] E Donald Elliott, 'The Evolutionary Tradition in Jurisprudence' (1985) 85 Columbia Law Review 38, 40; Émile Durkheim, *The Division of Labor in Society* (George Simpson tr, The Free Press of Glencoe 1960) 144-146.
[143] Karl Marx, *A Contribution to the Critique of Political Economy* (NI Stone tr, Charles H Kerr 1904) 11.
[144] Max Weber, *Economy and Society*, vol 2 (University of California Press 1978) 656.

recognition in order to forge a tight conceptual link between my nominal aspects of Conditioning and Flux. I counteract any perception that the content of law remains static by again problematising the view that law contains discrete, informational content.

In **5.2.2.2**, I move away from these general conceptual precepts to consider the importance of Flux in a more substantive sense. To this end, the resistance to death in the content of law is employed as a set-piece. I recall how material reconditioning is often conflated with such notions as destruction, decay, and death. In terms of the content of law, I argue that the treatment of death is often couched in terms of *resistance*. As I explained in **2**, the survival theories of law often centralise resistance to physical violence in laws against assault and murder. Other laws, like those relating to assisted suicide, are similarly posited in tension with material Flux. In order to unearth the root of this tension, I examine the concepts of biopolitics and necropolitics – the approach to the body (and life) as managed material units – as critically identified by Foucault and Mbembe, respectively.[145] In conjunction with the new materialist problematisation of the life/death binary, as discussed in **3.3.3**,[146] I ultimately point towards a reappraisal of the assumptions made by the law surrounding assisted suicide and euthanasia.

5.3 shifts discussion from Flux as material reconditioning to explore the theme of Flux as *material system*. Flux as material system stands for the dynamic contingencies and continuous processes of materality. To illustrate, I use the example of the growth, fruition, and decay of a leaf. These processes are situated within a complex *system* of materialities. For example, the agencies of rainwater, sunlight, roots, worms, and countless others besides, are all entangled in a densely interwoven material system.

[145] Achille Mbembe, 'Necropolitics' (2003) 15 Public Culture 11; Michel Foucault, *Society Must Be Defended* (Mauro Bertani and Allesandro Fontana eds, David Macey tr, Allen Lane 2003) 253.
[146] See Rosi Braidotti, *The Posthuman* (Polity Press 2013) 130; Coole and Frost (n 84) 23.

theories that I had recourse to in **2**, Flux theories of law embrace a monistic ontology of matter, with many parallels with new materialisms. The traditions that I draw upon are various, and include Aboriginal,[147] Lozi,[148] and ancient Chinese (**5.3.1**).[149] I then argue in **5.3.2** that a re-visitation and revitalisation of this literature, in light of and in tandem with the insights gained by new materialisms, allows recognition of the complex material Flux of law – ie, the impossibility of any deep understanding of law divorced from (the nominal categories of) the non-human, the non-living, and so forth.

In **6**, I recapitulate on the thesis and point towards areas of further investigation. The first area of further investigation, outlined in **6.2**, concerns the generative aspect of law's materiality. I draw upon new materialist works here, especially those of DeLanda and Barad.[150] Finally, in **6.3**, I take up the themes touched upon in **5.3.2**, and point towards some ethical and practical implications of my material ontology of law.

Having now outlined the main argumentative narrative of the thesis, I will conclude on all I have covered in this introduction to the thesis.

1.4 Conclusion

I opened in **1.1** with a statement of the research question: *how is law material*? The answer that I defend in this thesis is that law is, in both concept and content, ineluctably material. In a fundamental sense, I argue that law *is* matter. The thesis therefore advances a *material ontology of law*.

The meaning that I ascribe to matter and materiality has been bracketed for the purposes of this introduction, until I may give a more thorough treatment (although I

[147] Irene Watson, 'Kaldowinyeri - Munaintya in the Beginning' (2000) 4 Flinders Journal of Law Reform 3.
[148] Max Gluckman, 'Natural Justice in Africa' (1964) 9 The American Journal of Jurisprudence 25.
[149] James Legge, *The I Ching* (2nd edn, Dover 1965).
[150] Manuel DeLanda, *A New Philosophy of Society* (Continuum 2006); Barad (n 86).

did sketch the salient points of argument in **1.3**). In **1.2**, I rather explained how 'law' is approached for the purposes of the thesis. After reviewing some standard definitional and conceptual puzzles of legal philosophy (**1.2.1**), I concluded that a clear approach to 'law' is notoriously difficult to determine. This difficulty was not approached as something to be lamented, but rather to be embraced. As will become apparent throughout the course of the thesis, I argue that the indeterminacy of law owes to the inherent ontological indeterminacy of matter. Because of this, in **1.2.2**, I then advocated an interdisciplinary approach to legal philosophy. This involves drawing upon literatures and methodologies outside the standard toolset of legal philosophy; and for my part, includes recourse to evolutionary biology, Wittgensteinian approaches to language, and the new materialisms movement.

In **1.3**, I summarised the main argumentative narrative of the thesis. To briefly restate the main moves, **2** begins my investigation by rejecting the idea that the ends (or purposes) of law and survival are concomitant. While I reject the teleology of survival theories of law, I take inspiration from their implicit or explicit engagement with matter. Taking up this investigative strand, I therefore develop an ontology of matter in **3,** which is heavily influenced by the new materialisms. I sketch two nominal aspects of the overall monistic ontology of *agentic* matter: Conditioning and Flux. **4** considers the first of these, Conditioning, which captures law's fundamental materiality in terms of its communication and its content. **5** considers Flux, in the dual senses of material reconditioning and material systems. Finally, in **6** I recapitulate on the thesis and sketch areas for further investigation.

I will now turn to my critical rejection of the idea that the ends of law and survival are concomitant.

2 Concomitancy of the Ends of Law and Survival

2.1 Overview

In **1**, I explained how I seek to examine and reject the claim that law promotes human survival. Before the reflections in this chapter, the claim that law promotes human survival was central to my own thoughts on law, and it is also prominent in the thoughts of many past legal philosophers. It might be said of the claim that law promotes human survival, in a teleological sense, that *the end of law is concomitant with the end of survival* (or when abridged, *law is concomitant with survival*). There are two significant ways in which survival has been centralised in concepts of law. Here I shall visit both of these groups of theory in detail (**2.2** and **2.3**), so that the claim that law is concomitant with survival may later be placed under informed scrutiny – and eventually rejected (**2.4**). At this point, as I will explain in greater detail shortly, my reflections on survival inspire the beginnings of a material ontology of law.

The first group of theories that I visit in **2.2** are particular instances of *natural law* theory. Chronologically, the school of natural law includes some of the oldest theorisations of law, and of social order in general. In **2.2.1**, I place natural law in the context of its metaphysical and teleological underpinnings. Specifically, I draw to attention natural law's historical preoccupation with the metaphysical supposition of survival as a human telos, either *in part* (as in the writings of Aristotle and Aquinas), or as a *sufficient* human telos.

Survival is taken to be a sufficient human telos in the predicates of at least two 'social contract' theories of natural law. In **2.2.2.1**, I examine Hobbes' theory of state authority as the rational consequence of seeking peace and security in the violent state of nature. Hobbes centralises the drive for self-preservation as the *reason* for laws prohibiting violence against people and property.[1] In **2.2.2.2**, I then examine Locke's social contract

[1] Thomas Hobbes, *Man and Citizen: De Homine and De Cive* (Bernard Gert ed, Hackett 1991) 115; Thomas Hobbes, *Leviathan* (Oxford University Press 2008) 86-87.

theory of law. Locke views the state as the rational recognition of human *equality and liberty*, and posits its role in maintaining attendant rights in society.[2] Integral to state regulation are rules on the protection, acquisition, and disposition of property,[3] upon which humans all otherwise have an essentially Divinely-given right of ownership in the state of nature.[4]

After examining Hobbes' and Locke's superficially similar but internally quite different social contract theories, I then move my attention to one final examination of survival in natural law theory (**2.2.3**). While strictly speaking not a natural law theory, Hart's identification of some 'minimum content' of law represents a significant concession to the general precepts of natural law.[5] In *The Concept of Law*, Hart writes sympathetically of the 'core of good sense' at the heart of natural law's metaphysics;[6] namely that survival is a human end *that is in fact desired*.[7] On this basis, Hart proposes five truisms that must be reflected in any system of social rules with respect to the end of survival.[8] In **2.2.3.1**, I focus on three of Hart's truisms – human vulnerability, limited resources, and approximate equality – which echo themes in the theories of Hobbes and Locke. Overall, I conclude on the importance ascribed to survival in these dominant theories of law: they posit that the end of law is concomitant with the end of human survival.

2.3 takes discussion away from natural law to consider a second arc of legal theorisations – namely, evolutionary theories of law. As with the preceding natural law theories, evolutionary theories of law also centralise survival in their accounts of law. While the debts to natural law go deeper than a focus on survival, I investigate evolutionary theories of law separately because, in their own scientific way, they claim a concomitancy between the ends of law and survival. I later argue that this claim is mistaken.

[2] John Locke, *Two Treatises of Government* (Everyman's Library 1978) 120.
[3] Locke, *Two Treatises of Government* (n 2) 180.
[4] Locke, *Two Treatises of Government* (n 2) 129.
[5] HLA Hart, *The Concept of Law* (3rd ed, Oxford University Press 2012) 193.
[6] Hart (n 5) 199.
[7] Hart (n 5) 192.
[8] Hart (n 5) 194-199.

In the first instance, I draw a dichotomy between analogical evolutionary theories of law, and theories positing that law and legal behaviour are evolved biological phenomena. While undoubtedly possessing merit in other contexts, I reject analogical evolutionary theories of law on the basis that I am seeking to examine real, rather than self-confessedly metaphorical connections, between law and survival.

2.3.1 then prefaces discussion with an explanation of the place of teleology in biological sciences. While its place is unsettled, I demonstrate that teleological language is unequivocally employed by evolutionary theories of law. I argue that *even if* such teleological language is used metaphorically, or simply due to the limitations of (the English) language, this is sufficient to call in to question the supposed teleological concomitancy of the end of human survival and the end of law.

The cluster of evolutionary theories of law that I visit in **2.3.2** began historically with the works of Gruter.[9] She theorises that law, particularly the behavioural *rule-following* aspect of law, is an adaptive behaviour that interrelates with other human dispositions to confer evolutionary advantages for survival.[10] Elliott concurs with this portrayal of law as an 'evolutionary prosthesis', which compensates for shortcomings in humans' anatomical or behavioural biology.[11] Whereas Gruter and Elliott take a generalised approach to weaving together the threads of law, survival, and evolutionary biology, other theorists focus on particular behavioural themes. Bohannan, for example, posits law as an evolutionarily advantageous 'intermediator' in the dyadic relationship caused by aggressive behaviour.[12]

Overall, these evolutionary theories of law elide what Zaluski terms ontological and teleological questions.[13] In positing the concomitancy of the end of human survival and the end of law on an evolutionary basis, the *purpose* of law is being explained by an

[9] Margaret Gruter, 'The Origins of Legal Behavior' (1979) 2 Journal of Social and Biological Systems 43; E Donald Elliott, 'Law and Biology: The New Synthesis' (1996) 41 Saint Louis University Law Journal 595, 596.
[10] Margaret Gruter, *Law and the Mind* (SAGE 1991) 4.
[11] Elliott, 'Law and Biology' (n 10) 607.
[12] Paul Bohannan, 'Some Bases of Aggression and Their Relationship to Law' in Margaret Gruter and Paul Bohannan (eds), *Law, Biology & Culture* (Ross-Erikson 1983) 157.
[13] Wojciech Zaluski, *Evolutionary Theory and Legal Philosophy* (Edward Elgar 2009) ix.

account of its evolutionary *origins*. This appeal to origins is not dissimilar to the method of the natural law theories of **2.2**, which move from certain predicates on human nature and the natural world as explanations for *why* the operation and content of law is such as it is.

Having outlined natural law and evoutionary theories of law in **2.2** and **2.3**, respectively, I then to turn to critique. Ultimately, I reject the claim that the end of law is necessarily concomitant with the end of human survival. I argue that there are several ways in which law can be shown to be either ambiguously concomitant or even *contrary* to the end of survival. In **2.4.1** and **2.4.2**, I describe the theoretical supposition that certain circumstances (or state of affairs, modalised in the *content* of law) will either increase or decrease the chance of survival. I further argue that likelihood judgements on these circumstances always depend upon the level of 'contextual specificity' given by the terms or expression of the circumstance. I demonstrate in **2.4.3** how survival theories of law suppose this theoretical determination of survival chances.

On this basis, I critique the assumption of survival theories of law that survival chances are determined through the frame of reference of the *aggrieved human individual*. I first establish that the survival theories of law adopt this frame of reference in **2.4.4.1** (that they focus on the 'human individual') and **2.4.4.2** (that the human individual is 'aggrieved'). In **2.4.4.3**, I then argue that there is no particular reason for adopting this teleological frame of reference of survival over any other. Because the survival theories of law posit a dyadic, individualistic nature of law, I show that it is possible to shift the frame of reference from the nominally 'aggrieved' to the nominally 'transgressing' individual. The implication of this shift is that law can be not concomitant to, but *contrary* to the end of survival. I therefore move to reject the claim that the ends of law and survival are concomitant.

However, to conclude in **2.5**, I explain how the scrutiny and jettisoning of the teleology of these survival theories of law inspires an exciting avenue for further investigation. In particular, the ineluctable materiality of survival, divested of the misleading teleological dimension, points towards a fuller theorisation of the *materiality of law*.

With this argumentative arc in mind, I will now begin with the first of the two groups of survival theories of law.

2.2 Natural law theories of human survival

2.2 considers natural law theories of human survival. In **2.2.1** I shall consider natural law's preoccupation with metaphysics and teleology *in general*, and the historical importance of survival as one particular focus of a larger body of natural law. Following this contextualisation, I then move to consider natural law theories of human survival in detail. **2.2.2** covers the 'social contract' theories of Hobbes and Locke, who both maintain – on the basis of exactly opposite views of human nature – that the proper end of law and society is the security of human life. This leads me to an inspection of Hart's famous concession to natural law in **2.2.3**, where he proposes some minimum content of law necessary to secure the contingently desired end of human survival.

2.2.1 Metaphysical and teleological bases

One of the fundamental questions that legal philosophy seeks to answer is 'what is the nature of law?' Across history, numerous schools of thought have emerged in response; each has coalesced through their shared premises and thematic similarities. Of these schools, the two most prominent comprise theories of *natural law* and theories of *positive law*. Natural and positive law theories are often presented as the classic dichotomisation of legal philosophy because, at face value, they give irreconcilable answers as to the nature of law. My purpose in discussing 'natural law' is not to necessarily support the traditional natural law/positive law dichotomy. In fact, one trend in legal philosophy is to question both the historicity and practical relevance of that dichotomy entirely.[14] With that being said, the theories that I visit in this section do in fact ride under the banner of natural law, or are positivist concessions to natural law, in

[14] Dan Priel, 'Toward Classical Legal Positivism' (2015) 101 Virginia Law Review 987; Jeffrey A Pojanowski, 'Redrawing the Dividing Lines between Natural Law and Positivism(s)' (2015) 101 Virginia Law Review 1023.

the case of Hart's minimum content. It is not relevant for any of my purposes here to consider the natural law/positivism dichotomy in any detail.

Natural law theories may or may not be anthropocentric; but as I am concerned with *human* survival in this section, I will necessarily be using the term 'natural law' as it applies exclusively to humans, until otherwise stated.[15] An alternative application of 'natural law', which is non-anthropocentric, forms the focus of the discussion in **5.3**.

The school of natural law includes some of the oldest theories within legal philosophy. At their core, natural law theories share an appeal to universal and immutable principles *beyond* human law.[16] Freeman explains that

> the essence of natural law may be said to lie in the constant assertion that there are objective moral principles which depend upon the nature of the universe and which can be discovered by reason.[17]

The discovery of these principles through intuition or reason is one of the defining features and methodologies of natural law.[18] These principles generally consist of an ethical distinction between good and evil, or other such value judgements on what is desirable and undesirable.[19] Natural law then maintains that human law must – whether as a matter of *definitional* requirement, or human *practical ambition* – conform to these

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[15] 'Natural law' might also mean laws of physics, or principles applying to animals, which Patterson notes are 'now commonly discarded or subordinated' (Edwin W Patterson, *Jurisprudence: Men and Ideas of the Law* (Foundation Press 1953) 246 and 334).

[16] JW Harris, *Legal Philosophies* (Butterworth 1980) 7.

[17] Michael DA Freeman, *Lloyd's Introduction To Jurisprudence* (8th edn, Sweet & Maxwell 2008) 84.

[18] Harris (n 17) 7. Benditt appears to make a distinction between the methods of intuition and reason within natural law theories (Theodore M Benditt, *Law as Rule and Principle* (Stanford University Press 1978) 91). However, most theorists use only the term reason in relation to natural law; some view that there can be no concept of 'intuition' separate from a concept of 'reason' (see Miranda Fricker, 'Intuition and Reason' (1995) 45 The Philosophical Quarterly 181). However, I reference both intuition and reason as investigative methods of natural law, because the theories I visit later in **5.3.1** result from non-inferential and emotional responses to nature, most accurately captured by an everyday understanding of *intuition*.

[19] AP d'Entrèves, *Natural Law* (2nd edn, Hutchinson & Co 1970) 80.

principles as either a condition or measure of its validity.[20] On the view of definitional requirement, nothing can be called 'law' in its proper sense unless it in fact accords with or embodies certain principles. Otherwise, it might be that law simply *ought* to aspire towards certain principles, as a moral objective; that which falls short of this aspiration – either by pursuing alternative, opposite, or no discernible ends – is not necessarily denied the appellation of 'law'.

The content of law derived from the natural law method necessarily depends upon the metaphysical maxims that one begins with. For example, a hedonist equates pleasure with good; and some might conclude therefore that 'pleasure is what we ought to desire or pursue.'[21] Alternatively, in a religious context, natural laws may be discerned through divine or spiritual revelation, sometimes mediated by human reason.[22] A Muslim, for example, would assert that the Quran is the will of Allah, as revealed through the

[20] The derivation of an 'ought' from an 'is' is one of the classic charges against natural law. In practice, the step amounts to a 'prescriptivisation' of the descriptive moral principles that a certain natural law theory accepts as its premises. Hume and Moore are critics of such methodologies in general (see David Hume, *A Treatise of Human Nature* (LA Selby-Bigge and PH Nidditch eds, Oxford University Press 1987) 469; GE Moore, *Principia Ethica* (Cambridge University Press 1971) 126). Hart, in the spirit of Bentham and Mill, applies such arguments of Hume and Moore to a specific criticism of natural law methodologies (HLA Hart, 'Positivism and the Separation of Law and Morals' (1958) 71 Harvard Law Review 593). Priel (n 15) and Pojanowski (n 15) reduce such arguments of Hart's to a misunderstanding of the essentially different claims made by natural law and the dominant (Anglo-American) schools of positivism.

[21] JCB Gosling, 'Hedonism' in Ted Honderich (ed), *The Oxford Companion to Philosophy* (2nd edn, Oxford University Press 2005) 363. Locke, who I shall consider in detail shortly, adopted hedonistic viewpoints in his later writings (John Locke, *Essays on the Law of Nature* (W von Layden ed, Oxford University Press 1954) 14). Some readings of Locke give coherency between his hedonism and his natural law theory (Elliot Rossiter, 'Hedonism and Natural Law in Locke's Moral Philosophy' (2016) 54 Journal of the History of Philosophy 203); others believe these two themes in Locke's work are irreconcilable (Richard I Aaron, *John Locke* (Oxford University Press 1971) 257). Bentham, the founder of utilitarianism, believed in the possibility of a 'hedonic calculus' – a balance of aggregate pleasure over pain – which would guide legislative policy (Jeremy Bentham, 'Introduction to the Principles of Morals and Legislation' in Mary Warnock (ed), *Utilitarianism* (Fontana Books 1990) 64-67). However, despite proceeding from metaphysics in this regard, Bentham disavowed natural rights theories (Jeremy Bentham, *The Works of Jeremy Bentham*, vol 2 (William Tait 1843) 501). His theory of law rather centred on sovereign commands (Bentham, *The Works of Jeremy Bentham* 506).

[22] Aquinas is one theorist who derives natural law from both scripture and reason (Hilaire McCoubrey and Nigel D White, *Textbook on Jurisprudence* (3rd edn, Blackstone Press 1999) 74).

prophet Muhammad; and thus one ought to adhere to this word, and live in submission to and dependency on it.[23]

Whatever the case, the natural law method maintains, either explicitly or implicitly, that the purpose of law is the proper direction towards some particular teleologic *goal* or *end*. Hart argues that, historically, this natural law method derives from the tendency for humans to observe that 'the world of inanimate and living things, animals, and men is a scene of recurrent kinds of events and changes which exemplify certain regular connections.'[24] In particular, these recurrences and regularities lead to the outlook that

> every nameable kind of existing thing, human, animate, and inanimate, is conceived not only as tending to maintain itself in existence but as proceeding towards a definite optimum state which is the specific good – or the *end*… appropriate for it.[25]

This teleological mode of thinking is still present in everyday thought. Hart gives the perennial example of the telos of an acorn to become an oak, and not to decay, and also of a leaf 'to obtain the moisture necessary for "full" and "proper" development.'[26] The example of the acorn was first given by Aristotle,[27] who took the position that organisms have final causes (ends) brought about by their inherent natures and potentials.[28] Hart notes that the same teleological outlook 'is present in our conception of the *functions* of bodily organs' – such as the proposition that 'it is the function of the heart to circulate the blood'.[29]

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[23] Ignác Goldziher, *Introduction to Islamic Theology and Law* (Andras Hamori and Ruth Hamori trs, Princeton University Press 1981) 13. Variations of religious natural law are numerous; in each case, scripture, revelation, or what has been determined to be the will of a deity, is seen as equivalent to divine, natural order (all Abrahamic religions at least make the same claim as to the moral authoritativeness of their central texts). Hart traces the tendency of religions to equivocate natural order with divine will back to (secular) Greek origins (Hart (n 5) 187).
[24] Hart (n 5) 188.
[25] Hart (n 5) 188-189.
[26] Hart (n 5) 189.
[27] Aristotle, *The Metaphysics* (Hugh Lawson-Tancred tr, Penguin Classics 1998) 274.
[28] Aristotle, *Physics* (Robin Waterfield tr, Oxford University Press 1999) 49. These Aristotelian natures and potentials are closely equivalent to what we now call scientific laws (Allan Gotthelf, *Teleology, First Principles, and Scientific Method in Aristotle's Biology* (Oxford University Press 2012) 10).
[29] Hart (n 5) 191.

In the context of my inquiry into the claim that law promotes human survival, it is hopefully clear why the metaphysical and teleological underpinnings of natural law theories render them of particular importance for my analysis. While the end of survival is certainly not the exclusive subject matter of natural law theory,[30] the security of life has been a historically prominent metaphysical motif in natural law. Hart, the avowed positivist of the twentieth century, called the cognisance of survival – which may mean nothing more than the fact that 'most men most of the time wish to continue in existence' – the 'core of good sense' of natural law.[31] In various ways, survival is a consideration of such influential philosophers as Aristotle, Aquinas, Hobbes, and Locke, all of whom I shall consider shortly.

Even when survival *in itself* is not taken as the end of humans, natural law frameworks often posit the security of human life as intermediate to some other, greater end. The drive for self-preservation corresponds to the first of Finnis' basic forms of good – that of life itself.[32] As Finnis explains,

> [w]e are organic substances, animals, and part of our genuine well-being is our bodily life, maintained in health, vigour and safety, and transmitted to new human beings. To regard human life as a basic reason for action is to understand it as a good in which indefinitely many beings can participate in indefinitely many occasions and ways, going far beyond any goal or purpose which anyone could envisage and pursue, *but making sense of indefinitely many goals*.[33]

[30] Before the twentieth century, natural law was essentially restricted only to ontological ruminations on the 'natural universe', and the derivation of (moral) principles on that footing. Modern legal philosophy, however, has seen the development of various 'new natural law theories' (NNLTs), led in particular by Finnis and Grisez in the 1980s. Rather than deriving principles from certain ontologies of the natural world, NNLTs proceed *deontologically*, considering instead basic, pre-moral 'goods' as giving rise to correlative duties and rights (see Michael DA Freeman, *Lloyd's Introduction To Jurisprudence* (8th edn, Sweet & Maxwell 2008) 126-131). I needn't visit NNLTs in detail; they are mentioned to clarify that theories concerning survival as the human end are but *one thread* of a large tapestry of natural law.

[31] Hart (n 5) 191 and 199, respectively.

[32] John Finnis, *Natural Law and Natural Rights* (Oxford University Press 2005) 86.

[33] John Finnis, 'Natural Law and Legal Reasoning' (1990) 38 Cleveland State Law Review 1, 1-2. Emphasis added.

This idea that survival is a prerequisite to a higher human end is also found in Aristotle. In the first instance, Aristotle argues that mere 'nourishment and growth', or life in-itself, falls short of a uniquely human end, as this is an end which even plants may attain.[34] Rather, Aristotle takes the view that the *telos* (end) of humans is to attain *eudaimonia* – the state of perfect happiness or well-being.[35] Given that humans are also by nature political animals,[36] the common pursuit of this ultimate end coalesces into political association – statehood – which has its precursor in the family.[37] Cairns notes that Aristotle's view on law lacks any 'general and leading conception';[38] but Aristotle clearly sees that law's task is to foster the ultimate attainment of *eudaimonia* across a lifetime.[39] With this in view, law necessarily has a role in the security of the everyday exigencies of survival, insofar as it is an intermediate end to *eudaimonia*.[40]

Aquinas similarly takes the view that the ultimate end of humans is happiness; but instead of Aristotle's conception of soulful activity in accordance with virtue (which ostensibly makes perfect happiness attainable in this mortal world), Aquinas' most perfect state of happiness 'can lie only in the vision of the divine essence' of God in Heaven.[41] All happiness on Earth is therefore only imperfect.[42] Yet, in their own ways,

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[34] Aristotle, *Nicomachean Ethics* (Roger Crisp ed, Cambridge University Press 2004) 12.

[35] Aristotle posits *eudaimonia* as a complete, self-sufficient good chosen in itself, and not for the sake of any other good. It may be attained through any 'activity of the soul in accordance with virtue'. The individualistic character of *eudaimonia* is important here, for there are many virtues that one may choose to cultivate. A flute-player, for example, finds their *eudaimonia* across a life of playing the flute well (Aristotle, *Nicomachean Ethics* (n 38) 10-11). Finnis sought to clarify and develop Aristotle's conceptions in a natural law context, by identifying 'a set of basic practical principles which indicate the basic forms of human flourishing' (Finnis (n 36) 23). Finnis' subtle restatement amounts to a neo-Aristotlelian vision (Anthony J Lisska, 'Finnis and Veatch on Natural Law in Aristotle and Aquinas' (1991) 36 American Journal of Jurisprudence 55, 60).

[36] Aristotle, *Politics* (CDC Reeve tr, Hackett 1998) 4.

[37] Aristotle, *Politics* (n 40) 99.

[38] Huntington Cairns, *Legal Philosophy from Plato to Hegel* (Johns Hopkins University Press 1949) 95.

[39] Aristotle, *Nicomachean Ethics* (n 38) 20 and 23-24.

[40] Patterson (n 16) 338-339. A superficial parallel might here be drawn with Maslow's hierarchy of needs, whereby physiological exigencies are the necessary but not sufficient step towards self-actualisation (Abraham H Maslow, *Motivation and Personality* (3rd edn, Harper Collins 1987); Stanley D Ivie, 'Was Maslow an Aristotelian?' (1986) 36 The Psychological Record 19. Cf Roy José Decarvalho, '"Was Maslow an Aristotelian?" Revisited' (1991) 41 The Psychological Record 117 on Maslow's inspiration).

[42] 'It should be said that some participation in happiness can be had in this life, but perfect and true happiness cannot' (Aquinas (n 45) 540).

human inclinations to other ends (the preservation of life, sexual intercourse, and the education of offspring), while lesser, are nonetheless also precepts of the natural law.[43] Because natural law contains no sanctions by itself, Aquinas believes that it is right that human law – meaning 'nothing else than a certain promulgated ordinance of reason for the common good by one has charge of the community' – is directed such that it participates (only ever imperfectly) in these higher principles of natural law.[44]

This brief excursion to Aristotle and Aquinas has served to show that survival is not always regarded as a sufficient aim in natural law theory, but it may still be an intermediate or lesser aim. As Hart notes however, many legal philosophers are in fact satisfied with the more modest end of human survival *per se*.[45] Divested of more complex metaphysics, à la Aristotle and Aquinas, such theories will provide me with a clearer route to the heart of the natural law positions on survival and human law.

As I will demonstrate, theorisations on the end of survival per se are prominent in several 'social contract' theories of natural law. This prominence warrants a closer consideration of these theories, to which I now turn.

2.2.2 Social contract theories

In general, social contract theories inquire into the legitimisation of state authority through the explicit or tacit consent of individuals.[46] The social contract is often represented pictorially through the metaphor of the 'body politic' – a king or ruler anatomically constituted of the individuals that support his authority.[47] Of the notable social contract theorists – which include Grotius, Rousseau, and Rawls – Hobbes and

[43] Patterson (n 16) 350. Aquinas posits natural law as part of the eternal law, another category of principles, in which humans participate (Cairns (n 42) 176).
[44] Aquinas (n 45) 617 and 622.
[45] '[O]ther thinkers, Hobbes and Hume among them, have been willing to lower their sights: they have seen in the modest aim of survival the central indisputable element which gives empirical good sense to the terminology of Natural Law' (Hart (n 5) 191).
[46] Anthony Harrison-Barbet, *Mastering Philosophy* (Macmillan 1990) 200.
[47] Such an image features as the original frontispiece of Hobbes' *Leviathan*, and is a common trope in medieval and Roman political theory (Michael Squire, 'Corpus Imperii: Verbal and Visual Figurations of the Roman "Body Politic"' (2015) 31 Word & Image 305).

Locke are two Enlightenment philosophers who stand out most for my purposes, due to their contemplation of the material exigencies of survival. This strain of social contract theory is focussed on origins of polity (which, as identified by Gough, is distinct from social contract theories that focus on the origins of the state).[48] I will begin with Hobbes, who wrote before Locke.

2.2.2.1 Hobbes and the 'war of all against all'

Hobbes is conventionally denominated as a legal positivist, particularly with respect to the influence he had on later positivists.[49] This classification, however, is contestable – Murphy, for one, argues that Hobbes' thought is more affinitive with natural law theory.[50] As I explained in **2.2.1**, I am not concerned with debates on the natural law/positivism distinction. Rather, Hobbes' writings are eminently useful for my purposes because of his thoughts on human nature and the ends of survival. I have characterised Hobbes' social contract theory as a natural law theory here because of its teleological underpinnings.

At the heart of Hobbes' legal philosophy is the idea that, but for political authority, humans would exist in a state of competition and diffidence.[51] This state is unsurprisingly bleak, and is a pessimistic portrait of humanity; he declares that 'man to man is an arrant wolf',[52] as all are equally fearful, selfish, and cynical of others. Humans, Hobbes argues, are naturally disposed towards violence and the control of resources in order to preserve their own life.[53]

[48] JW Gough, *The Social Contract* (Oxford University Press 1937) 2-3.
[49] Hobbes' influence on Austin in particular was profound. In Austin's *Province of Jurisprudence Determined* he admits that 'I know of no other writer… who has uttered so many truths, at once new and important' (John Austin, *The Province of Jurisprudence Determined* (John Murray 1832) 299).
[50] Mark C Murphy, 'Was Hobbes a Legal Positivist?' (1995) 105 Ethics 846.
[51] Hobbes, *Leviathan* (n 1) 83.
[52] Hobbes, *Man and Citizen* (n 1) 89.
[53] Hobbes, *Leviathan* (n 1) 86.

It is Hobbes' centralisation of human nature and self-preservation that renders his thoughts of great relevance for my inspection of the concomitancy of the ends of law and survival. As Freeman argues, for Hobbes, '[s]elf preservation is the great lesson of natural law.'[54] In the following passage of Hobbes is the key to his thought:

> For every man… shuns what is evil, but chiefly the chiefest of natural evils, which is death; and this he doth by a certain impulsion of nature, no less than that whereby a stone moves downwards… *Therefore the first foundation of natural right is this, that every man as in him lies endeavour to protect his life and members*.[55]

Owing to these proclivities, pre-political life is 'a condition of war of every one against every one',[56] where there are no checks on violence to body or property, of which there is no legitimate ownership.[57] This state of war extends to non-human animals, too – they are both threats in themselves ('a fierce and savage beast should with more right kill a man, than the man a beast'), and therefore suitable for exploitation and commodification.[58] Crucially, the universality of the proclivity to violence and the fear of death means that the *natural law of reason* compels humans towards seeking peace, whenever and wherever they may find it.[59] Ultimately, Hobbes argues that it is the concessions of personal liberty to state authority by way of contract and covenant which offers humans the best release from the violent state of nature.[60]

For Hobbes, the war in the state of nature is contingent on the particular material characteristics of the world. This outlook is consistent with Hobbes' pervasive, mechanical view of the world as consisting entirely of *bodies* or *substances*, which are at one level synonymous.[61] Hobbes' metaphysics posits that the universe is the aggregate of all substances (varieties of bodies with accidental sensory qualities), and

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[54] Freeman (n 33) 106.
[55] Hobbes, *Man and Citizen* (n 1) 115. Emphasis added.
[56] Hobbes, *Leviathan* (n 1) 86.
[57] Benjamin B Lopata, 'Property Theory in Hobbes' (1973) 1 Political Theory 203, 204.
[58] Thomas Hobbes, *Human Nature and De Corpore Politico* (Oxford University Press 2008) 129.
[59] Hobbes, *Leviathan* (n 1) 87.
[60] Hobbes, *Leviathan* (n 1) 88-91.
[61] Hobbes, *Leviathan* (n 1) 261.

nothing else.[62] Indeed, Hobbes goes so far as to call 'abstract substances' or 'separated essence' merely 'insignificant words'.[63] Cox points out that Hobbes' law of nature is 'grounded on [a] philosophical materialism… which denies the transcendent reality of the spiritual dimension of the universe.'[64] Thus, the human impulsion 'to protect life and member' being like a stone obeying the law of gravity is not obviously merely an analogy.[65]

In one particular consideration of the material exigencies of survival, Hobbes points out that humans are equally materially prone to violence (as well as equal in their fear of death). Of human material homogeneity, Hobbes says that

> if we look on men full grown, and consider how brittle the frame of our human body is, which perishing, all its strength, vigour, and wisdom itself perisheth with it; and how easy a matter it is, even for the weakest man to kill the strongest: there is no reason why any man, trusting to his own strength, should conceive himself made by nature above others.[66]

This paragraph summarises two of the 'truisms' that Hart posits should be reflected in any account of natural law (its minimum content, when survival is taken as an end in itself):[67] namely, the truisms of *human vulnerability* and *approximate equality*.[68] I will come on to these shortly in **2.2.3.1**. So, for Hobbes, the fact that humans are moved to violence and are equally materially vulnerable moves the state (in exchange for divestiture of individual liberty) to protect life and limb in pursuance of the natural law of peace.

In a second consideration of the material exigencies of survival, Hobbes posits natural (God-given) rights to land, nutrients, sources of warmth, and so on.[69] Because these

[62] Hobbes, *Leviathan* (n 1) 261.
[63] Thomas Hobbes, *The English Works of Thomas Hobbes of Malmesbury*, vol 1 (Bohn 1839) 34.
[64] Richard H Cox, *Locke on War and Peace* (Oxford University Press 1960) 20-21.
[65] Hobbes, *Man and Citizen* (n 1) 115.
[66] Hobbes, *Man and Citizen* (n 1) 114.
[67] Hart (n 5) 193.
[68] Hart (n 5) 194-195.

materials are limited, in a state of nature 'every thing is his that getteth it, and keepeth it by force; which is neither *propriety*, nor *community*; but *uncertainty*.' [70] This is encapsulated in a third of Hart's truisms, *limited resources*,[71] which I will also consider in **2.2.3.1**. Hobbes again argues that, owing to these facts of the material nature of the world, the state is empowered, in accordance with the social contract, to protect property rights, divide land, and uphold mutual contracts for property exchange.[72]

This theme of property here is a good place to introduce the second social contract theorist of interest to me – Locke – whose political theory of the state orbits around the core concept of property.

2.2.2.2 Locke and the institution of property

Whilst also a social contract theorist, Locke gives a diametrical characterisation of human nature to that offered by Hobbes. Rather than humans being disposed through their fear of death to violent struggle, Locke takes an optimistic view of human nature; he argues that impressed within humans is the natural law 'which willeth the peace and preservation of all mankind.'[73] Locke does agree with Hobbes that humans spurn death and desire survival. Locke believes that

> our all-wise Maker, suitably to our constitution and frame, and knowing what it is that determines the will, has put into man the uneasiness of hunger and thirst, and other natural desires, that return at their seasons, to move and determine their wills, for the preservation of themselves, and the continuation of their species.[74]

[70] Hobbes, *Leviathan* (n 1) 164.

[72] Hobbes, *Leviathan* (n 1) 164-167.
[73] Locke, *Two Treatises of Government* (n 2) 120.
[74] John Locke, *An Essay Concerning Human Understanding* (Thomas Tegg 1841) 334.

However, unlike Hobbes, Locke argues that it is *not* the law of nature that these wills are pursued at the material cost of others. Rather, Locke portrays a communal view of human life, arguing that all are born equal by nature. Locke writes that

> [e]very one as he is bound to preserve himself, and not to quit his station wilfully, so by the like reason, when his own preservation comes not in competition, ought he as much as he can to preserve the rest of mankind… [and not] take away or impair the life, the liberty, health, limb, or goods of another.[75]

After the fall from Eden,[76] Locke believes that humans have naturally come to exist in 'a state of perfect freedom to order their actions, and dispose of their possessions and persons as they think fit, within the bounds of the law of Nature, without asking for leave or depending upon the will of any other man.'[77] However, this state of absolute freedom breeds problems for the maintenance of the natural law. There exists from time to time transgressors of the natural law of peaceful preservation, who seek to exploit the material exigencies of sustenance and survival for personal gain. The need therefore arises for individuals to place trust in a state (the 'commonwealth') for the benefit of the common good; '[f]or the law of Nature would, as all other laws that concern men in this world, be in vain if there was nobody that in the state of Nature had a power to execute that law, and thereby preserve the innocent and restrain offenders'.[78]

As I have mentioned, Locke places his will to survival in the context of the material needs occasioned by the human body. As pointed out by Hobbes, food, water, clothing, shelter, ores, and so on, are required to promote survival and stave off death. To this

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[75] Locke, *Two Treatises of Government* (n 2) 120.

[76] Before pre-civil society, Locke believes that humans existed in utopia; this initial state of nature was the *literal* Eden of Biblical scripture, from which humankind was expelled after the Fall. The loss of this utopian state, occasioned by the Fall, precipitated human's second political state of nature. Unlike Locke's belief in the reality of Eden, it is not clear whether Locke viewed the political state of nature that followed, as Vogt points out, 'as a purely theoretical construct or as an actual moment in human history' (Locke, *Two Treatises of Government* (n 2) 13; P Vogt, 'Locke, Eden and Two States of Nature: The Fortunate Fall Revisited' (1997) 35 Journal Of The History Of Philosophy 523).

[77] Locke, *Two Treatises of Government* (n 2) 118.

[78] Locke, *Two Treatises of Government* (n 2) 120.

end, McDaniel describes the institution of property as 'Locke's natural law solution to this greatest of threats.'[79] Locke's concept of property is more expansive than the everyday, and even legal, definition of property; it comprehensively includes 'lives, liberties and estates'.[80] Unlike Hobbes, Locke maintains that title to property exists prior to the state; God gave humankind natural rights in common to all matter of the world.[81]

However, this causes a paradox: how might one then make any legitimate use of property, in pursuit of the natural law of peace and preservation, if that use excludes others from their natural rights? Locke reconciles this paradox by asserting that human bodies are the only thing to which 'nobody has any right to but himself.'[82] By extension, then, the '"labour" of his body and the "work" of his hands, we may say, are properly his. Whatsoever, then, he removes out of the state that Nature hath provided and left it in, he hath mixed his labour with it… and thereby makes it his property… exclud[ing] the common right of other men.'[83] Both a person's body and his labour thereof are then, in a proper sense, property.

As I have said Locke's expansive view of property includes that of, lives, liberties and estates. In the formation of the social contract, it is the *purpose* of the commonwealth to secure this:

> The great and chief end, therefore, of men uniting into commonwealths, and putting themselves under government, is the preservation of their property[.][84]

I have now shown how both Hobbes and Locke relate the end of human survival to the legal end of the social contract. In doing so, I have alluded at several points to Hart's

[79] Robb A McDaniel, 'Garden-Variety Liberals: Discovering Eden in Levinas and Locke' (2001) 34 Polity 117, 123.
[80] Patterson (n 16) 360.

[82] Locke, *Two Treatises of Government* (n 2) 130. In the particular case of slavery, Locke writes that 'freedom from absolute, arbitrary power is so necessary to, and closely joined with, a man's preservation, that he cannot part with it but by what forfeits his preservation and life together' (Locke, *Two Treatises of Government* (n 2) 128). Locke's abhorrence of slavery, 'so vile and miserable an estate', was profound (Locke, *Two Treatises of Government* (n 2) 3).
[83] Locke, *Two Treatises of Government* (n 2) 130.
[84] Locke, *Two Treatises of Government* (n 2) 180.

articulation of the so-called 'minimum content' theory of natural law. As will become clear, Hart intends for his minimum content to isolate the 'core of good sense' of natural law theories that take *survival* as the proper end of humans per se.[85] In doing so, Hart presented a twentieth century account of the same general enterprise of the classical theorisations of Hobbes and Locke. As such, Hart's focus on what is necessary, in theory, for a system of law to secure human survival is directly relevant to my investigation into the concomitancy of the ends of law and survival.

2.2.3 Hart's minimum content of natural law

Hart's explication of the minimum content of natural law occurs in his seminal *The Concept of Law* (hereafter referred to as *Concept*).[86] Overall, *Concept* is a staunch defence of legal positivism, which aims to provide a non-culturally specific and morally-neutral approach to the description of law.[87] It is useful to bear in mind an overview of Hart's endeavour in *Concept*, in order to recognise the restricted use of his work for my purposes. The argumentative arc of *Concept* consists of at least three theoretical moves.

First, Hart examines Austin's command theory – that a law is defined as a command given by a sovereign that obliges a person or persons to a course of conduct.[88] Hart ultimately rejects the idea that law is merely such a 'gunman situation writ large'.[89] Austin's linguistic vagueness comes under particular scrutiny,[90] and Hart notes several

[85] Hart (n 5) 199.
[86] Hart (n 5).
[87] Hart clarifies this ambition in his postscript (Hart (n 5) 239-240). Again, as I am not concerned with the distinction between natural law and positivism *per se*, whether Hart achieves his aims is a matter for separate debate. Perry criticises Hart's methodologies, whereas Moore writes in defence of Hart (Stephen R Perry, 'Hart's Methodological Positivism' (1998) 4 Legal Theory 427; Leighton Moore, 'Description and Analysis in the Concept of Law: A Response To Stephen Perry' (2002) 8 Legal Theory 91; Michael Moore, 'Hart's Concluding Scientific Postscript' (1998) 4 Legal Theory 301).
[88] Hart (n 5) 18-25; Austin (n 53) 16-17. Austin's command theory of law was influenced by that of Bentham (Bentham, *The Works of Jeremy Bentham* (n 23) 506).
[89] Hart (n 22) 603.
[90] Hart critiques Austin's use of 'command' and 'address' (Hart (n 5) 18-25).

ways in which certain laws and legal systems manifestly do not conform to Austin's formulation.[91]

Overall, Hart argues that Austin's 'root cause of failure is that the elements out of which the [command] theory was constructed, viz the idea of orders, obedience, habits, and threats, do not include, and cannot by their combination yield, the idea of a rule, without which we cannot hope to elucidate even the most elementary forms of law.'[92] *Second*, by way of remedy, Hart draws a distinction between primary rules of obligation and secondary rules of recognition, change, and adjudication, the fusion of which lies 'at the centre of a legal system'.[93]

The *third* and final theoretical move of *Concept* is Hart's response, as a legal positivist, to theories of natural law. Having critiqued Austin's command theory, and having offered a description of law as the union of primary and secondary rules in its stead, Hart then seeks to defend his position against the natural law theorist's insistence that law is necessarily connected with morality.[94]

In this discussion, however, Hart makes one concession to natural law. Hart concedes that the contemplation of one end in particular – *survival* – allows the determination of 'certain elementary truths of importance for the understanding of both morality and law.'[95]

Hart arrives at this concession through a more general consideration of the traditional teleological view that humans, just like acorns and leaves, are 'thought of as tending towards a specific optimum state or end.'[96] Psychologically-speaking, Hart believes that

[91] These inconsistencies include the contents of certain laws (particularly those that confer power), modes of origin other than 'explicit prescription', and the ubiquitous limitations on legislators (Austin's 'sovereigns') (Hart (n 5) 79).
[92] Hart (n 5) 80.
[93] Hart (n 5) 99.
[94] Hart (n 5) 155-156.

[96] Hart (n 5) 190.

the equation of observed patterns in nature with characteristic modes of change (such as acorns growing into oak trees) 'overlaps with modern thought'.[97]

Hart argues that on the traditional teleological view, while humans are able to desire the end of survival (amongst others) consciously, 'this optimum state is not man's good or end because he desires it; rather he desires it because it is already his natural end'.[98] Hart writes that

> though it is true that some men may refuse to eat or rest because they wish to die, we think of eating and resting as something more than things which men regularly do or just happen to desire. Food and rest are human needs, even if some refuse them when they are needed. Hence we say not only is it natural for all men to eat and sleep, but that all men ought to eat and rest sometimes, or that it is naturally good to do these things.[99]

Hart continues that

> [i]t will be rightly observed that what makes sense of this mode of thought and expression is something entirely obvious: *it is the tacit assumption that the proper end of human activity is survival, and this rests on the simple contingent fact that most men most of the time wish to continue in existence*.[100]

While the view that the end of humans is independent of desire is implicit in everyday language,[101] Hart believes that

> we can, in referring to survival, discard, as too metaphysical for modern minds, the notion that this is something antecedently fixed which men necessarily desire because it is their proper goal or end. Instead we may hold it to be a mere

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[98] Hart (n 5) 190.
[99] Hart (n 5) 190.
[100] Hart (n 5) 191. Emphasis added.
[101] The teleological view of natural ends 'is latent in our identification of certain things as human *needs* which it is *good* to satisfy and of certain things done to or suffered *by* human beings as *harm* or *injury*' (Hart (n 5) 190).

> contingent fact which could be otherwise, that in general men do desire to live, and that we may mean nothing more by calling survival a human goal or end than that men do desire it.[102]

It is this tacit assumption of the end or desired end of survival that Hart believes represents the 'core of good sense in the doctrine of Natural law.'[103] The drive for survival is described classically as *perseverare in esse suo*: 'the endeavour, the effort [of every man], which he makes to continue to be a man, not to die.'[104] It is on this 'core of good sense' that Hart proposes an attenuated form of natural law theory, by way of some suggested *minimum content*. This is a reconciliation with a school typically understood to be antipodal to Hart's legal philosophy; d'Entrèves calls it 'an understanding that goes beyond tolerance.'[105] Hart moves to articulate his concession to natural law into substantial principles:

> From this point the argument is a simple one. Reflection on some very obvious generalizations – indeed truisms – concerning human nature and the world in which men live, show that as long as these hold good, there are certain rules of conduct which any social organization must contain if it is to be viable… Such universally recognised principles of conduct which have a basis in elementary truths concerning human beings, their natural environment, and aims, may be considered the *minimum content* of Natural Law, in contrast with the more grandiose and more challengeable constructions which have often been proffered under that name.[106]

While the relevant passages in *Concept* are headed under 'The Minimum Content of Natural Law', there is no explicit instantiation of the content of these rules. Rather, Hart enumerates certain *facts* of the human condition which must be reflected in any theory of natural law: 'without such a content laws and morals could not forward the minimum

[102] Hart (n 5) 192.
[103] Hart (n 5) 199.
[104] Miguel de Unamuno, *The Tragic Sense of Life in Men and Nations* (Princeton University Press 1977) 9.
[105] d'Entrèves (n 21) 185-186.
[106] Hart (n 5) 192-193.

purpose of survival [that is taken as an end itself]'.[107] Hart refers to these facts of the human condition as *truisms*, to which I now turn.

2.2.3.1 Hart's truisms

Hart's truisms represent the 'salient characteristics of human nature upon which [the] modest but important minimum [content of natural law] rests'.[108] Taken together, the truisms 'afford a *reason* why, given survival as an aim, law and morals should include a specific content. The general form of the argument is that without such a content, laws and morals could not forward the minimum purpose of survival that men have in associating with each other'.[109]

Hart stresses the 'distinctly rational nature of the connection between natural facts and the content of legal and moral rules in this approach'.[110] Summers identifies no less than six different ways that laws and morals can be posited as 'necessarily interconnected'.[111] Summers notes that while Hart does not sort or identify these different connections in *Concept*, he does conform to the sixth type of connection; namely that 'given certain facts about human nature and the world man lives on, moral and legal rules having a minimum common content are necessary'.[112] For Hart, the connection between moral and law is merely one of *contingency*, in that the truisms provide *reasons* for the minimum content, where that content has as its aim human survival. The connection claimed is not one of *causation*, which is one of Summers' other postulated 'forms of connection between natural facts and legal or moral rules.'[113] On the point of causation between his truisms and the minimum content of natural law, Hart explains that

[107] Hart (n 5) 193.
[108] Hart (n 5) 193.

[110] Hart (n 5) 193.
[111] Robert S Summers, 'Professor H. L. A. Hart's "Concept of Law"' (1963) 1963 Duke Law Journal 629, 650.
[112] Summers (n 117) 650.
[113] Hart (n 5) 193.

> the still young sciences of psychology and sociology may discover or may even have discovered that, unless certain physical, psychological or economic conditions are satisfied, e.g. unless young children are fed and nurtured in certain ways within the family, no system of laws or code of morals can be established, or that only those laws can function successfully which conform to a certain type. Connections of this sort between natural conditions and systems of rules are not mediated by *reasons*; for they do not relate the existence of certain rules to the conscious aims or purposes of those whose rules they are. Being fed in infancy in a certain way may well be shown to be a necessary condition or even a *cause* of a population developing or maintaining a moral or legal code, but it is not a *reason* for their doing so.[114]

Furthermore, Hart argues that causal or contingent explanations of the connection between natural facts and the content of legal rules are not mutually exclusive:

> Such causal connections do not of course conflict with the connections which rest on purposes or conscious aims; they may indeed be considered more important or fundamental than the latter, since they may actually explain why human beings have those conscious aims or purposes which Natural Law takes as its starting-points. Causal explanations of this type do not rest on truisms nor are they mediated by conscious aims or purposes: they are for sociology or psychology like other science to establish by the methods of generalization and theory, resting on observation and, where possible, on experiment. Such connections therefore are of a different kind from those which relate the content of certain legal and moral rules stated in the following truisms.[115]

These passages are crucially important for understanding the nature of Hart's minimum content of natural law. The kind of empirically-discovered, causal connections that Hart mentions are precisely those which biological or evolutionary theories of law – the focus of **2.3** – seek to find. As Hart dismisses such approaches in his theory of the minimum content of natural law – or, at least, he holds them to be inconsequential in the context

[114] Hart (n 5) 193-194.
[115] Hart (n 5) 194.

of natural law theories – his minimum content should therefore *not* be understood as a biological or evolutionary theory of the roots of law, morals, or social rules. I do however revisit Hart's thoughts on causal preconditions of law in **4.3.2**.

Having contextualised Hart's truisms, I will now turn to them in substance. There is nothing to suggest that Hart saw his truisms as exhaustive (and certainly, the content of natural law resting on these truisms is explicitly minimal).[116] There are five named truisms in *Concept*:[117]

1. Human vulnerability
2. Limited resources
3. Approximate equality
4. Limited altruism
5. Limited understanding and strength of will

The fourth and fifth truisms, limited altruism and limited understanding and strength of will, will not be considered here. In overview, Hart suggests that the fact of limited and intermittent human altruism – 'men are not devils, neither are they angels' – requires rules of mutual forbearance from certain behaviours.[118] Otherwise, the fact of limited human understanding and strength of will necessitates sanctionary or punitive rules 'as a *guarantee* that those who would voluntarily obey shall not be sacrificed to those who would not.'[119]

I have discounted these two truisms from discussion for two reasons. First, it is unnecessary to describe all five truisms in detail; human vulnerability, limited resources, and approximate equality more than suffice to illustrate the theoretical character of Hart's minimum content of natural law. Second, the three truisms that I do describe possess direct thematic similarities in the works of Hobbes and Locke. This will become of particular importance in the closing **2.5** where, having rejected the claim that the ends of law and survival are concomitant, I outline my next stage of inquiry.

[116] Hart (n 5) 193.
[117] Hart (n 5) 194-199.
[118] Hart (n 5) 196.
[119] Hart (n 5) 198.

I shall now consider Hart's truisms of human vulnerability, limited resources, and approximate equality.

Human vulnerability

Hart's opening truism, human vulnerability, is framed as the most fundamental of facts that rationalise the minimum content of natural law. It is upon this fact that rules *prohibiting violence* against the human body depend. Hart explains human vulnerability and its concomitant social rules thus:

> The common requirements of law and morality consist for the most part not of active services to be rendered but of forbearances, which are usually formulated in negative form as prohibitions. Of these the most important for social life are those that restrict the use of violence in killing or inflicting bodily harm. The basic character of such rules may be brought out in a question: If there were not these rules what point could there be for beings such as ourselves in having rules of *any* other kind? The force of this rhetorical question rests on the fact that men are both occasionally prone to, and normally vulnerable to, bodily attack.[120]

This vulnerability to certain forms of bodily attack is a direct consequence of the particular material anatomy of humans. To illustrate, Hart presents a counterfactual scenario, whereby a different anatomy of the human body would dispense of the need for prohibitions on violence. He evokes, by inference, the image of a 'carapaced human':

> Yet though [human vulnerability] is a truism it is not a necessary truth; for things might have been, and might one day be, otherwise. There are species of animals whose physical structure (including exoskeletons or a carapace) render them virtually immune from attack by other members of their species and animals who have no organs enabling them to attack. If men were to lose their vulnerability

[120] Hart (n 5) 194.

> to each other there would vanish one obvious reason for the most characteristic provision of law and morals: *Thou shalt not kill*.[121]

Thus, for Hart, it is the fact that humans are physically susceptible to maiming and mortal damage, alongside the general observation that humans desire to survive, which gives rise to the need for prohibitions on violence as one minimum content of natural law. These tropes are seen readily in the works of Hobbes and Locke already visited. In substance, such rules are laws against murder, assault, and the like.

I will now turn to a second of Hart's truisms: that of *limited resources*.

Limited resources

Hart's second natural fact pertains to resources. 'Resources' are not specifically defined in *Concept*, but the examples consist of materials that have some kind of utility for human survival. This is in keeping with Hart's underpinning idea that the desired end of survival rationalises some minimum content of natural law. Given the natural fact that resources are limited, Hart concludes that in the very first instance *rules of property ownership*, and the attendant rights and duties, are needed. Hart explains that

> [i]t is a merely contingent fact that human beings need food, clothes, and shelter; that these do not exist at hand in limitless abundance; but are scarce, have to be grown or won from nature, or have to be constructed by human toil. These facts alone make indispensable some minimal form of the institution of property (though not necessarily individual property), and the distinctive kind of rule which requires respect for it. The simplest forms of property are to be seen in rules excluding persons generally other than the 'owner' from entry on, or the use of land, or from taking or using material things. If crops are to grow, land must be secure from indiscriminate entry, and food must, in the intervals between its growth or capture and consumption, be secure from being taken

[121] Hart (n 5) 194-195.

> from others. At all times and places life itself depends on these minimal forbearances.[122]

The rules contingent on the limited availability of resources, as described above, correspond in practice to the legal concepts of ownership, trespass, and theft. Yet material finitude is by no means a *necessary* fact. Similar to the way in which Hart contrasts the actual characteristics of human anatomy with those of hypothetical, more anatomically-resistant humans, Hart presents another counterfactual. He evokes the image of a 'photosynthetic human':

> Again, in [the respect of resources], things might have been otherwise than they are. The human organism might have been constructed like plants, capable of extracting food from air, or what it needs might have grown without cultivation in limited abundance.[123]

The natural fact that resources are not unlimited explains the rationale behind rules granting *exclusive uses* of material objects and land,[124] as previously described. These are what Hart terms '*static* rules, in the sense that the obligations they impose and the incidence of these obligations are not variable by individuals.'[125] In contradistinction, Hart argues that certain other characteristics of resources give rise to *dynamic rules*, which allows for ownership to be varied by individuals.[126] This is the difference between rules recognising property *ownership* in the first, most basic instance; and then rules recognising the *exchange* of that ownership. Hart explains that

> the division of labour, which all but the smallest groups must develop to obtain adequate supplies, brings with it the need for rules which are *dynamic* in the sense that they enable individuals to create obligations and to vary their incidence. Among these are rules enabling men to transfer, exchange, or sell their products; for these transactions involve the capacity to alter the incidence

[122] Hart (n 5) 196.
[123] Hart (n 5) 196.
[124] Hart (n 5) 196.
[125] Hart (n 5) 196.
[126] Hart (n 5) 197.

> of those initial rights and obligations which define the simplest form of property.[127]

These dynamic, obligation-creating rules clearly allude to legal *contracts*. In the passage quoted above, the alterations of property rights describe situations where physical resources, derived from separate labour-tasks, are simultaneously exchanged (as when, at a market-stall, a blacksmith exchanges their tools for a fisherman's catch). However, deferred exchanges of resources, or labour or services *in themselves*, may also be the subject of these dynamic rules:

> The same inescapable division of labour, and perennial need for co-operation, are also factors which make other forms of dynamic or obligation-creating rule necessary in social life. These secure the recognition of promises as a source of obligation… Where altruism is not unlimited, a standing procedure providing for such self-binding operations is required… to ensure the predictability necessary for cooperation. This is most obviously needed where what is to be exchanged or jointly planned are mutual services, or wherever goods which are to be exchanged or sold are not simultaneously or immediately available.[128]

Hart's reference to division of labour and the 'perennial need for cooperation' contextualises mutual services as *labour*. I have already described how Locke allied natural resources, labour, and property title under one conceptual schema.[129]

On the basis that human survival is an end desired in itself, I have so far considered the *necessary* connection between two *contingent* truisms and some minimum content of law in pursuit of that aim. The first truism, that of human vulnerability, rationalises the need for social rules prohibiting harm to the human body; the second truism, that of limited resources, rationalises the institution of property and contracts for exchange of goods and services. I turn now to the third and final truism that is of interest here – approximate equality.

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[127] Hart (n 5) 196-197.
[128] Hart (n 5) 197.
[129] Locke, *Two Treatises of Government* (n 2) 130.

Approximate equality

The truism of approximate equality is different in tone from Hart's other four truisms. While the facts pertaining to human vulnerability, resources, altruism, and strength of will are cast as *limitations*, approximate equality is rather a truism that asserts the *equality of limitations for all*. Approximate equality appears as the second truism in *Concept*, apparently to highlight its most significant affect on the first truism of human vulnerability. In this respect, Hart explains that

> [m]en differ from each other in physical strength, agility, and even more in intellectual capacity. None the less it is a fact of quite major importance for the understanding of different forms or law and morality, that no individual is so much more powerful than others, that he is able, without cooperation, to dominate or subdue them for more than a short period. Even the strongest must sleep at times and, when asleep, temporarily loses his superiority. This fact of approximate equality, more than any other, makes obvious the necessity for a system of mutual forbearance and compromise which is the base of both legal and moral obligation.[130]

In keeping with his contention that the truisms are merely contingent facts, Hart again presents a counterfactual apropos approximate equality:

> Again, things might have been otherwise. Instead of being approximately equal there might have been some men immensely stronger than others and better able to dispense with rest, either because some were in these ways far above the present average, or because most were far below it. Such exceptional men might have much to gain by aggression and little to gain from mutual forbearance or compromise with others.[131]

Similar statements on the approximate equality of humans is apparent in both Hobbes' and Locke's conceptions of the state of nature. As a driving factor of the state of war, I

[130] Hart (n 5) 195.
[131] Hart (n 5) 195.

have already considered Hobbes' characterisation of the homogeneity of the 'brittle' human frame.[132] Otherwise, while Locke is concerned with the principles of equal *freedom* and *liberty*, he derives these from self-evident forms of pre-political approximation. The starting point, of course, is God's creation. Humans are 'the workmanship of one omnipotent and infinitely wise Maker'; and so,

> being furnished with like faculties, sharing all in one community of Nature, there cannot be supposed any such subordination among us that we may authorise us to destroy one another, as if we were made for another's uses, as the inferior ranks of creatures are for ours.[133]

The inspection of Hart's truisms concludes the group of natural law theories of human survival. I now turn to the second group of theorisations – theories of evolutionary biology and law. As with the preceding natural law theories, I will demonstrate how theories of law that have recourse to evolutionary biology often claim a concomitancy between the ends of law and human survival. As such, the theories that I visit here are in themselves also highly pertinent to my examination – and eventual rejection – of the claim that law promotes human survival. In **1**, I identified this claim as a prominent strand of thought in legal philosophy.

It is worth mentioning that the link between the natural law theories just considered, and the following evolutionary theories of law, often runs deeper than a shared focus on survival. In particular, all the theories I consider in this chapter reflect, in some way or other, on human *origins*. As I have shown, Hobbes' and Locke's theories of law are both based upon views on the 'original' state of humans. For all their internal differences, their writings on this 'state of nature' evoke raw images of the pre-civil exigencies of life, including protection from violence and the security of resources. Evolutionary theories of law also proceed from a view of 'original' human nature,[134] and as I shall show shortly, they similarly centralise violence and resources in their theoretical narratives surrounding this original state of humans.

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[132] '[H]ow easy a matter it is, even for the weakest man to kill the strongest' (Hobbes, *Man and Citizen* (n 1) 114).

[134] Zaluski (n 14) xi-xii.

I argue here that Hart's minimum content of natural law represents a theoretical bridge between the natural law theories of Hobbes and Locke and the evolutionary theories of law. First, Hart's response to natural law theorists – where he names Hobbes explicitly – is to examine their 'empirical good sense'[135] in a distinctly anthropological way.[136] Hart also flirts with the possibility of scientific explanations of law when he suggests that 'the still young sciences of psychology and sociology may discover or may even have discovered' causal preconditions of law.[137] Moreover, while biological explanations are explicitly not the purpose of his minimum content theory,[138] one of Hart's truisms not considered in this chapter concerns human altruism,[139] which is a theme that has become of great importance in many evolutionary theories of law.[140]

It is enough to mention in passing this deeper melding of foci and themes in the legal theories covered in this chapter. The primary message here is that natural law and evolutionary theories of law both posit the concomitancy of the ends of law and survival, which is the central claim that I seek to investigate – and which I eventually reject. With that said, I will now turn to consider theories of evolutionary biology and law.

[135] Hart (n 5) 191.

[136] It is an anthropological approach in the sense that Hart claims his truisms are 'elementary truths concerning human beings, their natural environment, and aims', and his minimum content as 'in fact constitut[ing] a common element in the law and conventional morality of all societies' (Hart (n 5) 193). Elsewhere in *Concept*, Hart makes anthropological observations on 'primitive societies' to illustrate aspects of his primary and secondary rule dichotomy (Hart (n 5) 91-92). Many argue that Hart's treatment of so-called 'primitive societies' is anthropologically-naïve (S Roberts, *Order and Dispute* (Penguin 1979) 25; cited in McCoubrey and White (n 24) 39); but Hund argues Hart's *Concept* has merit for legal anthropology (John Hund, 'H.L.A. Hart's Contribution to Legal Anthropology' (1996) 26 Journal for the Theory of Social Behaviour 275).

[137] Hart (n 5) 193.

[138] Hart (n 5) 194.

[139] Hart (n 5) 196. As I said earlier in this section, the three truisms I did consider (human vulnerability, limited resources, and approximate equality) are sufficiently representative of his minimum content of natural law. In any case, Hart's reflection on human altruism covers only half a page in *Concept*; I provided a short summary of this coverage earlier.

[140] Gruter (n 11) 35-37; John H Beckstrom, *Evolutionary Jurisprudence* (University of Illinois Press 1989) 33.

2.3 Evolutionary biology and law

Needless to say, I can only here scrape the surface of the ways that law has been explained using the precepts of evolution. A significant problem is that several bio-evolutionary concepts – altruism, cooperation, and genetic inheritance, to name a few – are implicated in the framework of evolutionary explanations of law. This places me in a difficult position: reference to these scientific concepts is necessarily included in my survey; but in themselves they are outside the scope of this present thesis. I will thus endeavour to walk a tightrope with a drop to a shallow pool of oversimplification on my left, and a whirlpool of conceptual multiplications on my right.

In the very first instance, I will set aside from my investigation those theories that seek an understanding of law with recourse to the processes of evolution *by analogy*. In its original biological sense, Darwin's theory of natural selection states that those individual organisms best suited to their environment will have a greater chance of survival and reproduction; the beneficial traits of those individuals will thus be proliferated in the wider population.[141] This idea of differentiation, selection, and proliferation (*evolution*, simplistically put) has subsequently been adopted to explain phenomena in numerous spheres outside of the biological.[142]

Elliott describes how the notion that common law evolves in a Darwinian fashion 'is so deeply ingrained in Anglo-American legal thought that most lawyers are no longer even conscious of it as a metaphor.'[143] The general contention is that, if one of a number of competing rules (whether potential or extant) proves better suited to resolving a certain legal issue, then that rule could be expected to be adopted in the legal system, and

[141] Charles Darwin, *The Origin of Species* (Harper Collins 2011) 88-91.

[142] 'Universal Darwinism' is the term used to describe the principle that evolutionary processes apply beyond the biological (see Geoffrey M Hodgson and Thorbjørn Knudsen, *Darwin's Conjecture* (University of Chicago Press 2010)). It has particular resonance in economics: Adam Smith's invisible hand of capitalism, where individual competition was seen as leading to an efficient economy that functioned for the good of all, greatly inspired Darwin himself (Adam Smith, *The Wealth of Nations* (Penguin Books 1986); Nicholas H Barton and others, *Evolution* (Cold Spring Harbor Press 2007) 15).

[143] Elliott provides an excellent overview of the use and implications of evolutionary theory in jurisprudence (E Donald Elliott, 'The Evolutionary Tradition in Jurisprudence' (1985) 85 Columbia Law Review 38).

similar solutions to proliferate in future.[144] Holmes for example observed that legal rules, being necessarily determined by the particular mores of their time and place, are then wont to change when those mores are no longer prevailing.[145]

Elliott identifies in Holmes' thought the biological and evolutionary analogies of transformation, cycles, and pathology.[146] Holmes posits that legal change is like 'the struggle for life among competing ideas, and of the ultimate victory and survival of the strongest.'[147] He also describes the continued survival of outmoded legal doctrines using the metaphor of vestigial anatomical features in organisms.[148]

As Elliott points out, however, the nineteenth century conception of evolution was quite different to the modern scientific conception, such that 'Holmes demonstrably did not have genes in mind when [he] spoke of evolution.'[149] Instead, Holmes was left to operate on the basis of *metaphor* and *analogy* between systems of gradual change – ie, between the legal and the organic. Analogical evolutionary theories of law by analogy

[144] Elliott, 'The Evolutionary Tradition in Jurisprudence' (n 150) 50-51.
[145] Holmes maintained that '[t]he common law is not a brooding omnipresence in the sky' (*Southern Pacific Co v Jensen* (1916) 244 US 205, 222). Rather, '[e]very important principle which is developed by litigation is in fact and at the bottom the result of more or less understood views of public policy in the last analysis… it will be found that, when ancient rules maintain themselves… new reasons more fitted to the time have been found for them, and that they gradually receive a new content, and at last a new form, from the grounds to which they have been transplanted' (Oliver Wendell Holmes, *The Common Law* (Mark De Wolfe Howe ed, Macmillan 1968) 32). Beyond these descriptive statements, Holmes believed that this fluidity in the law and its institutions is *desirable*. This places him in opposition to Burke, who saw that by trouncing inherited doctrine, 'men would become little better than flies in the summer' (Edmund Burke, *Reflections on the Revolution in France* (Frank M Turner ed, Yale University Press 2003) 81). The core message here is that thoughts of *legal* flux and change are conducive to analogies with *biological* evolution – core tenets of which are flux and change. This analogising is put quite poetically, albeit not intentionally, by Burke and his summer flies. I posit my own conception of legal Flux in **5**.
[146] E Donald Elliott, 'Holmes and Evolution: Legal Process as Artificial Intelligence' (1984) 13 Journal of Legal Studies 113.
[147] Oliver Wendell Holmes, 'Law in Science and Science in Law' (1899) 12 Harvard Law Review 443, 449.
[148] 'But just as the clavicle in the cat only tells of the existence of some earlier creature to which a collar-bone was useful, precedents survive in the law long after the use they once served is at an end and the reason for them has been forgotten' (Holmes (n 152) 31).
[149] Elliott, 'Holmes and Evolution' (n 153) 119.

have continued into modern times by scholars like Priest, Clark, and Roe.[150] Evolutionary analogies can also be seen in Luhmann's application of his general systems theory to law.[151] Of systems theory, Přibáň comments that '[i]t would be hard to find a similar general theory in modern history of social science which relies so heavily on metaphors, arguments, and the conceptual framework of biological evolutionary theories.'[152]

While certainly deserving of attention elsewhere, I am not concerned here with ways in which the process of change in law has been described as an evolutionary process, or analogised with other biological concepts.[153] Instead, placing in mind my inquiry into the claim that the ends of law and survival are concomitant, I seek to draw to light more direct links between law and bio-evolutionary drives for survival. As will become clear, these reflections on survival, and my rejection of a concomitancy with law, ultimately form the inspiration for a turn towards theorising law's inescapable materiality.

Aside from analogical applications of evolutionary theory to law, also deserving of mention here is Spencer, a major nineteenth century theorist who adopted a biological approach to sociology.[154] Spencer took the laissez-faire view that the law does and

[150] George Priest, 'The Common Law Process and the Selection of Efficient Rules' (1977) 6 Journal of Legal Studies 51; Robert C Clark, 'The Interdisciplinary Study of Legal Evolution' (1981) 90 The Yale Law Journal 1238; Mark J Roe, 'Chaos and Evolution in Law and Economics' (1996) 109 Harvard Law Review 641.

[151] Very simply put, Luhmann conceives of a world of various 'systems', which all possess unique internal operations. Through the process of 'communication', systems self-determine their boundaries by selecting from a possible number of internal operations. In this way, they differentiate themselves from their more complex environment, and self-replicate autopoietically (Stephan Herting and Lars Stein, 'The Evolution of Luhmann's Systems Theory with Focus on the Constructivist Influence' (2007) 36 International Journal of General Systems 1, 10; Niklas Luhmann, *Social Systems* (Stanford University Press 1995); Niklas Luhmann, Klaus A Ziegert and Fatima Kastner, *Law as a Social System* (Oxford University Press 2004).

[152] Jiří Přibáň, 'Review of Law as a Social System' (2005) 32 Journal of Law and Society 325.

Elliott's survey of theories crossbreeding 'law and biology' shows that they are not restricted to metaphors of Darwinian evolution; there are a whole raft of other theories, which Elliott calls 'bio-mimetic', that coopt concepts from other areas of biological science (Elliott, 'Law and Biology' (n 10) 600). Elliott himself, for example, uses scientific knowledge of host-parasite relationships to explain the 'problem of the commons' in environmental law (E Donald Elliott, 'The Tragi-Comedy of the Commons: Evolutionary Biology, Economics and Environmental Law' 20 Virginia Environmental Law Journal 17).

[154] Freeman (n 33) 838.

should be allowed to change organically, so as not to interfere with the universal law of the 'survival of the fittest';[155] a term that he coined.[156] Spencer wrote that

> [n]othing but bringing him [an imprudent man] face to face with stern necessity, and letting him feel how unbending, how unpitying, are her laws, can improve the man of ill-governed desires… all interposing between humanity and the conditions of its existence – cushioning-off consequences by poor-laws or the like – serves but to neutralize the remedy and prolong the evil.[157]

While Spencer's evolutionary thoughts on law have been highly influential,[158] I have not included him in my analysis of evolutionary theories of law (**2.3.2**) for two reasons. First, like Holmes', Spencer's works date from the nineteenth century, and so his biological arguments lack the same empirical basis that modern theories of law and biology might enjoy.[159] In fact, some doubt that Spencer's theory is even an *evolutionary* theory in the modern sense of the term in the first place.[160] Therefore, the stability of Spencer's science in comparison with more modern evolutionary theories of law is enough to question his inclusion for my purposes here.

Second, and more important for my analysis in this chapter, Spencer's laissez-faire view of law often places him in the inverse position of arguing that the ends of law and survival are *conflicting*, not concomitant. This argument is clear in Spencer's passage quoted above, where he laments the introduction of social welfare laws, which he argues would promote the survival of indigents to the detriment of humanity *as a whole*, and even to the detriment of those who are indigent.[161] This line of argument amounts

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[155] Herbert Spencer, *Social Statics* (John Chapman 1851) 354.
[156] Herbert Spencer, *The Principles of Biology*, vol 1 (Williams and Norgate 1864) 444-445.
[157] Spencer (n 162) 353-354.
[158] Michael Taylor, *The Philosophy of Herbert Spencer* (Bloomsbury 2007) 1-3.
[159] Buckley, for one, claims that Spencer was ignorant of the biological concepts of speciation and phylogeny (Walter Buckley, *Sociology and Modern Systems Theory* (Prentice-Hall 1967) 12-13).
[160] Valerie A Haines, 'Is Spencer's Theory an Evolutionary Theory?' (1988) 93 American Journal of Sociology 1200, 1201; Robert G Perrin, 'Herbert Spencer's Four Theories of Social Evolution' (1976) 81 American Journal of Sociology 1339, 1342.
[161] 'Let us never forget that the law is – adaptation to circumstances, be they what they may. And if, rather than allow men to come in contact with the real circumstances of their position,

to what Parsons sees as Spencer's call for the 'negation of social control'.[162] As such, Spencer's contrary view is discounted from my investigation into those theories that claim that the ends of law and survival *are concomitant*.

With analogical and Spencerian evolutionary theories discounted, I will now turn to consider an underlying theoretical issue facing the evolutionary theories of law that I visit in **2.3.2**. As with natural law theories, what underpins these evolutionary theories of law is a particular outlook on the proper place of teleology. It is important therefore to preface discussion with an overview of the statuses of teleology in evolutionary theory and biological sciences more generally.

2.3.1 Teleology in biological sciences

The role of teleology in the biological sciences is less clear-cut than it is in natural law theories. In fact, it is incredibly contentious. The role of teleological thinking in the studies of human biology and evolution can be explained with some pithy observations on the ordinary workings of the human body. Upon injury, the body appears to seek to 'repair itself' without any conscious or external intervention. On the occasion of a cut, for example, blood begins clotting so as to prevent loss and infection. Otherwise, humans bodies appear to regulate food intake by drawing attention when the stomach is empty, and digesting and disposing of artefacts when the stomach is full. Such observations were accounted for in ancient times with the Hippocratic conception of vital spirits, which inhabited and governed the body towards particular ends. Thus, as Haldane explains, 'a "vegetative spirit" was supposed to preside over the processes of digestion and assimilation of food, a "vital spirit" over such activities as those of the heart or breathing, and an "animal spirit" over nervous and emotional phenomena.'[163]

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we place them in artificial – in false circumstances, they will adapt themselves to these instead; and will, in the end, have to undergo the miseries of a re-adaptation to the real ones' (Spencer (n 162) 354).

[162] Talcott Parsons, *Sociological Theory and Modern Society* (Free Press 1967) 30.

[163] JBS Haldane, *Philosophy of a Biologist* (Clarendon Press 1935) 32.

This vitalist view persisted in one form or another, among biologists and chemists alike, well into the middle of the nineteenth century, and even into the twentieth century. Of these proponents, Driesch is notable. Driesch's vitalist thinking was inspired by scientific findings on healthy embryo development – in spite of outside interference – and organ regeneration in animals. He described this potential or organising life-force as *entelechy*, a term requisitioned from Aristotle's metaphysics.[164]

However, Darwin's theory of natural selection seriously challenged the idea that the human body and its evolution are inherently ordered towards any pre-determined end.[165] Rather, the (conventional) modern view is that evolution is *not* end-directed, but that natural selection operates upon phenotypic variations caused by random gene mutations.[166] *Henderson's Dictionary of Biological Terms* thus immediately describes biological teleology as an 'invalid view'.[167]

Two prominent modern evolutionary biologists, Dennett and Gould, are highly sceptical of biological teleology. Dennett defends the idea that Darwin broke with previous naturalists' insistence on organic teleology;[168] and Dennett himself argues that '[t]he theory of natural selection shows how everything in the natural world *can* be the product of a blind, unforesightful, nonteleological, ultimately mechanical process'.[169] Gould takes a similar line: Richards writes that Gould 'reject[s] utterly any notion of

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[164] Hans Driesch, *The History and Theory of Vitalism* (CK Ogden tr, Macmillan 1914). I shall revisit the thoughts of Driesch, and vitalism more generally, in later discussions concerning material agency (**3.3.2**).

[165] Apart from the challenges presented by Darwin's theory, Haldane also notes that vitalism fell out of favour due to a recognition of its 'internal inconsistencies… similar in nature to those in the Cartesian idea of a mind or soul in a causal relationship with an independent physical world in and around the body' (Haldane (n 170) 35).

[166] L Gold and J Walker, 'Directed Evolution' in Stanley Maloy and Kelly Hughes (eds), *Brenner's Encyclopedia of Genetics*, vol 2 (Elsevier Inc 2013) 325. Here it is expedient only to consider the conventional view of evolutionary biology.

[167] Eleanor Lawrence (ed), 'Teleology', *Henderson's Dictionary of Biological Terms* (12th edn, Pearson Education 2000) 626.

[168] Daniel C Dennett, *Darwin's Dangerous Idea* (Penguin Books 1995) 64-67. For further reading on the claim that Darwin was a biological teleologist, see James G Lennox, 'Darwin Was a Teleologist' (1993) 8 Biology and Philosophy 409. Cf Michael T Ghiselin, 'Darwin's Language May Seem Teleological, but His Thinking Is Another Matter' (1994) 9 Biology and Philosophy 489.

[169] Dennett (n 175) 315. The '*can*' here, in context, refers to a following discussion of artificial selection, which Dennett ultimately argues is just as nonteleological as natural selection (Dennett (n 175) 315-317).

guidance in evolution by teleological factors'.[170] In his own words, Gould writes that '[l]ife is a copiously branching bush, continually pruned by the grim reaper of extinction, not a ladder of predictable progress.'[171] 'Extinction is the fate of most species,' Gould observes.[172]

Even if modern evolutionary biology has no conceptual need for teleology, it has nonetheless had a hard time distancing itself from it, in spite of what Vitale describes as the 'obsessive desire' to purge it from the field.[173] Instead, the modern scientific position conflicts with the language often 'on the lips of biologists',[174] who continue to talk and write, intentionally or not, of organisms or their parts in terms of their *functions*. Indeed, Dennett believes that some biologists 'build their whole careers around the functional analysis of this or that (an organ, patterns of food-gathering, reproductive "strategies," etc.'[175]

Teleologically-sceptical evolutionary biologists often draw a distinction between teleological language and teleological explanation (or, an *epistemologically*-expedient recourse to teleological language; and an actual *ontological* view of teleology). Dawkins holds that the language of purpose, whether it is attached to a gene or whole organisms, is best seen as a convenient, short-hand metaphor.[176] Driesch himself offers a distinction between descriptive teleology – where organisms and their parts are seen as 'being purposive… only in the sense in which processes in a machine made by men are purposive' – and a deeper, autonomous teleology (vitalism).[177]

Other biologists have opted for new terminology altogether. Pittendrigh coined the word 'teleonomy' to describe 'end-directedness' in biological phenomena in

[170] Robert J Richards, *The Meaning of Evolution* (University Of Chicago Press 1992) 176.
[171] Stephen Jay Gould, *Wonderful Life* (W W Norton 1990) 35.
[172] Stephen Jay Gould, *Ever Since Darwin* (Pelican 1981) 90.

[174] Elliott Sober, *Philosophy of Biology* (Oxford University Press 1993) 86.
[175] Dennett (n 175) 126.
[176] Richard Dawkins, *The Selfish Gene* (30th anniversary, Oxford University Press 2006) 196.
[177] Driesch (n 171) 4.

particular.[178] He argued that a distinct concept was needed to encapsulate the apparent function or purpose of naturally-occurring biological structures, which, unlike man-made artefacts, have no immediately obvious use or purpose.[179] The need for a distinct language in evolutionary biology to bridge this disjunction was later endorsed and developed by Huxley and Mayr.[180]

While it has been important to conduct due diligence on the knotty problem of teleology in evolutionary biology in general, I am able to bracket the issue for my purposes. It is not just that this problem in the philosophy of science falls outside of the remit of my thesis. Rather, it is enough that *in fact* the evolutionary theories of law that I visit unequivocally posit law as end-directed towards survival. Such claims come in forms like 'legal behaviour may be an innate biological mechanism, vital for survival';[181] '[l]aw is… an adaptive mechanism for the maintenance (effective survival) of the individuals, subgroups and the entity that constitute a society';[182] and 'legal norms will help promote an attitude among group members that may enhance group cohesion and thus the survival and reproduction of group members.'[183]

Scrutiny of such claims, when they are pitched on the turf of legal philosophy, is not dependent upon whether this teleological language is meant metaphorically, or actually espouses a view of goal-directedness in biological evolution. I am not concerned with the latter; and even if teleological language is used 'merely' metaphorically, it is no less pertinent to my inquiry to call into question the validity of such metaphors.

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[178] Colin S Pittendrigh, 'Adaptation, Natural Selection and Behavior' in Anne Roe and George Gaylord Simpson (eds), *Behavior and Evolution* (Yale University Press 1958) 394.
[179] Pittendrigh (n 185) 394. Sober takes a similar position to Pittendrigh. Sober writes that '[w]e have no trouble discerning the function of a knife because knives are created and used with certain intentions [eg, to cut]… This raises the question of what it could mean to apply the concept of function to objects that are not the products of human handiwork… if we wish to give a purely naturalistic account of the living world, how can the idea of function make any literal sense?' (Sober (n 181) 82-83).

[181] Gruter (n 10) 43.
[182] E Adamson Hoebel, 'Anthropology, Law and Genetic Inheritance' in Margaret Gruter and Paul Bohannan (eds), *Law, Biology & Culture* (Ross-Erikson 1983) 31.
[183] Hendrik Gommer, 'Integrating the Disciplines of Law and Biology: Dealing with Clashing Paradigms' (2015) 11 Utrecht Law Review 34, 37.

With this in mind, I will now turn to consider what constitutes the substance behind the claim that, from an evolutionary perspective, the ends of law and human survival are concomitant.

2.3.2 Evolutionary theories of law

As I said in **2.3**, my investigation here could easily become interminable, given the vast body of scientific literature on this topic. However, there are a few theorists notable for their forthright contention that law – and social rule-following behaviour more generally – is an adaptive behaviour, originating from or through the generalised evolutionary *drive for survival*. I will focus particularly on the works of Gruter, who by all accounts began the movement of 'law and biology' in the 1980s.[184] Others – including Elliott and Bohannan – similarly apply scientific findings to cast law as a biological evolutionary phenomenon.[185]

Light can be shed on these cross-pollinations of evolutionary biology and law by understanding that they engage in two particular questions. Zaluski calls these the 'ontological question' and the 'teleological-axiological question', and it will be useful for my own analysis to be alive to this distinction.[186] Ontologically, evolutionary theories of law seek to determine the biological *origins* of legal behaviour with recourse to scientific findings. Teleologically, they also purport a certain view of the evolutionary *purpose* or goals of law. Answers to these two questions are tightly bound: casting the *origins* of law within an evolutionary framework is precedent to the view that law is *purpose*d towards the end of survival (whether this meant literally or metaphorically, as discussed

[184] Elliott, 'Law and Biology' (n 10) 596.
[185] E Donald Elliott, Bruce A Ackerman and John C Millian, 'Toward a Theory of Statutory Evolution: The Federalization of Environmental Law' (1985) 1 Journal of Law, Economics, & Organization 313; Elliott, 'The Tragi-Comedy of the Commons: Evolutionary Biology, Economics and Environmental Law' (n 160) 30-31; Bohannan (n 13) 147.
[186] Zaluski (n 14) 60-77 and 102-127, respectively. Zaluski also delimits the 'normativity question', or how evolutionary theory can shed light on 'the sources of the normative aspect of the law, that is, of the fact that legal norms give rise to reasons for action', and of the motivational aspect of legal norms (ix). This involves tendencies to obey authority, senses of justice, and cognitive abilities (Zaluski (n 14) 102-126).

above). I will thus deal with the 'ontological' and 'teleological' aspects of evolutionary theories of law together.

As with the natural law theories that I visited in **2.2**, evolutionary theories of law begin with some fundamental propositions concerning the basic configuration of human nature, which range from optimistic to pessimistic.[187] The natural disposition of humans in Gruter's thought is a fusion of benevolence and malevolence, which both have evolutionary functions and origins in turn. In a foreword to Gruter's *Law and the Mind*, Elliott explains that

> the essence of Margaret's vision is of the divided self. She sees two opposing spirits built into the evolutionary soul by our evolutionary past, one selfish and violent, the other altruistic and loving. Law, she believes, is one of the devices that human beings have developed to mediate between these two sides of the human soul.[188]

I argue that these two 'opposing spirits' of Gruter's can be fruitfully compared to the different views of human nature given by Hobbes and Locke. Hobbes' 'war of all against all', a consequence of the natural animus and mutual fear of humans, is redolent of the Darwinian struggle for survival.[189] Fear and anger, often concomitant with violent behaviour, are emotional states with well-theorised evolutionary origins.[190] On the other hand, Gruter's recognition of the altruistic and loving side of humans is approximately Lockean. Whereas Locke saw human altruism as a consequence of the recognition of humans' natural equality,[191] Gruter draws attention towards the extensively documented and conceptualised evolutionary origins of altruistic

[187] Zaluski (n 14) 14.
[188] E Donald Elliott in the foreword to Gruter (n 11) xiii.
[189] Conway Zirkle, 'Natural Selection before the "Origin of Species"' (1941) 84 Proceedings of the American Philosophical Society 71, 85.
[190] Fear has its neurological basis in the amygdala across species. In humans, there is also a social component to fear (Andreas Olsson and Elizabeth A Phelps, 'Social Learning of Fear' (2007) 10 Nature Neuroscience 1095). I shall pick back up on the themes of anger and violence shortly.
[191] Locke, *Two Treatises of Government* (n 2) 119-120.

behaviour.[192] Gruter's human is thus Janus, bearing faces that both Hobbes and Locke would recognise.

Upon these foundations, Gruter's contention is that law, or more specifically the behavioural *rule-following aspect* of law, is an adaptive behaviour that interrelates with other human dispositions to confer evolutionary advantage. Gruter summarises her main argument thus:

> Legal behaviour did not evolve in a vacuum… For tens of thousands of years – the period of recent human evolution – humans lived in groups ranging from 50 to 200 people. To survive, they had to find ways to raise their offspring until they reached social and biological maturity… Early in human evolution… rules that infants had to obey (if only because they could be enforced by their mothers or other groups members) were critical for survival. *Rule-following behaviour thus was intertwined with other behaviours essential for survival*. Together, they proved adaptive… [D]ispositions for rule-making and rule-following behaviour were likely to be favoured by selection, with predispositions for these behaviours becoming an integral part of the species genome.[193]

Contrary to Hobbes and Locke, then, it is not through reason alone that humans associate in structured social groups. Rather, far from being a legal *tabula rasa*, rule-following is a pre-socialised, innate behaviour formed throughout humans' evolutionary past.[194] This disposition to follow rules has evolved in response to selective pressures that other faculties of human biology alone could not resist. On this point, Elliott describes law as an 'evolutionary prosthesis':

> In a sense, it is the *shortcomings* of biology in adapting us to live in our current environment that are of the greatest interest for law; they create the niche in

[192] Abigail A Marsh, 'Neural, Cognitive, and Evolutionary Foundations of Human Altruism' (2016) 7 Wiley Interdisciplinary Reviews: Cognitive Science 59; Robert L Trivers, 'The Evolution of Reciprocal Altruism' (1971) 46 The Quarterly Review of Biology 35. This article of Trivers' was seminal for the field.
[193] Gruter (n 11) 4. Emphasis added.
[194] Michael D Guttentag, 'Is There A Law Instinct?' (2009) 87 Washington University Law Review 269.

> which law and many other social and cultural phenomena take place. If we were perfectly adapted by biology to live in our current environments, there would be no need for law or other social cultural tools. This has led me to propose that law amounts to a kind of *evolutionary prothesis* [sic] – that is, that law is useful to societies precisely to compensate for those areas in which biology does *not* suit us to live in our current environment.[195]

Whereas Gruter and Elliott describe law's general evolutionary origins and functions, Bohannan focuses on law's interface with behavioural aggression.[196] The premise is that aggressive behaviour, rooted at least in biological infrastructure,[197] creates an unstable and volatile *dyadic* relationship between the involved parties; this 'can lead to death, to flight or to relationships of dominance and submission.'[198] In Bohannan's view, law acts as a *mediator* in this dyadic relationship, thereby stabilising interactions between individuals in a *triadic* relationship:

> Law can be seen as a cultural device that evolved to… [turn] a conflicted or "adversary" dyadic relationship into a triadic group in which a third party interferes in order to "solve" the conflict, thereby getting two surfaces (culture and society) into the picture… Thus, the law is a cultural means of controlling social relationships in such a way as to reduce the physical aggression or solve the unacceptable results of aggression.[199]

In this section, I have been concerned with what Zaluski describes as the *ontological and teleological* questions posed at the theoretical juncture of evolutionary biology and law. Answers to these two questions are tightly bound together. I demonstrated how such

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[195] Elliott, 'Law and Biology' (n 10) 607.
[196] Bohannan does not recognise aggression as his *sole* focus; but maintains that '[a]mong the different kinds of somatically-based behaviour that require the attention of the legal profession, aggression ranks among the most important' (Bohannan (n 13) 156). In contrast with Bohannan, Menke (from a non-biological perspective) posits law and violence at one level as thesis and antithesis: 'law is the opposite of violence, since legal forms of decision-making disrupt the spell of violence generating more violence' (Christoph Menke, 'Law and Violence' (2010) 22 Law and Literature 1).
[197] Konrad Lorenz, *On Aggression* (Methuen & Co 1966).
[198] Bohannan (n 13) 157.
[199] Bohannan (n 13) 157.

theories describe the function or *purpose* of law – variably as a generalised 'prosthesis', or as a mediator for aggression – using the language and conceptual framework of evolutionary theory. Evolutionary theories of law also posit a causal explanation of *why* law performs those functions – invariably because, in humans' evolutionary past, legal behaviours conferred some form of advantage. Intrinsic to the claims that legal behaviour has an *evolutionary* origin and function is that legal behaviour is, in some way or another, advantageous to survival.

This draws me to the conclusion of evolutionary theories of law, and to survival theories of law as a whole. Having uncovered the principal themes and arguments concerning the general contention that law's purpose is concomitant with the end of survival, I now move to reject survival theories of law.

2.4 Rejecting the concomitancy of the ends of law and survival

In this section I will argue that teleologies of survival are in no sense necessary for the conceptual analysis of law. This argument rests upon an appreciation of the ways in which the ends of law, in a particular mode of analysis, are not concomitant with the end of human survival. First, it might be that it is not immediately obvious how particular laws advance or promote human survival. Second, it might be that some laws run *counter* to the end of survival. On this second point, more specifically, my critique shows that the notion that the ends of law and survival are concomitant derives from an arbitrary conceptual prioritisation of one 'frame of reference', to the exclusion of all others.

It should be noted that, in my critique, I am concerned only with the *teleological* claims of the survival theories of law to which I have had recourse. Apart from challenges to their teleologies, I would also question certain ontological assumptions. In particular, I challenge their distinction between 'humans' and 'things' as discrete ontological categories. This challenge is reserved for **3.3.3**, because it is immaterial to a determination of the extent to which the end of survival is concomitant with the end of

law. This ontological line of critique does nonetheless provide important points of discussion in later chapters, so it is expedient to mention it in passing here.

This chapter was stimulated by the claim that the end of human survival is concomitant with the end of law. As I have argued here, the association between survival and law has a rich history in legal philosophy.

Hobbes and Locke posited that the end of law is the security of human life, because the acceptance of law (which entails the abrogation of ultimate, individual freedom) is the price paid *in order to* best secure life and property. Hart maintained that, given certain fundamental truths about human nature and the world that humans live in, law must contain certain minimum contents that secure the end of survival if any social order is to be viable.

Outside of natural law, and Hartian concessions thereof, evolutionary theories of law conceptualise law in dual terms of its evolutionary *origins* and *purpose* with respect to survival. These theories suppose that legal behaviour has an evolutionary pedigree *because* legal behaviour can and does confer evolutionary advantages. In this way, these theories maintain that law is inseverable from the end of survival.

I contend that such teleological conceptions of law and survival are mistaken. In order to refute the notion that law necessarily promotes human survival, I argue that it is enough to demonstrate the method by which individual laws – many of which are central to the theories that I have visited – can be recast as contrary to the end of survival. This demonstration ultimately hinges upon shifting the *frame of reference* that survival theories unjustifiably assume in their approach to law.

Before I reach my critique, it is necessary to expose the underlying assumptions that survival theories of law make. There are two: an independently sound theoretical exercise concerning the theoretical determination of chances of survival (**2.4.1**); and the assumption that law has and should be analysed on the basis that it possesses discrete content (**2.4.2**). The analysis of these two assumptions will later be brought together in **2.4.3**, to form the main criticism of the claim that the ends of law and survival are

concomitant. My rejection of this claim will ultimately inspire a theoretical turn towards the question of how law is material, in the subsequent chapters of this thesis.

2.4.1 The theoretical determination of chances of survival

In this chapter, I have used the term survival to mean no more than the continuation or maintenance of human life *per se*. I have usually spoken about survival in individual terms, but sometimes in collective terms. This distinction is important later, but for now I shall continue to refer to 'human life' understood in an individual sense – ie, the life that *you* live in distinction to the life that *I* live.[200] In turn, by human life I mean no more than an everyday notion of what it means to be physically living – ie, the exhibition of certain physiological traits which act as the necessary conditions of human life.

Now, based upon an understanding of the conditions of human life, it is possible to determine in theory the likelihood that a particular circumstance (or state of affairs), *ceteris paribus*, will either decrease, increase, or have a negligible effect on the chance of survival. By likelihood, I do not mean the question of whether a circumstance is likely or unlikely *to happen*. Rather, likelihood in this context asks whether an assumed circumstance is likely or unlikely *to affect the chances of survival*.

It is best to resort to examples to explain the logical relations involved here. Table **A** below contains descriptions of two different circumstances: the introduction of arsenic to one's bloodstream, and the sterilisation and suturing of a wound. I will approach these examples in very general terms first. In each case, with reference to physiological knowledge, and to the extent that information is given, the circumstance has been sorted as being either theoretically likely to *decrease* or *increase* the *chance of survival*.

[200] The philosophical implications of speaking of life in this individualistic way are of no relevance to my investigation here. It is enough – and actually integral to the critique – that this individualism of life is assumed by the survival theories under examination. It is also in any case how life is often referred to – as in, *she* was born, *her* life changed, and *she* died. Outside of the present context, of course, the picture of an individual possession of life is somewhat illusory (see **5.2.2.2**, where I discuss human life and death in relation to my concept of Flux).

Chance of Survival

Likelihood	Decrease	No / Negligible Change	Increase
Likely	Introduction of arsenic to one's bloodstream	N / A	Sterilisation and suturing of a wound
Unlikely	Sterilisation and suturing of a wound	Introduction of arsenic to one's bloodstream Sterilisation and suturing of a wound	Introduction of arsenic to one's bloodstream

Table A

In **Table A**, each of the two circumstances appears in three different positions. This is a purely logical consequence of the antithetical nature of the terms of likely/unlikely and decrease/increase. When it has been judged a circumstance is *likely to decrease* the chance of survival, that circumstance cannot be *likely to increase* the chance of survival. However, if a circumstance is *likely to decrease* survival, then it is also necessarily *unlikely to increase* survival. For example, the introduction of arsenic to one's bloodstream is both *likely to decrease* and *unlikely to increase* the chance of survival. The same oppositional relationship is true of circumstances *likely to increase* the chance of survival – such as sterilising and suturing a wound – that are by that measure also *unlikely to decrease* the chance of survival.

This explains why the same circumstance appears at opposite corners of the table. Another logical relation apparent from the table is that, if a circumstance is *likely* to *either* increase or decrease the chance of survival, then it cannot also be *likely to produce no or negligible change*. Therefore, the same circumstance is *unlikely to produce no or negligible change* to the chance of survival. This can be seen at the bottom half of the middle column.

Table A employs examples of circumstances that are likely to either increase or decrease chances of survival. However, it can be said of some circumstances that, with reference to physiological knowledge and insofar as the circumstances are presented, they are *likely to produce no or negligible changes* to the chance of survival. This is necessarily the same as saying that such circumstances are simultaneously *unlikely to decrease* and *unlikely to increase* the chance of survival. This logical relation is demonstrated in **Table B**, using the example of the circumstance of one's core body temperature rising by 0.5ºc, which is the average daily variation.[201]

Chance of Survival

Likelihood	**Decrease**	**No / Negligible Change**	**Increase**
Likely	N / A	Core body temperature rises by 0.5ºc	N / A
Unlikely	Core body temperature rises by 0.5ºc	N / A	Core body temperature rises by 0.5ºc

Table B

It should be remembered that, overall, this exercise is not concerned with whether a certain circumstance is *likely* to happen; rather, this exercise concerns the determination of the likelihood that an assumed circumstance either *will or will not increase the chance of survival*. A circumstance will *not* increase the chances of survival if it decreases the chance, or otherwise has no or negligible effect on the chances of survival. As it is possible to determine that circumstances are likely to produce no or negligible changes, in this category may be placed any indeterminate 'null hypotheses' with respect to the *chances* of survival. This is why, at least for my purposes, I need not

[201] PA Mackowiak, SS Wasserman and MM Levine, 'A Critical Appraisal of 98.6 Degrees F, the Upper Limit of the Normal Body Temperature, and Other Legacies of Carl Reinhold August Wunderlich' (1992) 268 Journal of the American Medical Association 1578.

posit a category of likelihood in between the categories of likely or unlikely (which would amount to a '50/50 chance').

It is crucial to stress the *purely theoretical* nature of this exercise. The likely effect that circumstances have on survival may be determined only to the extent that those circumstances are expressed; no details can be assumed beyond those expressions. In practice, of course, circumstances pertaining in the world are *always* contextualised by a multitude of variables. While *in theory* one circumstance may produce one likely effect, a circumstance can *in fact* produce dramatically different effects depending on the surrounding context. It is not just that the affectivity of any *future* variables can never be ruled out; but also it will never be certain that all variables pertaining in the *present* have been accounted for. These uncertainties explain why medical prognoses are expressed in mathematical terms as percentage chances. Therefore, the *theoretical likelihood* that a circumstance produces a particular effect depends entirely upon its level of 'contextual specificity'.

Table C demonstrates the affect of varying levels of contextual specificity using the examples of the rise of one's core body temperature by 0.5ºc, when one is either hypothermic or hyperthermic.

		Chance of Survival		
		Decrease	**No / Negligible Change**	**Increase**
Likelihood	**Likely**	Rise of 0.5ºc when hyperthermic	Rise of 0.5ºc	Rise of 0.5ºc when hypothermic
	Unlikely	Rise of 0.5ºc	Rise of 0.5ºc when hypothermic	Rise of 0.5ºc
		Rise of 0.5ºc when hypothermic	Rise of 0.5ºc when hyperthermic	Rise of 0.5ºc when hyperthermic

Table C

To summarise, I have explained how it is possible to determine in theory the likelihood that a particular circumstance, *ceteris paribus*, will decrease, increase, or have a negligible effect on the chance of survival. This theoretical determination depends entirely upon the level of contextual specificity given by the expressed terms of the circumstance.

For reasons that will become apparent in **2.4.3**, I now move on to consider the idea of the 'content' of law.

2.4.2 The idea of the 'content' of law

One fairly standard way of thinking about law is that it is substantially 'about' something. In a general way, law, or 'the law', is also treated as being about different things at different times and places. It is by virtue of this quite ordinary treatment that there is differentiation between and reference to specific *laws*. It would be perfectly reasonable in an everyday sense, for example, to say that 'in Ancient Rome, marriage between plebeians and patricians was prohibited', or that 'the prosecution terminated proceedings for robbery, but continued with the charge of credit fraud'. The specific subject matter or circumstances to which a law relates is commonly referred to as its *content*.

For the purposes of legal philosophy, I am not here suggesting that law is best approached as if it possesses discrete, neatly determined and separable content. In fact, for one thing, such an approach to law is inconsistent with the routine practical difficulties of determining and applying the law. Hart points out that, due to the linguistically 'open' texture of law, all legal rules outside of their core meaning are surrounded by a 'penumbra of uncertainty'.[202] For example, a law prohibiting vehicles in a public park would certainly prohibit cars; but does the same law prohibit bicycles or toy cars in the park?[203] Hart argues that this uncertainty is not in practice resolved

[202] Hart (n 5) 12.
[203] Hart (n 22) 607.

through a merely formulaic or syllogistic analysis of legal content.[204] On this point Hart is sympathetic to legal realism, the *raison d'être* of which is a reaction against the idea that judges, in their reasoning, simply follow the 'black-letter' contents of law through to the logical conclusion of its terms.[205]

Additionally, other legal philosophers question whether the notion of content is *conceptually* relevant to law. The positivists Austin and Kelsen, for example, sought to describe legal concepts solely in abstract terms 'without regard to their content'.[206] Austin was involved in what he called the philosophy of 'general' jurisprudence – a determination of the conceptual necessities of law – which he treated as preceding the 'particular' analysis of concrete laws in 'specifically determined nations'.[207] Kelsen, who has debts to Austin's positivism,[208] similarly sought 'to determine [law's] structure and its typical forms, independent of the changing content which it exhibits at different times and among different peoples.'[209] He conceptualised law 'purely' on the basis of its normative validity and sourcing,[210] and as such posited the notion of the *content* of law as conceptually irrelevant.

Finally, for my part, I also criticise on an ontological basis the notion that law possesses discrete content. Upon inspection, this notion is contingent on an understanding of communication as 'information exchange', which is ontologically irreconcilable with my 'agentic' conceptualisation of the communication of law. This nuanced approach is explained later in **4.3.1**.

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[204] Rather, adjudicators may look instead to the *purpose* behind the law (Hart (n 5) 204).
[205] McCoubrey and White (n 24) 202-203. Llewellyn, a central figure in American realism, summarised the movement as the collective maintenance that 'there is less possibility of accurate prediction of what courts will do than the traditional rules would lead us to suppose (and what possibility there is must be found in good measure outside these same traditional rules)' (Karl N Llewellyn, 'Some Realism about Realism: Responding to Dean Pound' (1931) 44 Harvard Law Review 1222, 1241-1242). I shall revisit legal realists in relation to their approach to 'legal fictions' (**4.3.2.1**).
[206] Freeman (n 33) 13.
[207] Austin (n 53) 395.

[209] Hans Kelsen, 'The Pure Theory of Law and Analytical Jurisprudence' (1941) 55 Harvard Law Review 44.
[210] Kelsen's 'pure' theory of law is dealt with most extensively in Hans Kelsen, *Pure Theory of Law* (Lawbook Exchange 2002).

With that being said, the approach to law *as if* it possesses discrete content has obvious contextual merit. Practically, the content-approach is indispensable for people to organise their lives; and no less so for the work of police officers, lawyers, and judges. There is no incompatibility between acknowledging this organisational role of the content of law, and the sceptical claims of legal realism. The message of realists is that legal outcomes cannot be predicted solely through formal analysis of the content of the law.[211] This is of course quite different to the very real sense in which lawyers and judges engage with the law in discrete ways, by virtue of discrete content – proceedings for robbery are obviously somehow different to proceedings for credit card fraud.

For legal philosophers, too, the content-approach can be epistemically expedient, and sometimes epistemically essential. In the instance of expediency, it is often easier to theorise about law with recourse to illustrative, comparative, and critical examples. Even those who reject that particularised content is relevant to the conceptualisation of law are wont to refer to particularised content. Austin readily employs 'apt examples', such as the prohibition on the export of corn, to explicate his discussions on 'general' jurisprudence.[212]

Second, in a more essential way, the methodology of many theorists often *depends* upon the notion that law possesses discrete contents. It is of course indispensable to comparative legal theorists, who describe the positive law of legal systems in order that they may identify and explain variation.[213] Likewise, even Kelsen recognised that, methodologically, '[e]very assertion advanced by a science of law must be based on a positive legal order or on a comparison of the contents of several legal orders'.[214] The independence of Austin's 'general' jurisprudence from an analysis of particular content is also doubtful. Austin's schema of what constitutes law essentially turns upon the

[211] See the above quote of Llewellyn, at n 212.
[212] Austin (n 53) 13-14.
[213] This at least forms a basic part of the methodology of traditional comparative law (Mathias M Siems, *Comparative Law* (Second edition, Cambridge University Press 2018) 22-26). Postmodern, sociolegal, and numerical methodologies greatly extend this picture (Siems 113-114).
[214] Kelsen (n 215) xv.

generality and specificity of the *content* of sovereign commands.[215] In this sense, Austin's example of the specificity of the hypothetical 'corn law' – which directly follows his 'abstract expressions' – really betrays a methodological dependence on an analysis of particularised legal content.[216]

I will now move from this discussion on the content of law to begin my critique of the claim that the ends of law and survival are concomitant.

2.4.3 Survival chances, content, and theories of law

On the basis that law possesses 'content' that prohibits, permits, or mandates certain, discrete circumstances (**2.4.2**), it is then possible to determine in theory whether the observation of any particular law either *decreases* or *increases* the chance of survival (or at least has no or negligible effect), in line with the theoretical exercise demonstrated in **2.4.1**. Whenever the content of a law is said to be *likely to increase* the chance of survival, then its end can be said to be concomitant with the end of survival.

I argue that it is precisely this analysis of content in which survival theories of law engage. What precedes their conclusions is the quite reasonable appearance of the end of survival in many *instances* of law. I have already had occasion to visit some of these instances, a couple of which form important archetypes. In the first instance, it seems that laws prohibiting circumstances that lead to human death are the absolute examples of the way in which law secures the end of survival. Such laws may vary in detail and name, but any such law prohibiting the circumstance of human death in theory increases the chance of survival *absolutely*, and thus is said to have that as its end. A second archetypal example of laws *prima facie* having ends concomitant with the end of survival are those prohibiting individuals from taking or destroying objects without the 'permission' of their 'owner' – namely, laws on theft and property damage. The

[215] '[W]here [a command] obliges *generally* to acts or forbearances of a *class*, a command is a law or rule. But where it obliges to a *specific* act or forbearance, or to acts or forbearances which it determines *specifically* or *individually*, a command is occasional or particular' (Austin (n 53) 13).
[216] Austin (n 53) 13.

assumption of this concomitancy of ends arises from the fact that, as humans require certain materials for the sustenance of life (nutrients, land, fuel, shelter, and so on), any restriction on their appropriation or destruction is likely to increase the chance of survival.

I have shown in **2.2** and **2.3** how laws prohibiting killing and property violations are particularly central to survival theories of law – particularly those of natural law.[217] Hobbes posits law as the condition individuals accept in their social contract with sovereign powers,[218] as reason necessitates this sacrifice of liberty in light of humans' dual natural tendencies towards self-preservation and injurious violence.[219] Prohibitions of violence, stipulated in concrete laws by the sovereign, are therefore central to the very purpose of law.[220] Likewise, Hart in his concession to natural law deems prohibitions on 'the use of violence in killing or inflicting bodily harm' to be 'the most important for social life',[221] when survival is taken as an end.[222] Hart asks rhetorically, '[i]f there were not these rules what point could there be for beings such as ourselves in having rules of *any* other kind?'[223] While Hobbes and Hart also give significance to laws of property, Locke centralises property in his legal philosophy. Locke maintains that the institution of property underwrites the social contract itself;[224] given the end of human survival, sovereign laws must regulate the land and resources to which human individuals all have a natural, pre-political ownership.[225]

These theories self-evidently have these particular contents of law in mind as archetypal examples of the function of law to secure survival. It might be possible to argue that

[217] In *The Divine Comedy*, Dante places those violent against the human body and against property on the same circle of Hell (Alighieri Dante, *The Divine Comedy*, vol 1 (Dorothy L Sayers tr, Penguin) 135). This is justified theologically; if the whole universe is God's creation, then transgressions against bodies and property are just different aspects of the same sin of Violence.
[218] Hobbes, *Leviathan* (n 1) 87-88.
[219] Hobbes, *Leviathan* (n 1) 84.
[220] Alice Ristroph, 'Criminal Law for Humans' in David Dyzenhaus and Thomas Poole (eds), *Hobbes and the Law* (Cambridge University Press 2012) 103.
[221] Hart (n 5) 194.
[222] Hart (n 5) 193.

[224] Locke, *Two Treatises of Government* (n 2) 180.
[225] Locke, *Two Treatises of Government* (n 2) 129.

these theories are erroneously abstracting a singular 'purpose' of law from these particularly important instances, which in one mode of analysis do indeed have an apparent concomitancy with the end of survival. In theory it is possible to expose this induction error by positing *just one* concrete law that can be demonstrated to be either ambiguously concomitant with, or contrary to, the end of survival.

However, if to conclude that the end of an individual law is concomitant with the end of survival, it need only be asked whether its content is such that there is a *likely increase* in the chance of survival (**2.4.1**), then it is possible to provide reasoning to the end of survival in a seemingly endless number of instances.

In this mode of thought, one may for example argue that capping the speed that one may drive is concomitant with survival *because* higher speeds are in fact more likely to be injurious to life than lower speeds; that holding a restaurant owner to a certain standard of cleanliness in food preparation increases the likelihood of survival – and therefore has that as its end – *because* pathogens harm the consumer; and that a workers' rights in redundancy to continue working for a minimum period has the end of survival, as this legal right affords the opportunity to secure other means of subsistence without interruption.

Reasoning might also be given for laws seemingly very ambiguously concomitant with the end of survival. For example, although laws stipulating licencing requirements for stratospheric spacecraft do not immediately *appear* concomitant with the end of survival, they are indeed explicitly for the purpose of public safety, above all other purposes.[226] Alternatively, a law prohibiting or restricting immigration to a country might be rationalised with the end of survival on the basis that fewer inhabitants increases the available land and resources for the settled population. In fact, such reasons for tougher immigration laws, and restrictions on population growth more generally, can be traced back to Malthus.[227] Behind this reasoning lies the proposition

[226] Space Industry Act 2018, s 2(1).
[227] TR Malthus, *An Essay on the Principle of Population* (5th edn, Routledge 1996).

that any population 'must always be kept down to the level of the means of subsistence.'[228]

The reasoning behind laws ambiguously concomitant with the end of survival could always be attacked as speculative and suppositional. However, this would require testing abstract suppositions against the minutiae of the world. For example, Malthusian reasoning that a law prohibiting immigration promotes survival rests upon a riot of economic suppositions: *inter alia*, the current level and trends of the 'means of subsistence' (available land, resources, and public services); the size and working efficacy, productivity, and skill of the settled labour force; and all the same of the incoming workforce. There would need to be recourse to involved statistical evaluation and argument before determining whether or not any restrictive immigration law can truly be said to increase the chances of survival. Moreover, as by definition each individual law possesses a unique content (as law X prohibiting unlicensed spacecraft is different in content to law Y prohibiting immigration), there is the sense that the individual truth claims behind the reasoning of *every* concrete law must be evaluated, before the position that the end of law is concomitant with the end of survival may be defended.

Thankfully, rather than survival theories of law being condemned by any evaluation of reasoning behind concrete laws, I argue that there is a more important error in their supposition of a certain *frame of reference*.

2.4.4 The 'frame of reference' of survival theories of law

At the beginning of **2.4.1**, I explained that I have taken survival to mean no more than the continuation of life, which in turn means no more than the everyday notion of what it means to be physically living (the exhibition of certain physiological traits). I have considered 'life' up to this point in terms of human life *per se*, ie, as it can variously

[228] Gertrude Himmelfarb, *The Idea of Poverty* (Faber and Faber 1985) 101.

describe the life of individual humans or groups of humans – as in, *your* own life, and *their* life and lives.

I also foreshadowed that these particularised distinctions within the abstract or total view of life was critical. I argue in this section that the central mistake of survival theories of law is that their mode of analysis is restricted to one particular 'frame of reference', from which they conclude that the end of law is concomitant with the end of survival. I argue presently that this frame of reference is the life and survival of the *aggrieved human individual*. On further inspection, this is an entirely arbitrary restriction to one atomised frame of reference, and therefore the survival theories of law fail to recognise that, from different frames of reference, law cannot be said to be concomitant with survival. By shifting survival theories' supposed frame of reference away from the aggrieved individual, I show that instead of law's concomitance with survival, there can be contradiction.

I will first establish my claim that the survival theories of law that I considered in this chapter assume the frame of reference of 'human individuals' that are 'aggrieved'. I will expound each part of this claim separately (**2.4.4.1** and **2.4.4.2**), and then in synthesis (**2.4.4.3**).

2.4.4.1 'Human individuals'

First, it is important to note that, by 'human individuals', I mean *materially separate humans characterised by their own possession of life*. This is the everyday sense in which, for example, I am a living individual materially independent of your living, individual materiality. There is of course a lot more to the notion that any one human is materially separate from any other human(s). The sense of 'human individual' as 'materially separate life' has a *general everyday utility*, but it is not unproblematic. Indeed, I place the notion of material separation under particular examination in **5.2.1**, inspired by a new materialist recognition of the dynamic contingencies of matter.

With that being said, it is this meaning of individuals as materially separate, atomised humans with the end of survival that I argue is explicit, or at the very least implicit, in my readings of the preceding survival theories of law. I shall establish this in sequence, beginning with the natural law theories that I considered.

In the case of the theories of Hobbes and Locke, it is true that their meaning of 'individual' is *ultimately politicised* consequent to the social contract. Thus, Hobbes writes of the attendant rights of sovereigns and liberties of subjects;[229] and Locke writes of individuals being incorporated into the body politic, and thereby consenting to the political will of the majority.[230] However, I argue that this political individuality is nonetheless predicated, in the very first instance, on the view of *materially separate, atomised humans* that desire survival.

An underlying materialist view of individual survival is quite clear in Hobbes. In *Human Nature*, Hobbes argues that the idea of 'man in general' (or 'humanity' in general) is a deception of language; rather, there is in reality only 'particular person[s]'.[231] This atomistic view of humans is transposed to Hobbes' state of nature, which I detailed earlier in **2.2.2.1**; Hobbes portrays his state of nature using the third-person singular, which I argue makes explicit that his view of humans as materially separate individuals striving for survival is integral to his political theory. The state of nature

> is a condition of war of every *one* against every *one*; in which case every *one* is governed by *his own* reason; and there is nothing that he can make use of, that may not be a help unto him, in preserving *his life* unto his enemies; it followeth, that in such a condition, *every man* has a right to every thing; even to *one another's body*.[232]

I argue that the postulation of materially separate individuals, possessing the end of survival, also underlies Locke's political and legal philosophy. Locke similarly uses the third-person singular to describe his own state of nature. For example, Locke argues that

[229] Hobbes, *Leviathan* (n 1) 115-122 and 139-148, respectively.
[230] Locke, *Two Treatises of Government* (n 2) 165.
[231] Hobbes, *Human Nature and De Corpore Politico* (n 62) 36.

'being all equal and *independent*',[233] the law of Nature entails that '[e]very *one*… is bound to preserve himself, and not to quit his station wilfully'.[234] This *individual* survival is precedent to the survival of others: 'when *his own* preservation comes not in competition, ought he as much as he can to preserve *the rest* of mankind'.[235] In a central part of his discussion of property, which Locke's overarching theory rests upon in turn,[236] Locke posits that 'every man has a "property" in *his own* "person." This nobody has any right to but *himself*.'[237] I argue that this is a clear statement of Locke's committal to an individualised view of separate human materiality, in the very first instance.

This view of materially separate individuals possessing the end of survival is also explicit in Hart's minimum content of natural law. First, materially separated individuals are integral to his truism of approximate equality. Hart writes that '[m]en differ from *each other* in physical strength [and] agility… it is a fact of quite major importance… that no *individual* is so much more powerful than the others, that he is able, *without co-operation*, to dominate or subdue them'.[238] In terms of survival, Hart argues that this material individuality necessitates a (legal) system of 'forbearance and compromise'.[239] The view of atomised individuals with the end of survival is also explicit in Hart's truism of limited resources, which he argues necessitates contracts to 'enable *individuals* to create obligations and to vary their incidence.'[240]

Finally, I argue that the evolutionary theories of law also consider separate material individuals in their claim that the ends of law and survival are concomitant. First, provided that evolutionary theories of law accept the modern view of genes as the unit of inheritance,[241] then I suggest that a view of separate material individuals is at least

[233] Locke, *Two Treatises of Government* (n 2) 119. Emphasis added.
[234] Locke, *Two Treatises of Government* (n 2) 120. Emphasis added.
[235] Locke, *Two Treatises of Government* (n 2) 120. Emphases added.
[236] 'The great and chief end, therefore, of men uniting into commonwealths, and putting themselves under government, is the preservation of their property' (Locke, *Two Treatises of Government* (n 2) 180).

[238] Hart (n 5) 195.
[239] Hart (n 5) 195.
[240] Hart (n 5) 197.
[241] Anthony JF Griffiths and others, *An Introduction to Genetic Analysis* (7th edn, W H Freeman 2000) 1. The gene as the unit of inheritance is the dominant scientific model, but it is not

implicit because, in humans, genes are inherited through two individual organisms consequent to reproduction. Gruter, at least, commits to the view of genes as the standard unit of genetic inheritance.[242]

Second, and more conclusively, the view of materially separate individuals with survival as an end is explicit in the language that the evolutionary theorists of law employ. Gruter writes that 'as individuals we continue to be strongly pre-disposed to behave in self-interested ways, such as to assure our own and our kin's survival, to control resources, to engage in and win competitive interactions, and so on.'[243] The reference to 'kin's survival' here should not be misinterpreted as an argument for collective survival *per se*. Gruter, who supports the standard scientific view of the gene as the unit of inheritance,[244] quotes in approval Wickler, who wrote that '[h]elping one's kin can insure the survival of one's own genetic material.'[245] Bohannan's analysis of law as a mediator of aggression centres on violence in 'adversary relationships… in which *two* aggressive *persons* claim conflicting rights.'[246] Bohannan also discusses at some length biological causes of aggression at the level of the individual.[247]

I have just established my claim that the theories of law expounded in this chapter have in mind materially separate individuals with the end of survival when they claim that the ends of law and survival are concomitant. I will now argue that the second part of their frame of reference for survival consists of an individual being 'aggrieved' with respect to a circumstance that is likely to decrease their chance of survival. I explained the theoretical exercise underlying the determination that certain circumstances are likely to affect the chance of survival in **2.4.1**.

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without challenge. Many biologists instead advocate a multilevel (including group) selection model (see eg David Sloan Wilson and Elliott Sober, 'Reintroducing Group Selection to the Human Behavioral Sciences' (1994) 17 Behavioral and Brain Sciences 585; Martin A Nowak, Corina E Tarnita and Edward O Wilson, 'The Evolution of Eusociality' (2010) 466 Nature 1057; Stephen Jay Gould, 'Darwinian Fundamentalism' (1997) 44 *New York Review of Books* 34, 35-36).

[242] Gruter (n 11) 27.

[244] Griffiths and others (n 248) 1; Gruter (n 11) 27.

[245] W Wickler, *The Sexual Code* (Doubleday 1972) 1; cited in Gruter (n 11) 29-30.

[246] Bohannan (n 13) 157-158.

[247] Bohannan (n 13) 149-151.

2.4.4.2 'Aggrieved' human individuals

The starting point for the claim that survival theories of law adopt the frame of reference of an 'aggrieved' human individual is that, as I will argue, they cast law as a *dyadic relationship*. In particular, survival theories of law posit a dyadic relationship between a nominally 'aggrieved' individual and a 'transgressing' individual. I do not necessarily accept this dyad for my wider purposes because, as I shall argue in the remainder of this thesis, law involves a multiplex of material agencies. It is a dyad, however, that is adopted by the survival theories of law that I have considered.

'Aggrieved' in the context of this dyad refers to an individual human (as per **2.4.4.1**) whose chances of survival have decreased (as per **2.4.1**) as a consequence of circumstances caused by an individual who 'transgresses' the content of a particular law (as per **2.4.2**).

This aggrieved-transgressor dyad is quite clear in the natural law theories that posit a concomitancy of the ends of law and survival. Hobbes believes the sovereign has the right to punish such transgressors 'according to the law he hath formerly made';[248] and state punishment is empowered by the social contract formed by the aggrieved individual subjects.[249] Locke dedicates a large passage of his *Second Treatise* to discussions on the rights of injured (aggrieved) individuals to mete justice upon transgressors of the natural law.[250] Locke writes that 'every one has a right to punish the transgressors of that law…[251] he who hath received any damage has… a particular right to seek reparation from him that hath done it.'[252] Hart's truism of limited understanding and strength of will centres on transgressors of the law; as with Hobbes, Hart ties the aggrieved-transgressor dyad to punishment, arguing that sanctions are required 'as a *guarantee* that those who would voluntarily obey [ie, aggrieved individuals] are not sacrificed to those who would not [ie, transgressing individals].'[253]

[248] Hobbes, *Leviathan* (n 1) 120.
[249] Hobbes, *Leviathan* (n 1) 206.
[250] Locke, *Two Treatises of Government* (n 2) 120-124.

[252] Locke, *Two Treatises of Government* (n 2) 121.
[253] Hart (n 5) 198.

Finally, evolutionary theories of law also posit an aggrieved-transgressor dyad with respect to the survival chances implicated by the contents of law. As I explained in **2.3.2**, Gruter's view of human nature is dyadic: as a result of natural selection, individuals contain within themselves both self-interested and altruistic motivations.[254] Ultimately, these motivations translate to an aggrieved-transgressor dyad in law; Gruter argues that legal punishment is an outgrowth of biological drives to ostracise transgressors of social norms.[255] Bohannan similarly refers to a dyadic relationship between individuals, at least one of which is an aggressor, when he posits law as a mediator between two individuals in conflict over rights.[256]

Now that I have established my claim that the survival theories of law adopt the frame of reference of the 'aggrieved individual' when they posit the concomitancy of the ends of survival and law, I will demonstrate how this frame of reference may be shifted. Ultimately, I argue that, as there is no good reason to prioritise the frame of reference of the aggrieved individual, the teleological claim that law promotes human survival can be rejected.

2.4.4.3 Shifting the frame of reference of the 'aggrieved individual'

The first layer of criticism of the survival theories of law concerns the dyadic relationship of law that they suppose (nominally, that law is a dyad between 'aggrieved' and 'transgressing' individuals, as I explored in **2.4.4.2**). I do not accept this dyad, or the individualism that it is predicated on, without question.

The political philosophies of Hobbes and Locke in particular are founded upon a preoccupation with *individual rights* – they argue that the social contract is formed as insurance against *infractions* of these individual rights.[257] Taylor writes that this entails 'a vision of society as in some sense constituted by individuals for the fulfilment of ends

[254] Gruter (n 11) 53; E Donald Elliott in the foreword to Gruter (n 11) xiii.
[255] Margaret Gruter and Roger D Masters, 'Ostracism as a Social and Biological Phenomenon: An Introduction' (1986) 7 Ethology and Sociobiology 149, 151-152.
[256] Bohannan (n 13) 157.
[257] Harrison-Barbet (n 50) 205.

which were primarily individual.'[258] After Hobbes and Locke, this preoccupation with individual rights and ends has developed a strong correlation with theories of political *liberalism*, [259] articulated at the theoretical front by such writers as Gauthier and Rawls.[260] Rawls' liberalist theory is a modern instantiation of social contract theory, and draws in particular on Kantian moral individualism (which of course was not available to Hobbes and Locke).[261] Finnis' work also focuses on the rights of individuals; *Natural Law and Natural Rights* advances the theory that there can be no common good without individual rights.[262]

However, the preoccupation with rights of the 'individual' is certainly not without challenge. Communitarian critiques in particular advance against the assumptions of liberal individualism. Sandel writes that liberal individualism views the purpose of law as 'a framework within which its citizens can pursue their own values and ends, consistent with a similar liberty for others.'[263] However, communitarians argue that this framework errs in the supposition 'that individual rights cannot be sacrificed for the sake of the general good'.[264] Sandel believes that this is false, as the individual does not exist *prior* to any end, but *becomes* an individual with ends *by virtue* of the community and the general good. [265] The inherency of individual rights to the common good, as articulated by Finnis,[266] is criticised by Discher on the basis that '[t]here is not *always*

[258] Charles M Taylor, 'Atomism' in Shlomo Avineri and Avner de-Shalit (eds), *Communitarianism and Individualism* (Oxford University Press 1992) 29.
[259] The term 'liberalism' is a slippery one. Freeden and Stears write that '[w]hile ideologists, philosophers, and historians of political thought often proceed as if their accounts of liberalism are uncontentious, they produce manifold contrasting accounts, disagreeing on multiple axes of interpretation. It is thus crucial to recognize that liberalism is not a single phenomenon, but an assembly of family resemblances, with a rich and complex historical story and with numerous contrasting contemporary formations' (Michael Freeden and Marc Stears, 'Liberalism' in Michael Freeden and Marc Stears (eds), *The Oxford Handbook of Political Ideologies* (Oxford University Press 2013) 330).
[260] David Gauthier, *Morals by Agreement* (University Press 1987); John Rawls, *Political Liberalism* (Columbia University Press 1993).
[261] James R Otteson, 'Kantian Individualism and Political Libertarianism' (2009) 13 The Independent Review 389, 396. I revisit Kant in the context of his theory of agency in **3.3.2**.
[262] Finnis (n 36) 154-155.
[263] Michael Sandel, 'The Procedural Republic and the Unencumbered Self' in Shlomo Avineri and Avner de-Shalit (eds), *Communitarianism and Individualism* (Oxford University Press 1992) 13.
[264] Sandel (n 272) 13.
[265] Michael Sandel, *Liberalism and the Limits of Justice* (2nd edn, Cambridge University Press 1998) 178-179.
[266] Finnis (n 36) 154-155.

necessarily a mutually beneficial reciprocity between individuals and their communities: people do not necessarily always get out of them what they put into them.'[267]

MacIntyre takes a more radical position by questioning the assumption of individual natural rights in the first place: 'the truth is plain: there are no such rights, and belief in them is one with belief in witches and in unicorns.'[268] This language is evocative of the criticisms of 'legal fictions' advanced by legal realists such as Hägerström and Olivecrona.[269] From my part, I deconstruct 'legal fictions' in **4.3.2.1**, in the context of my new materialist ontology of law. It is important to mention this here, because in the first instance I am also sceptical of the use of phrases such as individual 'rights'. This scepticism, as I shall show throughout **4**, derives from my particular view that the content of law lacks any metaphysical meaning.

I will now advance a broader critique of the individualistic terms of the dyad assumed by survival theories of law. As I said, the sense of 'human individual' as 'materially separate life' is problematic, as it stands in direct conflict with the material ontology that I establish in **3**, in response to the materialistic aspects of survival theories of law. It is this ontology that I subsequently develop into a material ontology of law throughout the thesis. Because this ontology of law will be expounded in greater depth elsewhere, I will not go into great detail here.

However, the core of the charge against the notion of materially separate individuals here is that, owing to the contingency of all materiality, the notion of 'material separation' is problematised. With respect to social contract theories, I argue that 'individuals' are not apart from but *part of* wider materiality. 'Individuals', which is a term that has everyday utility, are subject to what I later describe as material Conditioning (**4**) and Flux (**5**). As such, the survival theories of law shut out the important sense in which supposedly 'materially separate individuals' are contingent on the

[267] Mark R Discher, 'Does Finnis Get Natural Rights for Everyone?' (1999) 80 New Blackfriars 19, 27.
[268] Alasdair MacIntyre, *After Virtue* (3rd edn, University of Notre Dame Press 2007) 69.
[269] Axel Hägerström, *Inquiries into the Nature of Law and Morals* (CD Broad tr, Almqvist and Wiksell 1953) 315-324; cited in Freeman (n 33) 1052-1057; Karl Olivecrona, 'Legal Language and Reality' in Ralph Newman (ed), *Essays in Jurisprudence in Honor of Roscoe Pound* (Bobbs-Merrill 1962) 152.

manifold nexus of material agency. Norrie advances such an argument, albeit not using the language of materiality, when he seeks to expose the tension between individualism and the social context underlying criminal law.[270] Norrie writes that

> [t]his contradictory location [of law] has its provenance in the Enlightenment representation of a world of free individuals coming together in civil society. However, crime is a social problem generated in ways that can be statistically correlated... This social context is refocused through law into a matter of individual responsibility, justice and deterrence. Each criminal act is relocated from the social sphere, where crime is produced, to the individual criminal agent, who is left, in less than splendid isolation, to 'carry the can'. It is this… refusal to see the individual as always-already social, that lies behind the dilemmas of legal justice and criminal law.[271]

My preceding criticisms of the individualistic, dyadic nature of law comprises only the first layer of criticism against the claim that the ends of law and survival are concomitant. *Even if* the view that law involves a dyad between individuals was convincing, or this view was accepted for the sake of argument, I argue that it is not at all clear why the frame of reference of the nominally 'aggrieved individual' – which I have shown is adopted by survival theories of law (**2.4.4.1** and **2.4.4.2**) – should be accepted to the exclusion of any other mode of teleological analysis. Indeed, in the absence of any compelling reason for the privileging of this frame of reference, I show that there is a paradox when the frame of reference of the nominally 'aggrieved individual' is shifted.

The theory involved in this shift can be demonstrated using the example of a law prohibiting the appropriation of another's property (ie, the law of theft). In the case of theft, two such individuals are legalised nominally as the 'owner' and the 'thief'. Relatively, it can be said that the 'owner' has materials stolen by the 'thief' (loss); and simultaneously the 'thief' appropriates materials from the 'owner' (accrual). Staying with the example of theft, what does a recognition of this dyad entail for survival theories of law?

[270] Alan W Norrie, *Law and the Beautiful Soul* (Glasshouse 2005) 87.

I said in **2.4.2** that the law of theft indeed appears to have survival as its end, on the quite rational basis that the securities of at least some types of materials are necessary to sustain life (nutrients, for example). Therefore, so it appears, the end of the law of theft is concomitant with the end of survival, because its prohibitory terms negate the circumstance of the loss of potentially life-sustaining materials.

However, if it is supposed that (i) the possession of materials is something which is likely to increase the chance of survival (as per the analysis described in **2.4.1**), and (ii) any loss from the owner's point of view is simultaneous and directly equivalent to an accrual from the thief's point of view, then it must be concluded that a *breach* of the law of theft also, adopting the frame of reference of the thief, is concomitant with the end of survival. This paradoxical conclusion results because it cannot be claimed, in light of supposition (i) concerning the chances of survival, that a physical accrual of materials is in any way different to the physical possession of materials (as physical accrual by definition results in physical possession).

Instead of relying upon abstract logical inference here, I will use another hypothetical example to demonstrate the paradox. Two individuals, A and B, have both been poisoned and will soon die. There is only one bottle of antidote, which is in the sole possession of A. The content of law X is such that B is injuncted not to take the antidote from A without A's permission, which A does not in fact give. B would take the antidote from A *but for* law X. B's *reasons* for electing to follow rather than breach the law are immaterial,[272] but the *consequence* of B's election is important. B dies, and so law X from B's frame of reference was not concomitant but contrary to the end of survival.

I have been using the example of the law of theft; but the same argument can in theory be substituted for any law which depends upon the aggrieved/transgressor dyad, assumed by survival theories of law. Instead of the law of theft, it is also possible that B is instead choosing to follow another law engaged by the action of snatching the antidote from A. Under English law, if B unlawfully took A's antidote, causing A's death,

[272] *Inter alia*, B might have placed in the law a religious or moral significance; significance in its normative character *per se*; or B might fear the penalties for the breach of the law of theft. Hart distinguishes between the internal and external aspect of rule-following, which amount to different psychological motivations (Hart (n 5) 82-91).

B might then also be culpable for manslaughter by an unlawful and dangerous act.[273] In this context, the end of the manslaughter law is equally contrary to the end of *B's* survival. I pointed out the importance of contextual specificity in **2.4.1**, in and around **Table C**. The *frame of reference* is one such contextual specification that can invert the determination that the end of any particular law is concomitant with the end of survival.

The point here is entirely separate from questions as to the *relative chances* of survival across the dyad as a whole. It need not matter which individual is deemed to have the 'quantitatively greatest' positive survival interest in whether the law is followed or breached – I am thinking here of the application of some form of consequentialist calculus.[274] Such quantitative evaluations are not necessary to demonstrate ways in which law can be contrary to survival; I am not concerned with the dyad as a whole, but with shifting the *frame of reference* of that dyad in order to challenge the *teleological centrism on the 'aggrieved individual'*.

Without any good reason for prioritising the 'aggrieved individual' in dyadic analyses of ends of law, it is thus possible to shift the frame of reference to challenge teleological conceptions of law and survival. It has been my contention that demonstrating how laws can in theory and in practice be interpreted as manifestly *contrary* to the end of survival condemns any notion that the end of survival is a concomitant to the end of law *in the abstract*.

I will now recapitulate on everything that I have visited in this chapter so far.

[273] *R v Goodfellow* (1986) 83 Cr App R 23.

[274] In the poison example, both A and B are poisoned and so, on the basis of a quantitative evaluation, it could be said that both have an exactly equal contingent survival interest in whether or not the law on theft is followed or breached (as appropriate). However, suppose a variation of the example, such that (i) A was *not* poisoned, (ii) B was poisoned, and (iii) A nevertheless 'spitefully' refused to hand over his antidote to B. In this case, the realisation of B's end of survival is absolutely contingent upon B's possession/consumption of the antidote (which is in turn contingent on him being in breach of the law); whereas the realisation of A's end of survival is not at all contingent on A's current possession/consumption of the antidote (ie, A has no contingent survival interest in whether the law is either breached or followed). Therefore, if B *breaches* the law by taking the antidote from A, what would result is not merely concomitancy with the end of survival from B's perspective, but also a *net increase* in the chances of survival across the dyad.

2.5 Conclusion

In **1**, I explained how the claim that law promotes human survival was – prior to the investigations in this chapter – central to my thinking about law, and it is also a claim prominent in the theories of many past legal philosophers. The claim that law promotes human survival may be framed teleologically by saying that *the end of law is concomitant with the end of survival*. It was the purpose of this chapter **2** to examine the merit behind claiming this concomitancy. Ultimately, I rejected that the end of law is concomitant with the end of survival. I first argued that the survival theories of law that I investigated privilege the frame of reference of the 'aggrieved individual' in a dyadic view of law. I then argued that, without any good reason for adopting this frame of reference, the end of law can be shown to be *contrary*, not concomitant, to the end of survival when the frame of reference is shifted.

I began my investigation of the central claim that law is concomitant with survival by turning to past theories of law that have incorporated survival into their conceptual frameworks. Survival has been theoretically incorporated in one of two ways. In the first instance, I described how survival has been a major trope in natural law theory (**2.2**). This owes to natural law's grounding in a certain metaphysical and teleological method, which I described in general in **2.2.1**. While some natural law theorists, such as Aristotle and Aquinas, have taken survival as a merely intermediate aim of humans,[275] others have been more content with positing the ultimate aim of humans as security of life in itself.

Of this last group, the social contract theorists Hobbes and Locke come closest to positing the end of law as that of human survival per se (**2.2.2**). For Hobbes, renouncing personal freedom to the state is the price that one pays in exchange for protection against the universal fear and violent enmity in the pre-political state of nature.[276] Obversely for Locke, law is the manifestation of humans' benevolence – the closest return to Eden that humans can now achieve – and it shores up society against the

[275] Aristotle, *Nicomachean Ethics* (n 38) 10-11; Aquinas (n 45) 522.
[276] Hobbes, *Man and Citizen* (n 1) 115; Hobbes, *Leviathan* (n 1) 86-87.

occasional transgressors of the natural law, who would seek to disrupt this state of nature.[277]

In **2.2.3** I considered a third legal philosopher. Hart, by no means writing under the natural law banner, nevertheless sees a 'core of good sense' in natural law theories. In *The Concept of Law*, Hart takes survival as a rational, minimum end to which humans in fact desire.[278] In light of some contingent natural truisms, he then alludes to some 'minimum contents' of law necessary to secure the end of survival.[279] I considered three of the most pertinent truisms: human vulnerability, which rationalise prohibitions on bodily harm;[280] limited resources, which rationalise property rules and contracts for exchanges of goods and services;[281] and approximate equality, which essentially clarifies that all humans are equally susceptible to the other truisms of limitation.[282]

All three of the natural law theories covered in **2.2** are significant manifestations of the claim that the end of law is concomitant with the end of human survival. I argue that law is posited as either the natural answer to problems of habitual violence (Hobbes), a culmination of benevolent humanity and a counterbalance against deviants (Locke), or compensation for the material and psychological deficiencies of humans (Hart).

In **2.3**, I turned to inspect a second group of theories that posit a concomitancy between the ends of law and survival – *evolutionary theories* of law. Like natural law theories, I argued that evolutionary theories of law maintain in the first instance that law and survival are conceptually inextricable. The similarities between natural law theories and evolutionary theories of law run deeper; they both also reflect on human *origins*. For all their other differences, the natural law and evolutionary theories consider 'pre-civil' exigencies of human life, such as the need for resources and protection from violence. I argue that Hart's minimum content of natural law theory represents a theoretical bridge between the natural law theories of Hobbes and Locke and the evolutionary theories of

[277] Locke, *Two Treatises of Government* (n 2) 120.
[278] Hart (n 5) 192.
[279] Hart (n 5) 194-199.
[280] Hart (n 5) 194.
[281] Hart (n 5) 196.
[282] Hart (n 5) 195.

law, in the way that he examines the 'core of good sense' of natural law theory with a distinctly empirical and anthropological method.[283]

Unlike natural law theories, however, the teleology of survival adopted by evolutionary theories of law derives from the theory that organisms have adapted to their environments through the process of evolution.[284] In order to place this in context, in **2.3.1** I considered the position of teleology in evolutionary theory and biology in general. I concluded that even the metaphorical use of the language of purpose was enough to consider in fair terms that the evolutionary theories of law that I consider claim that law promotes or secures survival.

I then discounted the application of evolutionary theory to law by mere analogy, as analogy does not go to the heart of the claim that the ends of law and survival are teleologically concomitant. There are, however, several interdisciplinary theories of 'law and biology' that posit an actual *causal link* between evolutionary biology and law, or rule-following behaviours more generally (**2.3.2**). For instance, Gruter proposes that law is an adaptive behaviour that interrelates with other human dispositions to confer evolutionary advantage.[285] Elliott dubs law an evolutionary 'prosthesis' on a similar basis.[286] Bohannan takes a more focused look at the role of law in mediating the dyadic relationship created by aggressive behaviours.[287] Such descriptions of the ontological *origins* of law are intelligible only with reference to the evolutionary and teleological *purpose* of law.[288]

An overview of these existing theories of law and survival enabled me to place the claim that the ends of law and survival are concomitant under informed scrutiny in **2.4**. There, my central argument was that they unjustifiably adopt the frame of reference of survival of the nominally 'aggrieved individual'. Ultimately, this caused me to reject the claim that the ends of law and survival are concomitant.

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[283] Hart (n 5) 191 and 193.
[284] Darwin (n 148) 88-91.
[285] Gruter (n 11) 4.
[286] Elliott, 'Law and Biology' (n 10) 607.
[287] Bohannan (n 13) 157.

There were a few preparatory steps before I reached this conclusion. First, **2.4.1** outlined the ordinary assumption that certain circumstances (or set of affairs) have a likelihood of either increasing or decreasing the chances of survival, when survival is understood as the everyday notion of the continuation of life. Given that, also in an everyday sense, laws possess contents that are modalised circumstances or sets of affairs (**2.4.2**), I explain in **2.4.3** how on this basis survival theories of law make judgements upon the inherent purpose of law to secure human survival. In instance, the archetypal laws on the prohibition of violence against human bodies, and the infringement of certain property rights, are readily apparent in the works of Hobbes, Locke, and Hart. As the likelihood that a law increases the chance of survival depends solely upon the level of 'contextual specificity', I identified that one might in theory inventively argue for the concomitancy of the end of survival and the end of *any* law.

However, instead of pursuing a critique on this basis, I turned instead in **2.4.4** to consider the presumed *frame of reference* of survival theories of law. This critique rests on the simple question: of *whom* is it supposed that law increases the chance of survival? In **2.4.4.1** and **2.4.4.2**, I argued, through a close examination of their language, that the presumption of survival theories of law is that law secures the survival of the *aggrieved individual*.

In **2.4.4.3**, I first took issue with the dyadic view of law that is implicated by the presumption of the frame of reference of the aggrieved individual. The first layer of criticism is that it is not at all clear *why* the individual should be privileged over any other mode of analysis. Communitarian critiques, including those of Sandel and MacIntyre, were cited in support of this scepticism.[289] Second, and in anticipation of the material ontology that I develop throughout the rest of the thesis, I also signalled disagreement with the view of 'materially separate individuals' adopted by survival theories of law (**2.4.4.1**).

In the later part of **2.4.4.3**, I then argued that, *even if* the view that law has a dyadic, individualistic nature was convincing, shifting the frame of reference from the

[289] Sandel (n 272) 13; Sandel (n 274) 178-179; MacIntyre (n 277) 69.

'aggrieved individual' reveals a paradox with respect to the claim that the ends of law and survival are concomitant. Shifting the frame of reference from the nominally 'aggrieved' to the nominal 'transgressor', in line with the theory behind determining survival chances that I expounded in **2.4.1**, can cast law as *contrary* rather than concomitant to survival.

Ultimately, this analysis has compelled me to reject the position that the end of law is necessarily concomitant with the end of survival.

Where, then, does this leave my investigation? Being unable to embrace the notion that the end of law is necessarily teleologically concomitant with the end of human survival, it appears that I have undermined discussion to the point of collapse. But this is not so; instead, I now argue that stripping away this teleological view of law reveals the deeper *ontological* nature of law.

I posit that, while law may be *contingently* concomitant with certain teleologies of survival, law is *necessarily* conceptually inseparable from a particular *material ontology*. In my preceding investigation into survival, I have been distracted by thoughts on goals, or ends, or purpose. I might have alternatively conjectured on law's purpose to secure hegemony,[290] a certain religious or moral order,[291] and/or any number of other ends. Arguments defending these purposes may indeed be sound in a certain epistemic mode of analysis; yet, as I will show, any supposed 'purpose' of law is nevertheless always subordinate to a unifying ontology of matter. It is in this ontology, away from the noise of purpose, that I move to understand law.

[290] Foucault, for one, argued that the purpose of state regulation is a legitimisation of power: '[m]y general project has been… to show the extent to which, and the forms in which, right (not simply the laws but the whole complex of apparatuses, institutions and regulations responsible for their application) transmits and puts in motion relations that are not relations of sovereignty, but of domination' (Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings* (Colin Gordon ed, Harvester Press 1980) 95-96; cited in Alan Hunt, 'Foucault's Expulsion of Law: Toward a Retrieval' (1992) 17 Law & Social Inquiry 1

[291] A 'certain moral order' of course opens the Pandora's box of natural law theory, to which I referred to in overview in **2.2**.

This material ontology of law that I point towards will be unpacked over the course of this thesis. But in the present context, I shall explain the inspiration that I draw from the materialistic aspects of the preceding survival theories of law. Despite their teleological overtones, which I reject, I argue that these theories have their greatest merit in their recognition, implicitly if not explicitly, of the material contingencies of law. In Locke's and Hobbes' state of nature, for example, humans are posited as flesh-bound, materially dependent and destructible, and inhabit a world of material exigencies and threats. The same tropes of matter are latent in Hart's minimum content of natural law – his three truisms that I visited in overview are essentially truisms of *materiality*. Finally, recognitions of matter are also immanent to evolutionary theories of law. The theory of natural selection presupposes material 'selection pressures', which in turn explain the development of human morphology and physiology; these material-evolutionary suppositions in turn underpin evolutionary theories of law.

In order to signal towards the unificatory power of a material ontology of law, I will use the example of a law prohibiting the use of fishing nets below a certain mesh size.[292] On reflection, this law can be said to bring about more than one end; its 'purposes' are manifold. In the first instance – assuming that the law does in fact guide human action – the law possesses what Aquinas would term a *proximate* end, or that which it immediately achieves.[293] By requiring a minimum mesh size, the proximate end of the law is to reduce the catch-rate of smaller fish.

[292] Such a requirement in stipulated by the European Union's Common Fisheries Policy (Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures [2019] OJ L198/105). However, legal restrictions on the mesh size of fishing nets can be traced back at least to 4th century BC China (Mencius, *Mencius* (DC Lau tr, Penguin 1970) 51). This example is again applied in **5.3.2**.

[293] Aquinas does not apply the distinction between proximate and remote ends consistently. Pilsner argues that this is not a failure, but a result of him asking 'two different questions with respect to the specification of human action', which I need not go in to here (Joseph Pilsner, *The Specification of Human Actions in St Thomas Aquinas* (Oxford University Press 2006) 218). The proximate/remote end distinction can be basically demonstrated through the example of a doctor preparing medicine (the proximate end) in order to give health to a patient (the remote end) (*Summa Theologica*, I-II, q. 12, a. 3; Aquinas borrows this example from Aristotle, *Metaphysics*, 5.2, 1013b).

This proximate end has implications for many other *remote* ends. One, because smaller fish in schools are typically those not yet mature enough to breed, the law ensures remotely that fish stocks are able to renew themselves at a sustainable rate. Two, as a consequence beyond the end of *ecological* sustainability *in itself*, it might be said that the law is conducive to the end of human survival, by advancing the types of arguments that I have visited throughout this chapter. For example, Hart might argue that, taking survival as a contingently desired end, the law reflects the combined truisms of the physiological needs of humans (the nutritional value of fish), the limited nature of resources (the discrete fish population), the limits of altruistic behaviour, and so forth. Three, the law might also be said to be directed towards the end of the *economic* sustainability of the fishing industry; this might be characterised more abstractly as the end of the capitalistic order maintaining its dominance. Fourth, the law might be characterised as one manifestation of law's overarching purpose of social control (which of course might be seen as an aspect of the third end of capitalist hegemony).

However, instead of attempting to pursue or reconcile any of these many teleologies of this one law, and of laws and law per se, I argue that beneath teleological concerns of purpose there lies a powerful unifying *material ontology*, which ultimately leads me to posit a material ontology of law. I will show how this material ontology of law is detached from human ends, and by that measure appreciates law's ineluctable materiality as a whole. For example, I argue that the contents of the law stipulating a minimum mesh size for catching fish cannot be wholly appreciated but for cognisance of the interrelations of the fisherman, the trawler, the fish, the ocean, the net, the weaver…, and their unifying materiality. It is such a material ontology of law that I develop in response to the central research question: *how is law material?*

I have so far spoken of 'matter' and 'materiality' only by allusion, without proper determination of precisely what this entails conceptually. The next necessary step, therefore, is to develop this ontology. In **3**, I propose in particular the adoption of a *new materialist ontology of matter*.

3 New Materialist Ontologies

3.1 Overview

This purpose of this chapter is to set out the conceptual approach towards 'matter' and 'materiality' that I will adopt throughout the rest of the thesis. This approach will act as the groundwork for my investigation into the central research question of *how law is material*. I conclude in this chapter that the *new materialisms* movement provides rich and nuanced accounts of matter that, ultimately, inspire my moves towards a material ontology of law.

I begin in **3.2** by considering the archetypal dictionary definition of matter as physical substance that occupies space.[1] I determine that such ready-made definitions of matter are too anaemic to provide the basis of any meaningful inquiry into how law is material. Therefore, I turn to an investigation of existing philosophical approaches to matter, in the hope that a more involved account might be inspired. This investigation covers the thoughts of Jain philosophers,[2] Ancient Greek philosophers,[3] Descartes,[4] and Locke.[5]

Although it is useful to contextualise my investigation with these diverse ontological approaches to matter, I argue at the close of **3.2** that new materialist accounts hold the most promise for an answer towards the question of how law is material. First, the new materialisms are interdisciplinary in their theoretical approaches, which resonates

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Angus Stevenson (ed), *Oxford Dictionary of English* (3rd edn, Oxford University Press 2010) 1093.

[2] JC Sikdar, *Concept of Matter in Jaina Philosophy* (P V Research Institute 1987) 17.

[3] CCW Taylor, 'Atomism, Physical' in Ted Honderich (ed), *The Oxford Companion to Philosophy* (2nd edn, Oxford University Press 2005) 65; Aristotle, *Physics* (Robin Waterfield tr, Oxford University Press 1999) 26.

[4] René Descartes, 'Principles of Philosophy' in John Cottingham (tr), *The philosophical writings of Descartes*, vol 1 (Cambridge University Press 1985) 224; René Descartes, *Discourse on Method and The Meditations* (Penguin 1968) 59-60.

[5] John Locke, *An Essay Concerning Human Understanding* (Thomas Tegg 1841) 72-79.

with my interdisciplinary approach to law (**1.2.2**). Second, new materialisms recognise the complex contingencies and agencies of matter, which lie dormant beneath the teleological trappings of survival theories of law (**2.5**). Third, the novelty of new materialisms offer a diverse range of possible avenues of inquiry into how law is material.

It is for these reasons that I turn in **3.3** to take a closer look at new materialisms. I contextualise discussion by describing new materialisms' centralisation of matter in theoretical accounts of various phenomena, in reaction to the 'cultural turn' of the twentieth century (**3.3.1**). This ultimately leads me to consider new materialist conceptualisations of *material agency* (**3.3.2**). Drawing upon the influential works of Deleuze,[6] Bennett,[7] Barad,[8] and Haraway,[9] I note that new materialisms lack one central conception of material agency.

However, I conclude that new materialisms are united by their insistence on a *distributed* form of agency: they posit the liveliness, potency, recalcitrance, and resistance of *all* matter. On the basis of distributed agency – which configures agency as a degree, not a quality – new materialisms posit that traditional oppositional binaries such as 'human and non-human animals', 'living and non-living', and 'biotic and abiotic' have no ontological basis (**3.3.3**).

I argue that new materialist accounts of matter and materiality create a powerful lens through which I may move to understand how law is material. To that end, in **3.4**, I identify two 'aspects' of a new materialist ontology, for my purposes of investigation into law. First, *Conditioning* captures the fundamental contingency of all materiality (**3.4.1**). Second, *Flux* stands for the reconditioning and systemic qualities of material agency (**3.4.2**). I stress that these two aspects are only nominally separate, as they

[6] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus* (Brian Massumi tr, University of Minnesota Press 1987).
[7] Jane Bennett, *Vibrant Matter* (Duke University Press 2010).
[8] Karen Barad, *Meeting the Universe Halfway* (Duke University Press 2007).
[9] Donna Haraway, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective' (1988) 14 Feminist Studies 575.

cannot be understood in isolation from each other. However, treating them as methodologically separate allows me to approach particular discussions of law with thematic clarity. In the remainder of this thesis, each aspect is then applied in turn to law – Conditioning in **4**, and Flux in **5**.

Finally, because I am dealing with ontologies of matter in this chapter, attention must be paid to two particularly significant metaphysical debates. I first consider the relationship between 'mind' and 'matter' (**3.5.1**). This tension is often characterised as the debate between idealism and realism, with some contemporary incursions in the form of panpsychism. The second debate concerns scales of matter and human perception (**3.5.2**). With respect to both metaphysical debates, I argue that the issues raised may reasonably be bracketed using either pragmatic or new materialist approaches.

With this overall argumentative arc in mind, I will now consider past ontologies of matter, ranging from Jainist philosophy to modern science.

3.2 Past ontologies of matter

Conventionally understood, matter is any 'physical substance'[10] that 'occupies space, possessing size and shape, mass, movability, and solidity'.[11] While dictionary-style definitions can be useful for some purposes, such a definition of matter is too anaemic and constraining at this stage for my wider investigation into how law is material. Therefore, I look in this section at past philosophical approaches to matter.

The idea that the universe is constituted of 'matter', or that some kind of substance is ontologically fundamental to the universe, has been philosophically persistent. The

[10] Angus Stevenson (ed), *Oxford Dictionary of English* (3rd edn, Oxford University Press 2010) 1093.
Simon Blackburn, *The Oxford Dictionary of Philosophy* (2nd edn, Oxford University Press 2008) 226.

linguist or philosopher, in any attempt to synthesise one central meaning encapsulating all of these different uses, would be hunting a chimera. The earliest known philosophical treatments of matter can be found in ancient Jain texts (circa 700 BC), which treat matter (*pudgala*) as a fundamental ontological category (*Dravya*) alongside time, space, soul, motion, and rest.[12] As *pudgala* is the only *Dravya* which has corporeal form, it is in *pudgala* that perceived qualities such as 'colour, taste, smell and touch, etc' subsist.[13] *Pudgala* is itself substance which manifests in various modes of being like earth, water, and fire;[14] this elementary classification of substance can be found in various philosophical traditions.[15] Crucially, the physical basis of all *pudgala* is said to be some form of particle, which at its smallest scale is impenetrable and indivisible.[16]

The conception of the essential, particulate nature of matter in Jain philosophy can also be found in the ruminations of the Ancient Greek *atomists*. Led by Leucippus and Democritus circa 500 BC, and Epicurus circa 300 BC, the atomists conceive of the universe as constituted of particle-like, indivisible substance surrounded by void[17] (the Greek parent word *atomon* translates as 'uncuttable').[18] As Democritus writes, '[b]y convention sweet and by convention bitter, by convention hot, by convention cold, by convention colour; but in reality atoms and void.'[19] This early atomistic view that there is only matter or void was later adopted by Lucretius, who reasons that, on the basis of observations of the natural environment, nothing is generated from nothing, nor does

[12] Jeffery D Long, 'Jain Philosophy' in JL Garfield and William Edelglass (eds), *The Oxford Handbook of World Philosophy* (2011) 162.
[13] Sikdar (n 2) 17.
[14] Sikdar (n 2) 47.
[15] In Ancient Chinese philosophy, the elements are fivefold: water, fire, earth, wood, and metal (Oliver Leaman, *Key Concepts in Eastern Philosophy* (Routledge 1999) 45-46). For the Ancient Greeks, the elements were fire, water, air and earth (Plato, *Timaeus and Critias* (Desmond Lee tr, Penguin Books 1977) 44). Aristotle appended a fifth element to Plato's formulation, which later became known as *aether* (David E Hahm, 'The Fifth Element in Aristotle's De Philosophia: A Critical Re-Examination' (1982) 102 The Journal of Hellenic Studies 60).
[16] Sikdar (n 2) 49.
[17] Taylor (n 3) 65.
[18] Catherine Osborne, 'Atomism' in Simon Hornblower, Antony Spawforth and Esther Eidinow (eds), *The Oxford Classical Dictionary* (4th edn, Oxford University Press 2012) 200.
[19] CCW Taylor (tr), *The Atomists: Leucippus and Democritus* (University of Toronto Press 1999) 9.

anything dissolve into nothing. There must therefore exist something indivisible and indestructible – in other words, 'everlasting matter'.[20]

The atomistic ontology of the universe has subsequently been spurned as naïve; Lacey calls the position of Democritus 'innocent and cheerful'.[21] The long-standing scepticism of atomistic thinking began with Aristotle.[22] Departing from Democritus, Aristotle instead theorises that all things are a combination of matter *and* form (the theory of hylomorphism).[23] Aristotle nonetheless continues to recognise the importance of the material subsistence of things, even if he holds that the particular material subsistence of a thing is caused by its ultimate purpose, or *telos*:

> In answer to the question 'Why is a saw as it is?', for instance, we say 'So that it can do such-and-such' and 'For such-and-such a purpose.' However, this purpose is unattainable unless the saw is made out of iron. So it has to be made out of iron if it is to be a saw and if its job is to be done. So what is necessary is so conditionally, not as an end, because the necessity is in the matter, but the end is in the definition.[24]

While conceptions of matter by no means lay dormant since the time of Aristotle and the seventeenth century,[25] the Enlightenment period did usher in a notable return to philosophical treatments of matter. Descartes began 'the first serious departure from

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[20] Lucretius, *The Nature of Things* (AE Stallings tr, Penguin Classics 2007) 10.
[21] Alan Lacey, 'Materialism' in Ted Honderich (ed), *The Oxford Companion to Philosophy* (2nd edn, Oxford University Press 2005) 564.
[22] The foremost objection being that, in a void, all objects would move at the same speed – which is clearly contrary to observation (Aristotle (n 3) 98; Marianne Gœury, 'L'atomisme épicurien du temps à la lumière de la Physique d'Aristote' (2013) 107 Les Etudes philosophiques 535, 539).
[23] 'It is clear, therefore, that if naturally existing things have causes and principles, which are the sources of their being and from which each thing has come to be what we say it is… then everything comes from an underlying thing and a form' (Aristotle (n 3) 26). Carrier's article on Aristotle is an excellent overview of the role of materialism in his works (LS Carrier, 'Aristotelian Materialism' (2006) 34 Philosophia 253).
[24] Aristotle (n 3) 54.

Democritus and Aristotle'[26] by conceiving that matter is defined by its essential geometrical extension in space: '[t]he nature of body consists not in weight, hardness, colour, or the like, but simply in extension.'[27] Ultimately, Descartes concludes that some form of physical substance must exist outside the mind. He reasons that, because humans are able to perceive external things through sense organs, this perception must have some basis in reality, as perception proceeds from God who is perfect, and cannot deceive.[28]

Beginning with Locke, Descartes' account has been refined to include the importance of epiphenomenal qualities of matter. Locke is unambiguous in the importance he attaches to the ability of substance to cause sense-impressions: '[e]xternal objects furnish the mind with the ideas of sensible qualities, which are all those different perceptions they produce in us'.[29] Logically, this means that from an anthropocentric point of view, matter is that which can only *ever* be perceived by human sensory organs: 'it is not possible for any one to imagine any other qualities in bodies, howsoever constituted, whereby they can be taken notice of, besides sounds, tastes, smells, visible and tangible qualities.'[30]

The empiricism of Locke set the way for the treatment of matter by contemporary science and philosophy, which now generally regards matter as substance with attributes or 'powers', which are typically 'quantitatively discernible forces, fields and energies'.[31] Qualitative phenomena like colour and smell are now generally considered to be secondary attributes in this conventional, scientific ontology of matter.[32]

In this section I have visited several key treatments of matter from ancient Jain philosophy through to contemporary scientific understandings. If anything, these

[26] Simon Blackburn, 'Atomism', *The Oxford Dictionary of Philosophy* (2nd edn, Oxford University Press 2008) 27.
[27] Descartes, 'Principles of Philosophy' (n 4) 224.
[28] Descartes, *Discourse on Method and The Meditations* (n 4) 59-60.
[29] Locke (n 5) 52.
[30] Locke (n 5) 63.
Howard Robinson, *Matter and Sense* (Cambridge University Press 1982) 112-113.
[32] Robinson (n 31) 112-113.

treatments have sufficiently shown why it is that, due to their various subtle or serious ontological differences, I cautioned at the start of this section against the restrictive nature of a singular definition or presentation of matter. Clayton captures the way in which philosophical accounts of matter vacillate:

> A strange dynamic emerges when one begins to study the history of the concept of matter in… philosophy. It appears that, each time the greatest systematic philosophers have attempted to define it, it has receded again and again from their grasp. The very philosophers who claim to offer a resolution of the conceptual problems and a synthesis of opposing schools – Plato, Aristotle, Thomas Aquinas, Descartes, Liebniz, Hegel, Whitehead – repeatedly fail to supply a substantive concept of matter, leaving the reader each time merely with lack, or *privation*: nothing instead of something.[33]

While it has been useful to consider the preceding ontologies of matter in order to contextualise discussion, I will now argue that it is *new materialist* accounts of matter that best equip me to move towards an answer to the central research question of how law is material.

First, owing to the indeterminacy of any one central meaning to 'law' (**1.2.1**), I advocate an interdisciplinary approach in legal philosophy (**1.2.2**). The methodologies of new materialisms are inherently interdisciplinary.[34] The second great benefit of new materialist accounts of matter, which also explains their affinity for interdisciplinarity, is that they recognise the complexities of the material interrelationships of the world.[35] In **2.5**, I concluded that survival theories of law – when divested of their teleological overtones – have underlying merit due to their recognition of materiality (in particular,

[33] Philip Clayton, 'Unsolved Dilemmas: The Concept of Matter in the History of Philosophy and in Contemporary Physics' in Paul Davies and Niels Henrik Gregerson (eds), *Information and the Nature of Reality* (Cambridge University Press 2014) 49-50.
[34] Joss Hands, 'From Cultural to New Materialism and Back: The Enduring Legacy of Raymond Williams' (2015) 56 Culture, Theory and Critique 133.
[35] Diana H Coole and Samantha Frost (eds), *New Materialisms* (Duke University Press 2010), 7; Rosi Braidotti, 'The Politics of "Life" Itself and New Ways of Dying' in Diana H Coole and Samantha Frost (eds), *New Materialisms* (Duke University Press 2010) 206.

the exigencies and vulnerabilities of human bodies in relation to the natural world). As I will show, the new materialisms centralise the importance of matter in a range of theoretical accounts, without privileging the human; this opens up the possibility of an account of law's materiality that goes beyond a focus on humans. Third, new materialisms are often speculative and intentionally novel in their theorisations.[36] Therefore, new materialist thought has unfixed boundaries, which allows for fresh insight, and does not close off any avenues of discussion.

For these reasons, I will now turn to consider the new materialisms, with a view to synthesising an ontological approach to matter and materiality for use in the rest of the thesis. Ultimately, this ontology of matter will be deployed to answer the question of how law is material.

3.3 The new materialisms

'New materialisms' describes an emerging cluster of theorisations in the social and political sciences that centralise *matter* in accounts of various phenomena. I will begin in **3.3.1** by explaining the theoretical background of new materialisms. This background helps to contextualise the new materialist insistence on distributed material agency (**3.3.2**), and the monistic ontology that this insistence entails (**3.3.3**).

From the outset, the intellectual spirit and premises of new materialisms is best understood by acknowledging that, at their bases, they are invigorated by an unease with the main theoretical premises and practical political effects of the postmodern 'cultural turn' in the social sciences. The cultural turn began in the 1970s as a

[36] Charles Devellennes and Benoît Dillet, 'Questioning New Materialisms: An Introduction' (2018) 35 Theory, Culture & Society 5, 7; Thomas Lemke, 'New Materialisms: Foucault and the "Government of Things"' (2015) 32 Theory, Culture & Society 3, 4.

linguistically-grounded,[37] epistemological attitude that all human knowledge and experience is constructed, in particular through social relations of power.[38] Bonnell and Hunt describe the cultural turn as the claim that 'shared discourses (or cultures) so utterly permeate our perception of reality as to make any supposed scientific explanation of social life simply an exercise in collective fictionalization or mythmaking.'[39]

These attitudes are canonised in the works of Derrida and Foucault,[40] who since the 1980s have been brought 'to the core of sociological analysis'[41] as *social constructionists*. When Derrida famously declared that '[t]here is nothing outside of the text',[42] he was not merely making a hermeneutic claim, but a socio-political one. Bush explains that Derrida intends to emphasise the cruciality of 'the political backdrop, involving the various interests at work in socio-institutional frameworks, that actively shapes any interpretive undertaking.'[43]

Similarly, Foucault stated that 'power produces knowledge [and they] directly imply one another… there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations.'[44] According to Foucault, these power relations precede and define all subjects and objects.[45] He stressed in particular that the materiality of the body can only be analysed from the departure point of the historical power

[37] Armstrong characterises the cultural turn as a 'permutation of the linguistic turn' (Nancy Armstrong, 'Who's Afraid of the Cultural Turn?' (2001) 12 differences 17, 18).
[38] Kate Nash, 'The `Cultural Turn' in Social Theory: Towards a Theory of Cultural Politics' (2001) 35 Sociology 77.
[39] Victoria E Bonnell and Lynn Hunt, *Beyond the Cultural Turn: New Directions in the Study of Society and Culture* (University of California Press 1999)
[40] Susan Hekman, 'We Have Never Been Postmodern: Latour, Foucault and the Material of Knowledge' (2009) 8 Contemporary Political Theory 435, 436-438.
[41] Fernando Lima Neto, 'Cultural Sociology in Perspective: Linking Culture and Power' (2014) 62 Current Sociology 928, 934.
[42] Jacques Derrida, *Of Grammatology* (Gayatri Chakravorty Spivak tr, Johns Hopkins University Press 1997) 158.
[43] SS Bush, 'Nothing Outside the Text: Derrida and Brandom on Language and World' (2009) 6 Contemporary Pragmatism 45, 47.
[44] Michel Foucault, *Discipline and Punish* (Alan Sheridan tr, Allen Lane 1977) 27.
[45] Foucault, *Discipline and Punish* (n 44) 27-28.

relations that act upon it;[46] a position greatly inspired by Nietzsche's concept of 'genealogies'.[47] Foucault writes that

> [t]he body is the inscribed surface of events… and a volume in perpetual disintegration. Genealogy, as an analysis of descent… is to expose a body totally imprinted by history and the process of history's destruction of the body.[48]

In the words of Bush, such constructionist views amount to 'challenging every philosophical attempt to ground knowledge and linguistic meaning by appeal to some sort of foundation, principle, or entity *independent of human history and culture*.'[49] Such an epistemological approach has been deployed in attempts to explain the construction of a variety of social phenomena, as part of an anti-essentialist move towards 're-thinking whole social categories, such as gender, sexuality, race, disability, and illness.'[50]

Butler, for example, typifies the application of constructionist attitudes to the realm of sex and gender, which she casts as historico-cultural constructs built on the basis of discursive ontological figments. Butler writes that '"sex" denotes an historically contingent epistemic regime, a language that forms perception by forcibly shaping the interrelationships through which physical bodies are perceived.'[51]

Otherwise, O'Reilly and Lester describe the influence of a social constructionism in studies on mental illness, which views 'the language of mental health conditions' as

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[46] Thomas Lemke, 'New Materialisms: Foucault and the "Government of Things"' (2015) 32 Theory, Culture & Society 3, 5.

[47] Friedrich Nietzsche, *On the Genealogy of Morality* (Cambridge University Press 2007). Michel Foucault, 'Nietzsche, Genealogy, History' in John Richardson and Brian Leiter (eds), *Nietzsche* (Oxford University Press 1978) 148.

[49] Bush (n 43) 47. Emphasis added. Here, Bush refers particularly to Derrida; but the quote also accurately describes the position of Foucault.

[50] Vivien Burr, 'Overview: Realism, Relativism, Social Constructionism and Discourse' in Ian Parker (ed), *Social Constructionism, Discourse, and Realism* (SAGE 1998) 13.

[51] Judith Butler, *Gender Trouble* (Routledge 1990) 114.

forming 'the very basis of what it means to experience the associated symptoms.'[52] This 'social embeddedness' approach to mental illness can be seen in the works of Sedgwick and Whooley,[53] as well as in the early work on mental illness authored by Foucault himself.[54]

The brief overview of social constructionism given here is intended to help draw out, through contrast, the different intellectual spirit(s) of new materialisms. The basic ontological and epistemological approaches of new materialisms resist the radical idea that all experience and knowledge is socially constructed. Coole and Frost describe how

> Materialism's demise since the 1970s has been an effect of the dominance of analytical and normative political theory on the one hand and of radical constructivism on the other. These respective Anglophone and continental approaches have both been associated with a cultural turn that privileges language, discourse, culture, and values.[55]

Lemke succinctly describes the reaction of new materialisms against social constructionism and the cultural turn:

> The new materialism is the result of a double historical and theoretical conjuncture. The 1970s and 1980s were marked by the decline of once popular materialist approaches, especially Marxism, and the rise of poststructuralist and cultural theories. While the latter rendered problematic any direct

[52] Michelle O'Reilly and Jessica Nina Lester, 'The Critical Turn to Language in the Field of Mental Health' in Michelle O'Reilly and Jessica Nina Lester (eds), *Examining Mental Health through Social Constructionism* (Springer International Publishing 2017) 11.
[53] Peter Sedgwick, *Psycho Politics* (Pluto Press 1982); Owen Whooley, 'Nosological Reflections: The Failure of DSM-5, the Emergence of RDoC, and the Decontextualization of Mental Distress' (2014) 4 Society and Mental Health 92.
[54] Michel Foucault, *History of Madness* (Jean Khalfa ed, Jonathan Murphy and Jean Khalfa trs, Routledge 2006). While also a social constructionist, Sedgwick was critical of Foucault's anecdotal and selective methodology in *History of Madness* (Peter Sedgwick, 'Michel Foucault: The Anti-History of Psychiatry' (1981) 11 Psychological Medicine 235).
[55] Coole and Frost (n 35) 3.

> reference to matter as naïvely representational or naturalistic, new materialists are convinced that the epistemological, ontological and political status of materiality has to be reconsidered and a novel concept of matter is needed.[56]

The point here is not that new materialisms *necessarily* reject Derridean and Foucauldian social constructionism. In fact, the intellectual debt to such articulations is made explicit by many new-materialist thinkers. Dolphijn and van der Tuin describe postmodern, French continental philosophy as 'creating the fertile ground in which new materialism takes root today.'[57] Braidotti for example, who first coined the term new materialism, professes inspiration from Foucault in her views on political subjectivity,[58] and Deleuze in her treatment of difference.[59] In a similar vein to Braidotti, Haraway sees gender and race as essentially 'cultural productions',[60] and recognises the Foucauldian power-dynamics that sustain those productions.[61] Other new materialists, such as Barad[62] and Bennett,[63] similarly express inspiration from the postmodern milieu.

The crucial point, instead, is that new materialisms often demonstrate a *frustration with the shelving of matter in accounts of social phenomena*. Braidotti takes a much

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[56] Lemke, 'New Materialisms' (n 36) 4.
[57] Iris Van Der Tuin and Rick Dolphijn, 'The Transversality of New Materialism' (2010) 21 Women: A Cultural Review 153, 154.
[58] Rosi Braidotti, 'Interview with Rosi Braidotti' in Rick Dolphijn and Iris van der Tuin (eds), *New Materialism* (Open Humanities Press 2012) 21.
[59] Rosi Braidotti, *Metamorphoses* (Polity Press 2005) 7. Deleuze is a poststructuralist contemporary of Foucault and Derrida. Deleuze and Foucault eventually parted ways philosophically (Mathias Schönher, 'Deleuze, a Split with Foucault' (2015) 1 Le foucaldien 8). I shall visit Deleuze in more detail in **3.3.2**.
[60] Donna Haraway, *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (Routledge 1989) 8.
[61] Haraway, *Primate Visions* (n 60) 287. Haraway stated that '[y]ou read people like Foucault and you're never the same again': Sarah Franklin, 'Staying with the Manifesto: An Interview with Donna Haraway' (2017) 34 Theory, Culture & Society 49, See, however, her caveat clause below, in n 86.
[62] Barad is intensely critical of Foucault's limited focus on the human body: '[w]hile Foucault analyzes the materialization of human bodies, he seems to take nonhuman bodies as naturally given objects.' Barad does, however, employ Foucault's 'theoretically sophisticated notion of discursivity' in preference to Bohr's 'narrow focus on linguistic concepts' (Barad (n 8) 204).
[63] Bennett is inspired by the 'material vitalism' experimented with by Deleuze and Guattari: Bennett (n 7) x.

more sympathetic approach to matter than her inspiration by Foucauldian social constructionism might suggest. She laments the 'denial of the materiality of the bodily self';[64] in her critique of Butler's radical constructionist attitudes to sex, for example, Braidotti writes that whereas 'Butler takes the linguistic turn, I go nomadically the way of all flesh. I think that sexual difference is written on the body in a thousand different ways, which includes hormonal and endocrinological evidence.'[65] The body is described by Braidotti as 'a layer of corporeal materiality, a substratum of living matter endowed with memory… The "self," meaning an entity endowed with identity, is anchored in this living matter, whose materiality is coded and rendered in language.'[66]

Likewise, while Haraway has some sympathies with Foucauldian social constructionism, she stresses that 'it is not enough to show radical historical contingency and modes of construction for everything'.[67] Indeed, Haraway writes that 'the further I get with the description of the radical social-constructionist programme and a particular version of postmodernism, coupled to the acid tools of critical discourse in the human sciences, the more nervous I get.'[68] Instead, Haraway takes a middle-road between feminist essentialism and social constructionism with her notion of 'nature-cultures', believing that to posit nature and culture as 'either polar opposites or separate categories is foolish.'[69] In the words of Latimer and Miele, Haraway argues that 'nature cannot stand outside of culture, just as culture cannot stand outside of nature… What humans identify as natural (claims, for instance, that women are naturally caring or that people are naturally heterosexual) is an effect of culture, but culture naturalized.'[70]

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[64] Rosi Braidotti, 'Teratologies' in Ian Buchanan and Claire Colebrook (eds), *Deleuze and Feminist Theory* (Edinburgh University Press 2000) 156, 160.
[65] Braidotti, *Metamorphoses* (n 59) 47.
[66] Rosi Braidotti, *Nomadic Subjects: Embodiment and Sexual Difference in Contemporary Feminist Theory* (Columbia University Press 1994) 165.
[67] Donna Haraway, *Simians, Cyborgs, and Women* (Free Association Books 1991) 187.
[68] Haraway, 'Situated Knowledges' (n 9) 577.
[69] Donna Haraway, *The Companion Species Manifesto* (Prickly Paradigm Press 2003) 8.
[70] Joanna Latimer and Mara Miele, 'Naturecultures? Science, Affect and the Non-Human' (2013) 30 Theory, Culture & Society 5, 11.

Finally, Bennett describes how the dominant postmodern attitudes towards categories like race and gender fail to appreciate the '*material recalcitrance* of such cultural productions.'[71] Bennett encapsulates the new materialist spirit when she argues that those 'cultural forms are themselves powerful, material assemblages with *resistant force*… [with] a positive, productive power of their own.'[72] Bennett theorises much on the 'agency' of matter, which has varied meanings within new materialisms (as I shall visit in length in **3.3.2**).

In their introduction to a compendium of new materialist articles, Coole and Frost describe the crux of the project, demonstrated here by the works of Braidotti, Haraway, and Bennett. Coole and Frost write that

> we are summoning a new materialism in response to a sense that the radicalism of the dominant discourses which have flourished under the cultural turn is now more or less exhausted. We share the feeling current among many researchers that the dominant constructivist orientation to social analysis is inadequate for thinking about matter, materiality, and politics in ways that do justice to the contemporary context of biopolitics and global political economy. While we recognize that radical constructivism has contributed considerable insight into the workings of power over recent years, we are also aware that an allergy to "the real" that is characteristic of its more linguistic or discursive forms – whereby overtures to material reality are dismissed as an insidious foundationalism – has had the consequence of dissuading critical inquirers from the more empirical kinds of investigation that material processes and structures require.[73]

[71] Bennett (n 7) 1.
[72] Bennett (n 7) 1.
[73] Coole and Frost (n 35) 6.

As a treatment for this allergy to the real, Coole and Frost prescribe returning to a recognition of 'the power of matter and the ways it materializes in our ordinary experiences'.[74] They acknowledge that

> [a]s human beings we inhabit an ineluctably material world. We live our everyday lives surrounded by, immersed in, matter. We are ourselves composed of matter. We experience its restlessness and intransigence even as we reconfigure and consume it. At every turn we encounter physical objects fashioned by human design and endure natural forces whose imperatives structure our daily routines for survival. Our existence depends from one moment to the next on myriad micro-organisms and diverse higher species, on our own hazily understood bodily and cellular reactions and on pitiless cosmic motions, on the material artifacts and natural stuff that populate our environment, as well as on socioeconomic structures that produce and reproduce the conditions of our everyday lives. In light of this massive materiality, *how could we be anything other than materialist*? How could we ignore… or *fail to acknowledge the primacy of matter in our theories*?[75]

It will be seen that the descriptions of this theoretical resistance to radical forms of social constructionism has led me to describe some of the specific ontological claims of new materialisms. Owing to the vibrancy and novelty of new materialisms, the trend lacks any 'canonical' theoretical framework. However, Devellennes and Dillet helpfully identify three characteristics:

> First, there is an emphasis on the novelty of the theory. Second, there is an ontological claim that is made (either explicitly or implicitly) about the nature of matter and how it impacts our lives. And finally, there are methodical implications of taking material objects seriously in our academic practices. Each

[74] Coole and Frost (n 35) 1.
[75] Coole and Frost (n 35) 1. Emphasis added.

> of these three criteria poses its own challenges… but to qualify as a 'new materialist' theory, a work must meet all three, at least to some extent.[76]

Going forward, I am most interested in the second characteristic which unifies new materialisms – the ontological claim(s) that they make. I argue that the ontological articulations of new materialisms readily equip me to answer the question of how law is material, in light of my approach to the indeterminacy of law (**1.2.1**), and my initial reflections on the underlying materiality of law (**2.5**).

In relation to the ontological claims of new materialisms, Lemke explains that '[i]n contrast to older forms of materialism, the call for a new materialism refers to the idea that matter itself is to be conceived as active, forceful and plural rather than passive, inactive and unitary[.]'[77] This activity and force of matter is often conceptualised as *material agency*,[78] to which I shall now turn.

3.3.2 Material agency

The first thing to note is that there is no canonical conception of 'agency' in new materialisms. The novelty of the *new* materialisms movement, as I described in **3.3.1**, means that agency has been conceptualised in different ways. To demonstrate, I shall here describe several theories of material agency prominent in the new materialist literature; namely, those of Deleuze, Bennett, Barad, and Haraway.

First, Deleuze's concept of 'affect' has been influential within the new materialisms movement.[79] The term 'affect' was taken, in turn, from Spinoza.[80] As part of Spinoza's

[76] Devellennes and Dillet (n 36) 7.
[77] Lemke, 'New Materialisms' (n 36) 4.

[79] Coole and Frost (n 35) 9.
[80] Deleuze and Guattari (n 6) 260-261; Benedict de Spinoza, *Ethics* (Edwin Curley tr, Penguin Books 1996) 68-113. Deleuze co-authored *A Thousand Plateaus* with Guattari; I make singular reference to Deleuze here for convenience.

broader philosophy,[81] Spinoza defined an affect as that 'by which the body's power of acting is increased or diminished, aided or restrained'.[82] Spinoza posits the primary affects as desire, joy, and sadness.[83] As such, affect has been alternatively translated as 'emotion';[84] but, beyond the everyday sense of emotion, Spinoza means to convey the sense of the active *force* behind affects like desire, joy, and sadness,[85] which can increase or diminish the power of the body.[86]

It is this forceful quality of Spinoza's affects that resonated with Deleuze.[87] While Spinoza's conception of affect in the *Ethics* related to human minds,[88] affectivity is subject-independent and non-human for Deleuze.[89] Matter, which Deleuze defined as 'the unformed, unorganized, nonstratified, or destratified body and all its flows: subatomic and submolecular particles, pure intensities, prevital and prephysical free singularities',[90] becomes affective when it is stratified through complex interactions and interplays.[91] What results is an 'assemblage'. In the post-structuralist vein, Deleuze does not define an assemblage explicitly, and its meaning is deferred in *A Thousand Plateaus*. Nail provides a succinct description of an assemblage as being 'composed of a *basic structure* including a condition', and elements that are always changing.[92]

[81] In *Ethics*, Spinoza argued by way of geometrical proof that there exists only one substance that is absolutely conceptually independent – namely, God – and that all things are consequently different aspects of God (Spinoza (n 80) 9-13).
[82] Spinoza (n 80) 70.
[83] Spinoza (n 80) 77.
[84] See eg Shirley's translation: Benedict de Spinoza, *The Complete Works* (Samuel Shirley tr, Hackett 2002) 278.
[85] Desire is 'any of a man's strivings, impulses, appetites, and volitions', and joy and sadness cause 'passage' to greater or lesser perfection, respectively (Spinoza (n 80) 104).
[86] Spinoza (n 80) 70.
[87] Christopher Norris, 'Deleuze, Gilles' in Ted Honderich (ed), *The Oxford Companion to Philosophy* (2nd edn, Oxford University Press 2005) 195.
[88] '[M]y purpose is only to treat of the human mind' (Spinoza (n 80) 74). Ultimately, Spinoza argues in *Ethics* that '[m]an's lack of power to moderate and restrain the affects' leads to human bondage (Spinoza (n 80) 113). Recognising both the power of 'evil' affects, and their necessity as aspects of God's eternity, leads to human freedom (Spinoza (n 80) 174-181).
[89] Deleuze and Guattari (n 6) 240.
[90] Deleuze and Guattari (n 6) 43.
[91] Deleuze and Guattari (n 6) 40; Deleuze and Guattari developed the concept of multiplicities that, in brief, is the position that reality is not hierarchical, but rather consists of complex networks of 'determinations, magnitudes, and dimensions' (metaphorised as 'rhizomes') where there is no supreme unity (Deleuze and Guattari (n 6) 8-9).
[92] Thomas Nail, 'What Is an Assemblage?' (2017) 46 SubStance 21, 36-37.

Examples of assemblages given by Deleuze include woman-bow-steppe[93] and horse-omnibus-street:

> [A] horse is not representative but affective. It is not a member of a species but an element or individual in a machinic assemblage: draft horse-omnibus-street. It is defined by a list of active and passive affects in the context of the individuated assemblage it is part of: having eyes blocked by blinders, having a bit and a bridle… pulling heavy loads, being whipped, falling, making a din with its legs, biting, etc. These affects circulate and are transformed within the assemblage: what a horse "can do."[94]

In such ways, Roberts writes that Deleuze moves 'towards an ontology in which the capacities to act and to be acted upon are modulated by the relations afforded by a particular milieu across a multiplicity of scales. Accordingly, both a thought and a material object are defined by their "capacity for affecting and being affected"'.[95]

While Deleuze was not straightforwardly a materialist,[96] his conceptualisations of affectivity and assemblages have been applied to theories of agentic materiality within new materialisms. DeLanda, who is avowedly materialist,[97] sought to expand Deleuze's assemblage theory.[98] DeLanda ultimately described material agency in terms of both a capacity to affect *and* be affected,[99] which entails a nonlinear view of causation.[100]

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[93] Deleuze and Guattari (n 6) 71.
[94] Deleuze and Guattari (n 6) 257.
[95] Roberts (n 78) 2516; quoting Gilles Deleuze, *Spinoza: Practical Philosophy* (City Lights Books 1988) 124.
[96] Žižek argues that Deleuze oscillates between materialism and idealism (Slavoj Žižek, *Organs without Bodies* (Routledge 2004) 28).
[97] Manuel DeLanda, 'Interview with Manuel DeLanda' in Rick Dolphijn and Iris van der Tuin (eds), *New Materialism* (Open Humanities Press 2012) 38-39.

[99] Manuel DeLanda, 'The New Materiality' (2015) 85 Architectural Design 16, 17.
[100] Manuel DeLanda, 'Causality and Meaning in the New Materialism' in Maria Voyatzaki (ed), *Architectural Materialisms* (Edinburgh University Press 2018) 33.

Bennett is also inspired by Deleuze in her own new materialist conceptualisation of agency,[101] which she calls *the force of things*.[102] Like Deleuze, Bennett is inspired by Spinoza's view that everything is animate, 'though in different degrees', and that '[e]ach thing, as far as it can by its own power, strives to persevere in its being.'[103] Bennett argues, in the words of Choat, that matter is 'creative and constitutive, producing effects and forming connections'.[104]

Barad advances her own theory of material agency in the form of 'agential realism', which is inspired by Bohr's philosophical take on quantum physics.[105] Barad's theory is an 'epistemological-ontological-ethical framework',[106] because it rests upon what Heisenberg articulated as the uncertainty principle.[107] In the words of Hawking, the uncertainty principles states that 'the more accurately you try to measure the position of [a] particle, the less accurately you can measure its speed, and vice versa.'[108]

Barad elaborates ontologically on this epistemological axiom,[109] arguing that phenomena are determined by the 'intra-action' of measured and measuring agencies – there is not merely an epistemological relation, but *ontological* 'entanglement'.[110] This indeterminate entanglement of non-linear causality is resolved in 'specific agential intra-actions' into determinate boundaries and properties of causing subjects and affected objects; Barad calls this resolution the 'agential cut'.[111] Ultimately, 'it is through specific intra-actions that phenomena come to matter – in both senses of the

[101] Bennett (n 7) viii.
[102] Jane Bennett, 'The Force of Things: Steps toward an Ecology of Matter' (2004) 32 Political Theory 347.
[103] Bennett (n 7) x and 2; Spinoza (n 80) 40 and 75.
[104] Simon Choat, 'Science, Agency and Ontology: A Historical-Materialist Response to New Materialism' (2018) 66 Political Studies 1027, 1030.
[105] Barad (n 8) 26 and 31; see generally Niels Bohr, *The Philosophical Writings of Niels Bohr* (Ox Bow Press 1987).
[106] Barad (n 8) 135.
[107] W Heisenberg, 'Über den anschaulichen Inhalt der quantentheoretischen Kinematik und Mechanik' (1927) 43 Zeitschrift für Physik 172; Barad (n 8) 139.

[109] Barad (n 8) 138.
[110] Barad (n 8) 139.
[111] Barad (n 8) 140.

word',[112] and '[t]his dynamism *is* agency… The universe is agential intra-activity in its becoming.'[113]

Haraway also develops a theory of material agency through epistemological reflections. She criticises the claims to objectivity that scientific investigation purports,[114] and in particular its masculine hubris (the 'god trick').[115] Finding social constructionist, Marxist, and feminist empiricist attempts unfulfilling,[116] Haraway seeks a new feminist conception of objectivity.[117] Haraway uses the metaphor of vision, first describing the riot of images produced by modern science – of T-cells, outer planets, etc – that would be denied to the unaided human eye.[118] Rather than the omniscience that this masculine conception of objectivity implies (see, in **3.5.2**, Locke's view on perception), Haraway sees such visions as a testament to the specificity and partiality of all knowledge – ie, its situatedness.[119]

Haraway's epistemology of situated knowledges entails a theory of 'material-semiosis'.[120] Haraway argues that on the masculine view of objectivity that knowledge is some 'thing' to be captured (as per the vision metaphor). This view entails that 'any status as agent in the productions of knowledge must be denied the object. It – the world – must, in short, be objectified as a thing, not as an agent; it must be matter for the self-formation of the only social being in the productions of knowledge, the human knower.'[121]

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[112] Barad (n 8) 140.
[113] Barad (n 8) 141. Emphasis added.
[114] 'We have perversely worshipped science as a reified fetish' (Haraway, *Simians, Cyborgs, and Women* (n 67) 9).
[115] The god trick is 'seeing everything from nowhere', or at least having the conceit that this is possible (Haraway, 'Situated Knowledges' (n 9) 581).
[116] Haraway, 'Situated Knowledges' (n 9) 577-579.

[118] Haraway, 'Situated Knowledges' (n 9) 581-582.
[119] Haraway, 'Situated Knowledges' (n 9) 582-583.
[120] Haraway, 'Situated Knowledges' (n 9) 595; Patricia Ticineto Clough and Joseph Schneider, 'Donna J Haraway' in Anthony Elliott and Bryan S Turner (eds), *Profiles in Contemporary Social Theory* (SAGE 2001) 341.
[121] Haraway, 'Situated Knowledges' (n 9) 592.

Haraway's situated knowledges instead turn this view on its head: '[s]ituated knowledges require that the object of knowledge be pictured as an actor and agent',[122] and the ontological implication is that these material-semiotic actors generate their ever-shifting boundaries.[123] Clough and Schneider summarise Haraway's alternative vision thus:

> For Haraway, knowledge objects such as the gene, the computer program, the chip, the foetus, the immune system, and the neural net are more productively seen as events than as objects. As such, they are dynamic and generative. Each object/event is like a temporary knot in a field of moving forces.[124]

I have just described several theories of agency in the new materialisms: namely, those of Deleuze, Bennett, Barad, and Haraway. Before I proceed to discuss the level on which these various understandings of material agency are unified, it is useful at this point to note the relationship between 'matter' and 'materiality', as this question is intricately tied to notions of agency.

In the new materialist literature, 'materiality' is often conceptualised beyond a mere linguistic posteriority to 'matter', because matter can carry connotational baggage of objective reality distinct from conscious observers.[125] As I have just demonstrated through the works of Barad and Haraway, new materialisms are wont to challenge such views.

Deleuze made moves towards 'materiality' in a sense *beyond* 'matter' when he argued that '[m]aterials are not the same as the unformed matter of the plane of consistency'.[126] Bennett writes that her goal 'is to theorize a materiality that is as much force as entity, *as much energy as matter*, as much intensity as extension.'[127] Coole

[122] Haraway, 'Situated Knowledges' (n 9) 592.

[124] Clough and Schneider (n 120) 342.
[125] Helmut Fleischer, 'The Materiality of Matter' (1962) 2 Studies in Soviet Thought 12.
[126] Deleuze and Guattari (n 6) 49.
[127] Bennett (n 7) 20. Emphasis added.

and Frost state explicitly that 'materiality is always something more than "mere" matter: an excess, force, vitality, relationality, or difference that renders matter active, self-creative, productive, unpredictable.'[128] In such ways, 'materiality' is furnished with the respective new materialist notions of agency, and this renders the matter/materiality pair not correlative in a straightforward dictionary sense.[129]

While the nuances given to the concept of 'agency' may differ, new materialisms are centrally united by their insistence on the 'agency of all things'.[130] Agency is understood not as a kind or category, but as a degree;[131] agency is often described as being 'dispersed'[132] or 'distributed'.[133] Thus, the terms 'agentic' or 'agency' do not necessarily imply the notion of discrete 'agents' that *possess* agency as a quality. This possessive sense of agency is epitomised in Kantian ethics. Kant argued that humans are the only beings possessed of moral agency, as only humans possess rationality – the condition of morality.[134]

New materialisms reject such possessive senses of agency. Bennett hopes her work 'stretches received concepts of agency… sometimes to the breaking point'[135] by positing a 'congregational understanding of agency' that 'depends on the collaboration, cooperation, or interactive interference of many bodies and forces.'[136] Bargetz writes that '[s]imilar to Bennett, Barad does not conceive of agency as a capacity inherent in someone or something, but as a multiplicity of possibilities within

[128] Coole and Frost (n 35) 9.
[129] Ie, materiality simply being 'the quality of being composed of matter' (Angus Stevenson (ed), 'Materiality', *Oxford Dictionary of English* (3rd edn, Oxford University Press 2010) 1092).
[130] Choat (n 104) 1029.
[131] Coole and Frost (n 35) 21.
[132] Roberts (n 78) 2513.
[133] Bennett (n 7) 23.

[135] Bennett (n 7) x.
[136] Bennett (n 7) 20-21.

a dynamic process.'[137] For Barad, 'distinct agencies do not precede, but rather emerge through, their intra-action';[138] '[a]gency is not an attribute but the ongoing reconfigurings of the world.'[139]

By these measures, new materialisms are often sceptical of the Kantian connotations of the term 'agent'. Barad's theory of agential realism 'unsettles the metaphysics of individualism (the belief that there are individually constituted agents or entities…)',[140] and instead argues that 'it is less that there is an assemblage of agents than there is an entangled state of agencies.'[141] In place of the term agent, Philippopoulos-Mihalopoulos advocates the Latourian term 'actant'.[142] Latour describes an actant as 'any entity that modifies another entity… of actors it can only be said that they act';[143] '[i]t implies no special motivation of human individual actors, nor of humans in general. An actant can literally be anything provided it is granted to be the source of an action.'[144] In this sense, actant is a term close to Deleuze's notion of an 'operator'.[145] Bennett sees both actant and operator as 'substitute words for what in a more subject-centered vocabulary are called agents',[146] and similarly adopts actant for its non-individualistic and non-objectifying implications.[147]

Overall, the new materialisms' distributed sense of agency means that matter is not seen as inert, in the way that classical physics might suppose. Galilean, Cartesian, and Newtonian accounts of matter, for example, satisfy themselves with the idea of matter

[137] Brigitte Bargetz, 'Longing for Agency: New Materialisms' Wrestling with Despair' (2019) 26 European Journal of Women's Studies 181, 188.
[138] Barad (n 8) ix.
[139] Barad (n 8) 141.
[140] Karen Barad, 'Intra-Actions' (2012) 34 Mousse 76.
[141] Barad (n 8) 23.

[143] Bruno Latour, *Politics of Nature* (Harvard University Press 2004) 237.
[144] Bruno Latour, 'On Actor-Network Theory. A Few Clarifications plus More than a Few Complications' (1996) 27 Soziale Welt 369, 374.
[145] Deleuze and Guattari (n 6) 325.
[146] Bennett (n 7) 9.
[147] Bennett (n 7) 10.

as point objects.[148] This classical physics view – adequate in the context of a mathematical, mechanical explanation of the world – therefore naturally tends to see matter as nothing more than inactive, unchanging, and stable.

New materialisms, however, explicitly reject 'notions of matter as dead' – Fowler and Harris explain that '[o]ne tendency in [new materialisms] is increasingly to see material things as an ever-changing bundle of relations, to emphasise the way they are constantly fluid and in flux. This has helped overcome an older view of material things simply as inert objects, brought to life only through human agency.'[149] Connolly describes how this older view is 'replaced by an evolutionary model in which there is vitality installed in energy/matter complexes from the start.'[150] The notion of energy/matter complexes was first articulated (in this sense) by Deleuze and Guattari.[151]

Within new materialisms, Bennett is notable for her characterisations of matter's 'vitality'. Here, vitality is not *strictly* used in the sense that it would be in the context of debates on vitalism/physicalism.[152] Bennett explicitly rejects 'the life/matter binary informing classical vitalism',[153] but shows some sympathy to the 'pulsing, conative dimension of agency' articulated by vitalist thinkers like Driesch.[154] Bennett rather describes vitality as 'the capacity of things edibles, commodities, storms, metals – not only to impede or block the will and designs of humans but also to act as quasi agents or forces with trajectories, propensities, or tendencies of their own.'[155]

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[148] It is not widely known that Bradwardine articulated an explanation for the motions of bodies before Galileo, in the first half of the fourteenth century (Edith Dudley Sylla, 'Medieval Dynamics' (2008) 61 Physics Today 51).
[149] Chris Fowler and Oliver JT Harris, 'Enduring Relations: Exploring a Paradox of New Materialism' (2015) 20 Journal of Material Culture 127, 128.
[150] William E Connolly, 'The "New Materialism" and the Fragility of Things' (2013) 41 Millennium 399, 400.
[151] Deleuze and Guattari (n 6) 407.
[152] In this context, 'vitalism' is the school of thought maintaining that *living* organisms cannot be accounted for in terms of material subsistence alone, as abiotic rocks or clouds can; instead, something else is required – an 'immaterial ingredient', which some might call a soul or spirit (Elliott Sober, *Philosophy of Biology* (Oxford University Press 1993) 22-24).
[153] Bennett (n 7) xviii.
[154] Bennett (n 7) 80. I visited the thoughts of Driesch in **2.3.1**.
[155] Bennett (n 7) viii.

Likewise, with respect to the agency of all matter, Barad writes that

> [m]atter… is not an individually articulated or static entity. It is not little bits of nature, or a blank slate, surface, or site passively awaiting signification; nor is it an uncontested ground for scientific, feminist, or economic theories. Matter is not immutable or passive. Nor is it a fixed support, location, referent, or source of sustainability for discourse. It does not require the mark of an external force like culture or history to complete it.[156]

Such ontological views of matter as active, agentic, lively, and resistant are in the first instance politically expedient. Bennett warns that 'the image of dead or thoroughly instrumentalized matter feeds human hubris and our earth-destroying fantasies of conquest and consumption. It does so by preventing us from detecting (seeing, hearing, smelling, tasting, feeling) a fuller range of the nonhuman powers circulating around and within human bodies.'[157]

Alongside this political dimension, the view of matter as active, agentic, resistant, and lively greatly enhances my approach towards the question of how law is material. New materialisms insist that agentic properties are *not* confined to humans or living things, and that there is both activity (liveliness, potency) and reactivity (recalcitrance, resistance) in *all* things. New materialisms portray the world as acting and reacting upon itself in an absolutely constant material flux – ie, the world is entangled. It is once this is recognised that it can be appreciated the ways in which, beyond human agency, and in the words of Barad, 'the world kicks back'.[158] Ultimately, this points me towards an understanding of the materiality of law beyond fixations on the 'human' or the 'living'.

There is perhaps no better set-piece to illustrate the agency of so-called 'inert' matter than the Chernobyl nuclear disaster in 1986. Here, the agencies of uranium pellets,

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[156] Barad (n 8) 150-151.
[157] Bennett (n 7) ix.
[158] Barad (n 8) 215.

water vapour, graphite, *and so on* – far outpaced the agencies of humans, plants, animals, *and so on*. The effects of the Chernobyl disaster on the material world were unprecedented in their severity. Given the political backdrop of the disaster, the full human cost is difficult to gauge – but in the very immediate aftermath, it is known that at least seventy-two people, mainly 'liquidators', succumbed to acute radiation poisoning.[159] Their symptoms demonstrate the pure material power of radioactive substance. The initial stage after a high dose of radiation, like that seen at Chernobyl, brings 'fever, headache, parotitis [inflammation of salivary glands], abdominal cramping, skin erythema, conjunctivitis, and hypotension'.[160] Following a liminal 'walking ghost' phase, where the *victim* appears to recover, death occurs in a few days due to a combination of multiple organ failure, internal bleeding, neurovascular damage, and a gutting of the bone marrow.[161]

Does what causes this, ostensibly lumps of metal, really sound 'inert'? Local wildlife in the vicinity of Chernobyl were also extirpated – today, those animal populations which live inside the exclusion zone have incorporated high levels of caesium and strontium isotopes in their muscles and bones.[162] Yet the impacts of Chernobyl were not limited to health and ecology. Socially, those uranium pellets led to the resettlement of three hundred and fifty thousand people across northern Ukraine,[163] and Gorbachev, who presided over the Chernobyl disaster, proffered it as 'perhaps the real cause of the collapse of the Soviet Union'.[164]

The case to be made for the agency of *all* matter of course need not be restricted to such extremes as nuclear disasters (even though such examples are profoundly striking). It is also true that an explication of the universality of matter's agency makes any examples ultimately arbitrary; I will give just two further case examples.

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[159] RK Chesser and BE Rodgers, 'Chernobyl' in Philip Wexler (ed), *Encyclopedia of Toxicology* (Elsevier 2014) 822, 823.
[160] Elizabeth H Donnelly and others, 'Acute Radiation Syndrome: Assessment and Management' (2010) 103 Southern Medical Journal 541.
[161] Donnelly and others (n 160).
[162] Chesser and Rodgers (n 159) 824.
[163] Chesser and Rodgers (n 159) 822.
[164] Mikhail Gorbachev, 'Turning Point at Chernobyl' *The Japan Times* (21 April 2006).

At an overarching scale, Tsing describes the agency of plants, mushrooms and fungi in the development of human social history – to such an extent that she refers to humans as being *domesticated* by them.[165] One particularly vivid example is that of the *Serpula lacrymans* (dry rot) fungus. Tsing describes the pernicious agency of the dry rot fungus, and its subsequent uneasy relationship with humans:

> [F]ungi are ubiquitous, and they follow all our human experiments and follies. Consider *Serpula lacrymans*, the dry rot fungus, once found only in the Himalayas. Through their South Asian conquests, the British navy incorporated it into their ships. *S. lacrymans* flourished in the unseasoned woods often used in ships for naval campaigns, and thus it traveled around the world. By the early nineteenth century, the decay of wood in British naval ships was called a "national calamity," and panic ensued until the introduction of ironclad warships in the 1860s. Dry rot, however, just kept spreading, as the fungus found new homes in the damp basement beams and railroad ties of British-sponsored civilisation. British expansion and dry rot moved together.[166]

Tsing's example presents humans as the passive party here: the party which is buffeted, moulded, and lured in to battle with the forceful agency of *seemingly innocuous* dry rot fungus.

In a similar fashion, electronics and machinery are often touted for their agentic affect on human life, in protest against the view that technology is merely inert and passive. Indeed, in Marxian political economy, the material machine and technology *defines* human social life through its role in the labour-process. Marx writes that

[165] Anna Tsing, 'Unruly Edges: Mushrooms as Companion Species' (2012) 1 Environmental Humanities 141, 145.
[166] Tsing (n 165) 144-145.

> [t]echnology reveals the active relation of man to nature, the direct process of the production of his life, and thereby it also lays bare the process of the production of the social relations of his life[.][167]

The interrelationships between the human body and electronics, machines, robots, prosthetics, and so forth, are so entrenched that in many cases reality now extends beyond science fiction. The common trope of machines dominating humans in some distant dystopian future (in *Bladerunner*, hostile 'synths' roam amongst humans; and in *The Matrix* trilogy humans are farmed in pods for their bio-energy) is on many more subtle levels realised in our present time. There is scarcely a human community untouched and unaffected by the explosion of electronic technology seen in the final decades of the twentieth century. Contrary to the narrative of humans affecting technology monodirectionally, technology also proactively affects human materiality. Haraway declares that '[o]ur machines are disturbingly lively, and we ourselves frighteningly inert.'[168] Likewise, Eisenberg writes of machines:

> Like our living allies, machines coevolve with us. They shape our evolution, both cultural and biological, almost as thoroughly as we shape theirs. We think we control them; in truth, they have a life and logic of their own… To describe machines as if they were alive is a conceit, but a useful one. It reminds us to keep an eye on them. For they are not simply tools that lie inert in our hands, but active members of ecological associations whose effects we have not yet learned to gauge.[169]

To demonstrate the agency of all matter, I have just used the three examples of nuclear material, dry rot, and technology as they affect the *human* – the interaction of agencies in matter complexes of wood, fungus, water, metal, and flesh. The anthropocentrism of these examples is excused in that it is more accessible to

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[167] Karl Marx, *Capital*, vol 1 (Penguin Classics 1990) 493.
[168] Haraway, *Simians, Cyborgs, and Women* (n 67) 152. This chapter was first published as Donna Haraway, 'Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s' (1985) 80 Socialist Review 65.
[169] Evan Eisenberg, *The Ecology of Eden* (Picador 1998) 57.

demonstrate the agency of matter through a reflection on human lived experience. However, it must also be borne in mind that, as new materialist ontologies contend, agency is distributed in *all things*. By that measure, agency is not a quality per se, but a degree and relation. In the context of material agency, lightning will strike a pine tree and fell it on the soil even if there is no human around to hear it. Tsing mentions the growth of radiotrophic fungi in the depths of the Chernobyl reactor.[170] Where humans fail and are no more, fungi will thrive; yet another instance of the inexplicable agency of matter, disinterested in human presence.

Ultimately, the idea of distributed agency leads to a form of ontological monism, which problematises material distinctions or categories. In practice, this means the rejection of binaries such as 'living and non-living', 'human and non-human animals', and 'biotic and abiotic'. This expansive outlook of new materialisms greatly appeals to the interdisciplinarity that I seek in my approach to law and legal philosophy (**1.2.2**). For that reason, I will now turn to consider the ontological monism of new materialisms in greater detail.

3.3.3 Ontological monism

I have just said that, owing to their positions on distributed agency, new materialisms elide ontological dichotomies like 'human and non-human animals', 'living or non-living', and 'biotic or abiotic' matter. In the most concentrated form of such dichotomies, everything outside of the 'human' sphere – ie, other biotic living and non-living things, and abiotic things – are set up as 'objects' in an anthropocentric subject-object dichotomy. These typical oppositional binaries, and their relationships between them, are represented in **Figure A** below.

[170] Tsing (n 165) 151.

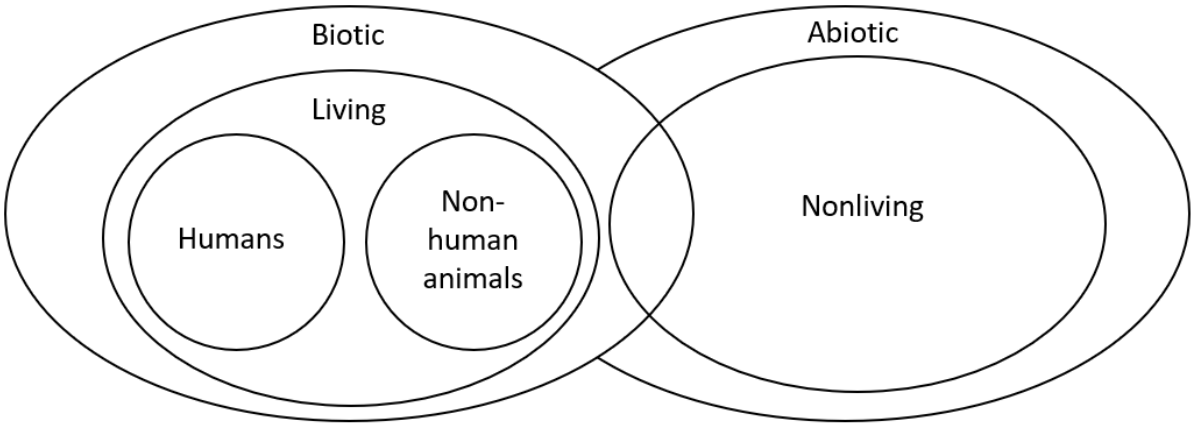

Figure A: Venn diagram of oppositional binaries [171]

Such binaries do have useful real-world application in many contexts – methodological, legal, and so forth. In biology and ecology, for example, phenomena are more easily analysed in the context of the dynamics between abiotic and biotic material, as those terms are defined in that field. Otherwise, in the context of law, some form of distinction between a human and a non-human animal is implicit in a law requiring, for example, certain persons to keep dogs under control.[172]

However, on the departure point that all matter is *agentic*, as described in **3.3.2**, no strict *ontological* distinctions can be drawn between oppositional binaries like those in **Figure A**. This is a logical consequence of the first stance on the distributed agency of matter; so much so that they are in effect one expression. Barad describes how 'if agency is understood as an enactment and not something someone has, then it seems not only appropriate but important to consider agency as distributed over nonhuman as well as human forms.'[173] Barad therefore steps towards ontological monism in her theory of agential realism, whereby any 'distinction between "human" and "nonhuman" [is not taken] for granted.'[174]

[171] If we understand biotic as that which relates to or results from living organisms, then at the point where the biotic sphere overlaps with the non-living sphere, we find dead and decaying *once*-living things, secretions, and so forth.
[172] Dangerous Dogs Act 1991, s 3(1).
[173] Barad (n 8) 214.
[174] Barad (n 8) 32.

The new materialist idea of the agency of all things, in the words of Lemke, 'brackets the distinctions between subjects and objects to embrace the idea of a comprehensive vitality that goes beyond traditional ontological and normative divisions and runs through both human and nonhuman matter.'[175] It is in this important sense that new materialisms are 'allied with perspectives described as post-humanist'.[176] Under new materialisms, all 'classic' distinctions melt away once common material agency is recognised. This is represented in **Figure B** below:

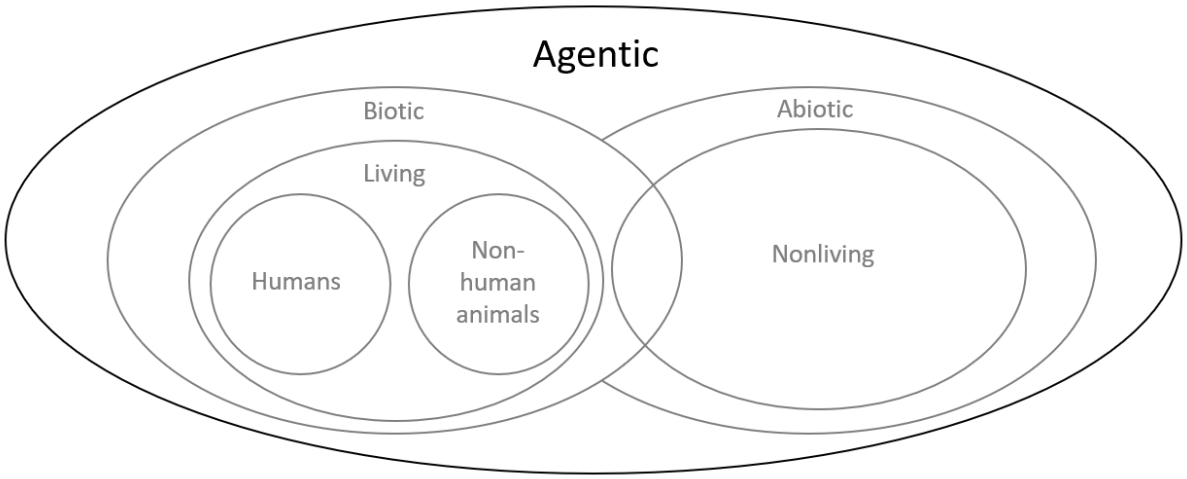

Figure B: The new materialist collapse of ontological categories

As is apparent from **Figure B**, to take one instance, new materialisms elide any distinction between 'humans' and 'non-human animals' (or more simply, 'animals').[177] There are various ways that one might make such a distinction. First, the distinction can be made if 'agency' is instead cast as *rational agency*, as per Kant. On this view, which I described in **3.3.2**, humans are distinguished from animals because the latter are seen to lack free will (self-consciousness, coupled with the capacity for reason).[178] Or, for Wittgenstein, humans and animals are distinguished by *language*, or rather the

[175] Thomas Lemke, 'An Alternative Model of Politics? Prospects and Problems of Jane Bennett's Vital Materialism' (2018) 35 Theory, Culture & Society 31, 33.
[176] Fowler and Harris (n 149) 128.

[178] Kant (n 134) 15. See the quoted passage in n 134.

ability to play language games, regardless of any other cognitive abilities that animals do or might possess.[179] And, even where shared materialities of humans and animals are expressly admitted, there may still be distinctions made. For example, Descartes sees animals as *automatons:* they are living and biotic, like humans, yet lack souls (or, at least, souls quite different to our own).[180]

For Braidotti, the distinction between animals and humans stems from capitalism's (ab)use of the former as a material commodity – the entitlement to do with animals as one likes.[181] Under this political economy, animals are cast as

> primary material products: think of the tusks of elephants, the hides of most creatures, the wool of sheep, the oil and fat of whales, the silk of caterpillars and, of course, milk and edible meat. The bodies of animals are classified like industrial production plants, especially insects' bodies, which are taken nowadays as prototypes for advanced robotics and electronics.[182]

However, any distinction between the 'human' and 'animal' in new materialisms is rejected on the basis of *distributed material agency*. On this ontological premise, strict distinctions cannot be drawn. Tsing and Haraway are notable for their consideration of the material entanglement of living things. Using anthropological instances, such as the relationship between British ships and dry rot fungus, Tsing stresses how human history reflects deep interspecies relationships.[183] Instead of human sociality, Tsing prefers instead to talk of 'more-than-human sociality' – here, recognition of the agency

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[179] 'It is sometimes said that animals do not talk because they lack the mental capacity. And this means: "they do not think, and that is why they do not talk." But – they simply do not talk. Or to put it better: they do not use language – if we except the most primitive forms of language' (Ludwig Wittgenstein, *Philosophical Investigations* (GEM Anscombe, PMS Hacker and Joachim Schulte trs, 4th edn, Wiley-Blackwell 2009) 16e.

[180] Cottingham points out that 'Descartes quotes with approval the passage in Deuteronomy which says that the soul of animals is simply their blood' (John Cottingham, 'Descartes' Treatment of Animals' (1978) 53 Philosophy 551; René Descartes, *Oeuvres de Descartes*, vol 1 (C Adam and P Tannery eds, Léopold Cerf 1913) 415).

[181] Kant (n 134) 15.

[182] Rosi Braidotti, 'Animals, Anomalies, and Inorganic Others' (2009) 124 Publications of the Modern Language Association of America 526, 529.

[183] Tsing (n 165) 144.

of things beyond the 'human' challenges the human/animal binary.[184] On the same basis of ontological, agentic entanglement, Haraway evocatively declares that 'we have never been human'.[185] Rather, '[w]e are in a knot of species coshaping one another in layers of reciprocating complexity all the way down.'[186] Haraway describes humans as *companion species* – 'a permanently undecidable category, a category-in-question', which spurns human exceptionalism.[187]

As **Figure B** shows, the human/animal binary is not the only instance where new materialisms pull down ontological walls. New materialisms also reject any prioritisation of the 'living' over the 'non-living'. The situation here is complicated by the fact that this dichotomy often takes the form of a cross-pollination with the lower-order classical binary of the human/animal – such that the 'human' is then also posited against the 'non-human, non-living'. It will be seen that both types of binary, however, orbit around an anthropic core.

Much of Latour's work is a reaction against the dichotomisation of 'nonhuman' nature and 'human' culture.[188] In its place, Latour proposes an epistemological approach to natural, social, and textual phenomena through the lens of *generalised symmetry*. This requires 'whichever words are connoted in one of the[se] realm[s] to describe the others, thus showing the… complete disregard for the artefactual gaps introduced by prerelativist arguments.'[189] To be sure, Latour's monistic approach is epistemological in nature, and does not suppose the ontological monism based upon material agency that I am seeking to establish in this section. Yet as Callon and Law (who collaborated with Latour) explain, a generalised symmetrical approach yields the same high vantage point from which one can inspect the various aspects of social dynamics (or law, for my purposes):

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[184] Anna Tsing, 'More-Than-Human-Sociality' in Kirsten Hastrup (ed), *Anthropology and Nature* (Routledge 2013) 27.
[185] This is the title of the first part of Donna Haraway, *When Species Meet* (University of Minnesota Press 2008). It is a play on Latour's title (n 188, below).
[186] Haraway, *When Species Meet* (n 185) 42.
[187] Haraway, *When Species Meet* (n 185) 165.
[188] Bruno Latour, *We Have Never Been Modern* (Catherine Porter tr, Harvard University Press 1993) 11.
[189] Latour, 'On Actor-Network Theory' (n 144) 379.

> Often in practice we bracket off non-human materials, assuming they have a status which differs from that of a human. So materials become resources or constraints; they are said to be passive; to be active only when they are mobilized by flesh and blood actors. But if the social is really materially heterogeneous then this asymmetry doesn't work very well. Yes, there are differences between conversations, texts, techniques and bodies. Of course. But why should we start out by assuming that some of these have no active role to play in social dynamics? The principle of material heterogeneity says that there is no reason to do so. Instead it says that all these elements and materials participate in social ordering.[190]

On a more ontological basis, it is common for new materialisms to point to the myriad complex ways that so-called 'non-living' matter shapes human materiality. Cloatre and Cowan lament that 'drawing firm lines between humans and objects was a wrong turn in social theory because humanity is constantly shaped and mediated by an infinite series of devices, from papers or bricks to computers and microchips.'[191] Rekret describes how Bennett and Braidotti, whom he takes to be exemplars of new materialisms, bracket 'epistemological questions of finitude' in order to collapse any ontological distinction between the human and animal or abiotic matter.[192]

Bennett's 'call to dissipate the binaries of life and matter, human and animal, organic and inorganic is made in the name of a demand to think the "vitality" and agency of matter',[193] of which I covered in **3.3.2**. In *Vibrant Matter*, Bennett uses the instances of foodstuffs and metals to 'gnaw away at the life/matter binary', by pointing out human's contingency on what are notionally *non-human* materials of life.[194]

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[190] Michel Callon and John Law, 'After the Individual in Society: Lessons on Collectivity from Science, Technology and Society' (1997) 22 The Canadian Journal of Sociology 165, 168.
[191] Emilie Cloatre and Dave Cowan, 'Legalities and Materialities' in Andreas Philippopoulos-Mihalopoulos (ed), *Routledge Handbook of Law and Theory* (2019) 434.
[192] Paul Rekret, 'A Critique of New Materialism: Ethics and Ontology' (2016) 9 Subjectivity 225, 228.
[193] Rekret (n 192) 22.
[194] Bennett (n 7) 39-62.

I have already shown how Braidotti traces the human and animal/non-human binaries, at least in part, to capitalistic commodification.[195] Moving beyond this focus on capitalism, Braidotti calls for 'a displacement of the lines of demarcation between structural differences, or ontological categories, for instance between the organic and the inorganic, the born and the manufactured, flesh and metal, electronic circuits and organic nervous systems.'[196]

Finally, DeLanda similarly decries any such distinction between the living and non-living thus:

> In the eyes of many human beings, life appears to be a unique and special phenomenon… This view betrays an 'organic chauvinism' that leads us to underestimate the vitality of the processes of self-organisation in other spheres of reality…[197]

In what ways, specifically, will the ontological monism implied by new materialisms' insistence on the agency of all matter benefit my arguments in the following chapters? It might be recalled from **3.3.1** that one of the characteristics that Devellennes and Dillet attribute to new materialisms is that they possess certain 'methodical implications of taking material objects seriously in our academic practices.'[198] In essence, this lends itself to the interdisciplinary approach that I adopt in the face of the indeterminacy of 'law' (**1.2.1** and **1.2.2**).

The new materialist writers that I have focused on in this chapter – Bennett, Braidotti, Tsing, and Barad – also employ a monistic ontology of matter to develop fresh *ethical* insights to various issues; particularly environmental issues. Bennett, for one, uses a

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[195] This is not to say that capitalism does not designate humans in other ways; Braidotti remarks that the motto of global capital may just be 'I shop therefore I am!' (Rosi Braidotti, *The Posthuman* (Polity Press 2013) 63).
[196] Braidotti, *The Posthuman* (n 195) 89.
[197] Manuel DeLanda, *A Thousand Years of Nonlinear History* (Swerve Editions 1997) 103-104; cited in Myra J Hird, 'Feminist Matters: New Materialist Considerations of Sexual Difference' (2004) 5 Feminist Theory 223, 227.
[198] Devellennes and Dillet (n 36) 7.

monistic ontology to 'counter the narcissism of humans in charge of the world'.[199] In the face of such world-threatening problems as climate change, profligacy with finite materials, and widespread pollution, the rejection of anthropocentrism on the basis of the agency of all matter is seen as an imperative ethical move. I reflect upon the possibility of pointing towards an ethics in **6.3**.

This brings me to the end of an overview of the new materialisms. I described in the different conceptions of material agency in (**3.3.2**), drawing in particular on the work of Deleuze, Bennett, Barad, and Haraway. These new materialist conceptions are unified by their position that material agency is *distributed*. Ultimately, this leads to a form of ontological monism, whereby typical binaries such as human/non-human and living/non-living are eroded (**3.3.3**).

Now that I have provided context on the new materialisms, I move to draw out *two aspects* apparent from my foregoing discussions on new materialist ontologies of matter. I identify these two aspects for the purpose of using them as thematic disembarkation points for my enquiry into the question of how law is material. I stress that these aspects are only *nominally* separate, because one cannot be entirely understood without the other.

3.4 Two nominal aspects for further inquiry

I call the two nominal aspects inspired by the new materialist ontologies *Conditioning* (**3.4.1**) and *Flux* (**3.4.2**).

[199] Bennett (n 7) xvi.

3.4.1 Conditioning

The aspect of Conditioning involves recognition of the ineluctable *contingencies* of materiality. This entails that things are as they are, no more or less, because those things are fundamentally *conditioned* as such by the infinitely complex entanglement of affective agencies.

I will unpack this somewhat general description of Conditioning using the example of an artist. This example is not merely an analogy, because it is employed to demonstrate the aspect of Conditioning in itself, in one actual instance.

Artists are sometimes thought to involve themselves in acts of unbridled creation, whereby they transpose their imagination onto media in the form and manner that occurs to them. Really, any art is contingent upon complex material agencies. In the case of an artist's painting, I might reference the size and porosity of the canvas; the specifications of the brush; the particular paint used;[200] the precision of hand; the visual perception of the artist;[201] the light level of the room; any reference material;[202] and so on.

[200] The chemical composition of the paint employed determines such contingent variables as its viscosity, texture, and chromaticity, all of which affect the appearance of the painting. See, in specific relation to van Gogh's mixing of oil paints, J Salvant Plisson and others, 'Rheology of White Paints: How Van Gogh Achieved His Famous Impasto' (2014) 458 Colloids and Surfaces A: Physicochemical and Engineering Aspects 134. Similarly, it is a fusion of chemical and practical reasons that Stone Age paintings are typically red or orange, as abundantly available ochres are rich in iron oxides (see L Darchuk and others, 'Composition of Prehistoric Rock-Painting Pigments from Egypt (Gilf Kébir Area)' (2011) 83 Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 34).

[201] The visual perception of artists is obviously integral to the creation of (visual) art (Michael F Marmor and James G Ravin, *The Artist's Eyes: Vision and the History of Art* (Abrams 2009)). The well-documented eye-diseases of Degas and Monet are heavily theorised to be responsible for their diffuse styles (Richard Kendall, 'Degas and the Contingency of Vision' (1988) 130 The Burlington Magazine 180; James G Ravin, 'Monet's Cataracts' (1985) 254 The Journal of the American Medical Association 394). There is also an (unlikely) theory that van Gogh's love of yellow was the result of xanthopsia, possibly caused by the drug dioxin, rather than a choice of style (Doğaç Demir and Şefik Görkey, 'Van Gogh and the Obsession of Yellow: Style or Side Effect' (2019) 33 Eye 165). Armağan, who was born without eyes, uses tactile methods to paint colourful landscapes which he has never seen (Alison Motluk, 'Seeing without Sight' (2005) 185 *New Scientist* 37).

These examples of the material Conditioning of a painting are minimal; there is much more besides, both citable and uncitable. By uncitable I mean to say that, epistemically, it is impossible to grasp the complexity of agency enough to produce an exhaustive account of material Conditioning in general – in other words, *the Conditioning of materiality is never explicable in its entirety*.

In the example of a painting, citing something so unbelievably complex as 'the artist's life' initiates a cyclic proliferation of material contingencies: the social milieu surrounding the artist; their upbringing; schooling; practice; habitation; health; and so on. For example, van Gogh's style in late works such as *Starry Night* (1889) was developed over the course of ten years. During this time alone, Brower cites failed experimentations, time at The Hague, and personal relationships as formative influences on van Gogh's characteristic style.[203] Each of these factors was in turn agentically Conditioned in incredibly entangled ways. Thus, any attempt at a comprehensive account of the agentic Conditioning that culminated in *Starry Night* – not least its influence on art and the *world* thereafter – is in vain; because materiality *in toto*, with its nominal aspects of Conditioning and Flux, is insusceptible to terminal description.

In light of the ungraspable knowledge of the totality of agentic materiality, to speak of any 'one' agency is arbitrary. In the case of a painting, I have cited such things as 'the brush' and 'the light level' as agencies of its Conditioning. This does not suggest that they are somehow special on an ontological level, because as I have said the painting's Conditioning is infinitely complex. I argue, however, that delineating separate agencies

[202] The influence of reference material in art is demonstrated quite impressively in the works of artists who strive to transpose what they see with high levels of fidelity. The Russian painter Shishkin, for example, painted landscapes around the area in which he lived with photorealistic detail (see *Wood Distances* (1884) and *Coniferous Forest, Sunny Day* (1895)). One art critic wrote that Shiskin was 'in love with the distinctive character of each tree, each bush and each blade of grass' (I Shuvalova (ed), *Ivan Ivanovich Shishkin* (Iskusstvo 1984) 268; cited in Christopher Ely, 'Critics in the Native Soil: Landscape and Conflicting Ideals of Nationality in Imperial Russia' (2000) 7 Ecumene 253, 261). In this way, Configuration of the reference material itself is also Configuration of the painting.

[203] Richard Brower, 'Vincent van Gogh's Early Years as an Artist' (1996) 3 Journal of Adult Development 21.

is expedient for *methodological* purposes. Indeed, in **4** I develop my understanding of Conditioning by considering the ways in which the *communication* of law (**4.2**) and the *content* of law (**4.3**) are contingent on various agentic materialities.

I will now outline the second aspect inspired by new materialisms: Flux. Ultimately, I will apply this aspect in **5** with a view to positing a material ontology of law.

3.4.2 Flux

Taking inspiration from new materialist thought, I argue for *Flux* as the conceptual representation of the dynamic, multi-directional, and contingent systemic processes of agentic materiality. A dead leaf that falls to the ground in the autumn is decayed by worms and bacteria in the soil. In turn, this leaf sustains not only that matter, but its remnants become soil itself. It now anchors the tree it once fell from, and which it might become again. Later in **3.5.2**, I employ the examples of the role of copper in various human biological processes, and the effect of microplastics on ocean biota. Alongside demonstrating instances of microscopic material agencies, these examples call to attention the contingent, complex, and multi-directional *systems* of agentic matter.

Conceptualising Flux as a nominal aspect for further inquiry into how law is material is of crucial importance. Law does not pertain merely to humans, because humans are not and cannot be separated from wider materiality. I explicitly apply the aspect of Flux to law in **5**, in the senses of *re*conditioning (**5.2**) and material systems (**5.3**).

Having outlined the aspects of Conditioning and Flux, which I intend to use as prisms for questioning how law is material, I will now turn to address two particularly problematic metaphysical debates. It is important to address these debates here, because they often overlap with questions of matter and materiality. As such, because I am adopting a new materialist ontology of matter, for use in the following chapters,

an engagement with the principle problems raised in these significant debates is deserved.

3.5 Addressing two metaphysical debates

In this section, I will consider the importance of debates concerning 'mind' and 'matter' (**3.5.1**), and scales of matter (**3.5.2**). Overall, I conclude in each case that pragmatic or new materialist approaches are adequately equipped to respond to, or at least bracket, the central tensions in these debates.

3.5.1 'Mind' and 'matter'

It was Berkeley who took the quintessential, subjective idealist position that objects independent of mind are an illusion. Berkeley wrote '[t]hat neither our thoughts, nor passions, nor ideas formed by the imagination, exist without the mind, is what everybody will allow. And it seems no less evident that the various sensations or ideas imprinted on the sense… cannot exist otherwise than in a mind perceiving them.'[205] Similarly, Leibniz stated that 'matter and motion are not substances or things as much as they are the phenomena of perceivers, the reality of which is situated in the harmony of the perceivers with themselves (at different times) and with other perceivers.'[206]

[204] Peter K McInerney, *Introduction to Philosophy* (Harper Collins 1992) 31-32.
[205] George Berkeley, *Principles of Human Knowledge and Three Dialogues* (Roger Woolhouse ed, Penguin Books 2004) 53-54.
[206] Leibniz was writing here to de Volder, who he was seeking to convince of his metaphysics (Gottfried Wilhelm Leibniz, *Philosophical Essays* (Roger Ariew and Daniel Garber trs, Hackett 1989) 181).

A seemingly unlikely alliance exists between such idealist thought of the seventeenth and eighteenth centuries and some quantum physicists.[207] The idealist character of this alliance derives from the observation that, at the quantum level (ie, scales well below the established 'standard model' of elementary particles),[208] any other notion of matter or substance gives way to nebulous ideas of quantum 'events'.[209] At a quantum level, matter is better characterised *statistically* in terms of wave functions[210] – the certainty of which depends inversely on the accuracy of observation.[211] Such quantum mechanical positions on matter rest upon mereological assumptions of part-whole relations and an 'ontological prioritisation' of the micro-level.[212]

On the basis of quantum theory, Henry declares that '[t]he Universe is immaterial… serious attempts to preserve a material world… serve only to preserve an illusion.'[213] Jeans is similarly sceptical of the reality of matter, writing that '[m]ind no longer appears as an accidental intruder into the realm of matter; we are beginning to suspect that we ought rather to hail it as the creator and governor of the realm of matter – not of course our individual minds, but the mind in which the atoms out of which our individual minds have grown exist as thoughts.'[214]

A contemporary position of great relevance to the perceived tension between 'mind' and 'matter' is *panpsychism*. Broadly speaking, panpsychists take the view that 'each spatio-temporal thing has a mental or "inner" aspect'.[215] This idea has many pre-

[207] Richard J Hall, 'Philosophical Basis of Bohr's Interpretation of Quantum Mechanics' (1965) 33 American Journal of Physics 624, 625; JBS Haldane, *Philosophy of a Biologist* (Clarendon Press 1935) 21.

[209] Bertrand Russell, *History of Western Philosophy* (Routledge 2004) 174.
[210] David J Griffiths, *Introduction to Quantum Mechanics* (2nd edn, Pearson Education 2014) 1.
[211] As described in **3.3.2**, Heisenberg's uncertainty principle maintains that increasing the precision of the measurement of the *position* of a particle will simultaneously increase the uncertainty of that particle's *momentum*, and vice-versa (Hawking (n 108) 63).
[212] Andreas Hüttemann, *What's Wrong with Microphysicalism?* (Routledge 2004) 122.
[213] RC Henry, 'The Mental Universe' (2005) 436 Nature 29.
[214] James Jeans, *The Mysterious Universe* (Cambridge University Press 1931) 138.
[215] Paul Noordhof, 'Panpsychism' in Ted Honderich (ed), *The Oxford Companion to Philosophy* (2nd edn, Oxford University Press 2005) 677.

historical and ancient precursors,[216] but it is an idea that has been largely rejected in post-Enlightenment philosophy.[217]

Notable contemporary panpsychists include Mathews and Skrbina.[218] Mathews describes panpsychism as the view that 'every instance of matter is not merely manifest and visible, but actually there, present to itself.'[219] Mathews looks beyond the external appearance of matter, arguing that

> there is an innerness to [matter's] reality as well as an outerness… an interiority analogous to ours, where our interiority is a subjective form of self-presence that can never be externalized, never exposed to the outside, no matter to what degree we are physically dissected.[220]

Panpsychism has been contrasted with both idealism and materialism, and critiqued on that basis.[221] However, it is perhaps more accurate to say that panpsychism to a large extent undercuts the debate concerning idealism and realism,[222] because it problematises traditional concepts of mind and matter in the first instance. Skrbina describes panpsychism as a 'meta-theory' of mind, 'not a theory in itself. It only claims that all things (however defined) possess some mind-like quality; it says nothing, per se, about the nature of that mind, nor of the specific relationship between matter and mind.'[223] Similarly, Noordhof writes that

> [f]ew panpsychists would be happy with a characterisation of their view that as that all things have minds, even sticks and stones. Instead, they want to say

[216] For example, in Aboriginal philosophy (Deborah Bird Rose, 'Connectivity Thinking, Animism, and the Pursuit of Liveliness' (2017) 67 Educational Theory 491, 495-496), and in Ancient Greek philosophy (David Skrbina, *Panpsychism in the West* (MIT Press 2005) 23-63).
[217] Freya Mathews, *For the Love of Matter* (State University of New York Press 2003) 1.
[218] Mathews (n 217); Skrbina (n 216).
[219] Mathews (n 217) 25

[221] David Ray Griffin, *Unsnarling the World-Knot* (University of California Press 1998) 93; David J Chalmers, 'Idealism and the Mind-Body Problem' in William Seager (ed) (Routledge 2019) 353.
[222] Uwe Meixner, 'Idealism and Panpsychism' in Godehard Brüntrup and Ludwig Jaskolla (eds), *Panpsychism* (Oxford University Press 2016) 387.
[223] Skrbina (n 216) 249.

> that there may be varying degrees in which things have inner subjective or quasi-conscious aspects, some very unlike what we experience as consciousness. A full-blown mind would only be possessed by things approaching the complexity of human beings.[224]

It has been important to visit the tension between 'mind' and 'matter', because the tension posited in that way is a central question in philosophy.[225] However, I suggest overall that the thorny problems of idealism, realism, and panpsychism may, for my purposes of inquiring into *how law is material*, be bracketed.

In the very first instance, it is not an object of this thesis to attempt a reconciliation of idealism, realism, and panpsychism. To this extent, I argue that a pragmatic, everyday approach to the issues raised is a reasonable position to adopt. The essence of this position is that matter at least *appears* to exist, in the way that different 'things' of the world are manifest; and that the relationship between or dependency on these things and what is commonly referred to as mind, is not immediately clear. Armstrong puts it excellently when he remarks that '[i]t is difficult to deny that a spatio-temporal system *appears* to exist'.[226]

In point of fact, it is this pragmatic position on the appearance of matter that the idealist Berkeley is sometimes wont to take himself. While he strongly denies that matter exists in *actuality* outside of any mind, he nonetheless describes the existence of 'matter' in a pragmatic sense when he sat at his table to write *Principles of Human Knowledge*:

> The table I write on, I say, exists, that is, I see and feel it; and if I were out of my study I should say it existed, meaning thereby that if I was in my study I might perceive it, or that some other spirit actually does perceive it…[227] I do not argue

[224] Noordhof (n 215) 677.
[225] Bertrand Russell, *The Problems of Philosophy* (Opus 1980) 1-24.
[226] David M Armstrong, 'Naturalism, Materialism, and First Philosophy' in Paul K Moser and JD Trout (eds), *Contemporary Materialism* (Routledge 1995) 35.
[227] Berkeley (n 205) 54.

> against the existence of any one thing that we can apprehend, either by sense or reflection. That the things I see with my eyes and touch with my hands do exist, really exist, I make not the least question.[228]

In the context of my discussion, idealism poses a merely semantical problem; for idealism disputes matter *understood as* independent from mind. As Berkeley notes, to claim 'that there are certain *unknown ideas* in the mind of God' is 'at the bottom… no longer contending for the *thing*, but for the *name*. Whether therefore there are such ideas in the mind of God, and whether they may be called by the name *matter*, I shall not dispute.'[229] This is not a concession within Berkeley's philosophy, but rather an application of his more involved linguistic position.[230]

Secondly, apart from being a reasonable position given the remit of this thesis – the inquiry into how law is material – I argue that a pragmatic approach in relation to debates between idealism, realism, and panpsychism is in fact a sufficient basis to account for the materiality of law. It will be seen that arguments from the *appearance* of matter, silent on the relationship of this appearance to 'mind', are adequate for the material ontology of law that I develop in this thesis.

[228] Berkeley (n 205) 65.
[229] Berkeley (n 205) 81.
[230] '[I]t is thought that every name has, or ought to have, one only precise and settled signification, which inclines men to think there are certain *abstract*, *determinate ideas*, which constitute the true and only immediate signification of each general name… Whereas, in truth, there is no such thing as one precise and definite signification annexed to any general name, they all signifying indifferently a great number of particular ideas' (Berkeley (n 205) 47).

determined by the concept of the Dreaming,[231] which is broadly-speaking panpsychist in character.[232] Despite this underlying panpsychism, it is sufficient that matter *appears* to Aborigines as suns, snakes, rivers, and so forth, in order to theorise on the affectivity that these materialities have in Aboriginal law.

Having looked at the tension between 'mind' and 'matter', I now come to consider a second important metaphysical problem. This concerns scales of matter in relation to human perceptibility.

3.5.2 Scales of matter

Without the aid of electron microscopes and Geiger counters, materialities like viruses and ionizing particles cannot in an everyday sense be *directly* perceived by human sensory organs, in the way that Berkeley's writing table can. Schrödinger notes the truth of the human inability to perceive below a certain threshold when he reflects that, 'if we were organisms so sensitive that a single atom, or even a few atoms, could make a perceptible impression on our senses – Heavens, what would life be like!'[233]

Some philosophers have formed their ontological views of matter on this idea of 'minimal' human perceptibility. As I described in **3.2**, the empiricist Locke characterised matter as that which has 'bulk enough to be perceived'.[234] Locke reflected on the use of microscopes to reveal different qualities of material bodies,[235] but in some sense believed this to be an abuse of human senses.[236] Ultimately, Locke's empiricism entails that matter is conditional on direct perception.[237]

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[231] AP Elkin, 'Elements of Australian Aboriginal Philosophy' (1969) 40 Oceania 85, 89; Irene Watson, 'Indigenous Peoples' Law-Ways: Survival against the Colonial State' (1997) 8 Australian Feminist Law Journal 39.

[232] Rose (n 216) 495-496.

[233] 8.

[234] Locke (n 5) 74.

[235] Locke (n 5) 193.

[236] 'The infinitely wise contriver of us, and all things about us [ie God], hath fitted our senses, faculties, and organs… (dull and weak as they are) to discover enough… to lead us to the knowledge of the Creator, and the knowledge of our duty… But were our senses altered, and

On the new materialist ontology that I adopt, materiality entails far more than that which can be perceived directly with human senses, unaided or aided. Because matter dynamically interacts at *all levels*, and in a myriad of often unexpected ways, there is no theoretical inconsistency in recognising that things that cannot be directly perceived are agentic either in themselves or as part of *complexes* of matter (or what Deleuze would call assemblages). That which cannot be seen by the unaided human eye, or held, or otherwise 'directly' sensed, is not necessarily less material than, say, one hundred foot long blue whales.

For example, while measles viruses or disturbed asbestos fibres cannot be seen with the unaided human eye, or cannot be felt resting in the palm of a human hand, the material affectivity of both is clearly manifested in the deleterious effects they can have on the human body. Similarly, microscopic matter can have either drastic or incremental effects as constituents of larger material relationships. The elements, chemicals, and compounds ingested in food, for example – although they cannot be individually seen or tasted – nevertheless directly affect the human body in aggregately appreciable ways. For example, copper, found abundantly in shellfish, is an essential element in several human enzymes, which variously produce skin pigment, nerve-sheaths, and other assorted proteins.[238]

The importance of microscopic matter is of course not restricted to considerations of the human body. Plants are fed by microscopic minerals and compounds absorbed from the soil, in many cases with the aid of various symbiotic bacteria in the roots. When synthetic textiles are washed in a washing machine, thousands of unseen microplastic fibres are released into the water stream,[239] which ultimately end up in

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made much quicker and acuter… I am apt to think, this would be inconsistent with our being, or at least well-being' (Locke (n 5) 193-194).

[237] '[I]t is not possible for any one to imagine any other qualities in bodies, howsoever constituted, whereby they can be taken notice of, besides sounds, tastes, smells, visible and tangible qualities' (Locke (n 5) 63).

[238] Peter Schreier, 'Chemopreventive Compounds in the Diet' in Albert J Augustin (ed), *Nutrition and the Eye* (Karger 2005) 11-12.

[239] Francesca De Falco and others, 'The Contribution of Washing Processes of Synthetic Clothes to Microplastic Pollution' (2019) 9 Scientific Reports 1.

the bodies of sea-dwelling organisms such as tuna.[240] The long-term effects of microplastic accumulation are still under debate; but adverse effects on the immune system and mechanical operation of gills – and thus potentially entire populations – of toxified fish are postulated.[241]

It is hoped that these examples have shown that a comprehensive understanding of materiality is multi-layered; and that this multi-layered approach does not necessitate any particular mereological position on the part-whole relationship between 'microscopic' and 'macroscopic' matter. Hüttemann describes a multi-layered approach to matter as 'pragmatic pluralism', which spurns the ontological prioritisation of one particular level of analysis.[242] This pragmatic pluralism is precisely the angle that Deleuze and Guattari take when they refuse to privilege the molecular level over the molar, as part of their wider ontology of assemblages.[243] In the words of Hein, they 'seek[] instead to preserve each stratum of reality, without prioritizing one stratum over the other'.[244] Deleuze and Guattari rather stress the importance of 'double-pincer' interactions between the internal and external surfaces of strata, meaning that parts (strata) cannot be precisely separated from the whole 'geology' of a concept – whether physico-chemical or social.[245]

I have just considered two metaphysical debates. The first concerned the relationship between 'mind' and 'matter' (**3.5.1**), to which I suggested that a pragmatic, non-committal position is reasonable in light of my purposes in this thesis. The second debate concerned the perceptibility of various scales of matter (**3.5.2**), to which I

[240] Teresa Romeo and others, 'First Evidence of Presence of Plastic Debris in Stomach of Large Pelagic Fish in the Mediterranean Sea' (2015) 95 Marine Pollution Bulletin 358; ML Taylor and others, 'Plastic Microfibre Ingestion by Deep-Sea Organisms' (2016) 6 Scientific Reports 1.
[241] Sarit O'Donovan and others, 'Ecotoxicological Effects of Chemical Contaminants Adsorbed to Microplastics in the Clam Scrobicularia Plana' (2018) 5 Frontiers in Marine Science 1, 1-3.
[242] Hüttemann (n 212) 125.
[243] Deleuze and Guattari (n 6).
[244] Serge F Hein, 'The New Materialism in Qualitative Inquiry' (2016) 16 Cultural Studies ↔ Critical Methodologies 132, 134.
[245] Deleuze and Guattari (n 6) 40-41.

sketched a new materialist defense on the basis of what Hüttemann terms 'pragmatic pluralism'.[246]

I will now conclude on the findings and arguments of this chapter as a whole.

3.6 Conclusion

Overall, I had in this chapter the task of theorising how *matter* and *materiality* should be understood for the purposes of this thesis; namely, the way in which matter figures as the groundwork for my investigations into the central research question of how law is material.

In **3.2**, I looked chronologically from Jaina philosophy to Lockean epiphenomenal ontologies of matter. While a review of these past ontologies was useful to contextualise discussion, I concluded that new materialist ontologies of matter hold the most promise for an answer to how law is material. First, the new materialisms are inherently interdisciplinary, which accords with my own approach to legal philosophy (**1.2.2**). Second, the new materialisms recognise the complexity of material contingencies. Divested of their teleologies, I was inspired by the importance given by survival theories of law to matter, in the form of the material exigencies of human life (**2.5**). New materialisms thus promise a prism through which to investigate this line of inquiry more closely. Third, and relatedly, the novelty of new materialisms opens up the possibility of investigation into law's materiality in diverse and fresh ways.

In **3.3**, I therefore turned to a more detailed consideration of new materialist ontologies. Discussion was grounded with an account of the new materialisms' centralisation of matter in theoretical accounts of phenomena, in response to the social constructionism of the cultural turn (**3.3.1**). This led me to consider the conceptualisation of *material agency* (**3.3.2**), through an engagement with the works

[246] Hüttemann (n 212) 125.

of Deleuze, Bennett, Barad, and Haraway. I stated in the first instance that there is no canonical conception of agency in new materialisms.

However, in general, new materialisms conceptualise agency in terms of *affect* (following the terminology of Spinoza and Deleuze), which variously casts matter as active, powerful, unfixed, and entangled. This sense of agency renders the matter/materiality linguistic pair not straightforwardly correlative: 'materiality' instead comes to represent an expression of affective agency. For my part, any future reference to matter should thus be read with the implication of this notion of agentic materiality. There is no reason that matter cannot also carry this meaning of affective agency, as when Bargetz writes that '[m]atter and materiality refer to activity and mobility as well as to obstinacy, agency and continuous and dynamic change.'[247]

The new materialisms are united in the way that they posit agency in *all* things – agency is therefore not a discrete category that 'agents' possess, but a distribution and degree. This leads to a form of ontological monism, which I described in **3.3.3**. The new materialist elision of ontological categories inspires a more expansive approach towards answering the question of how law is material. In **2** for example, I demonstrated how the selected natural law theories and evolutionary theories of law are focused only through an anthropocentric lens. Here, theories admit of only the material constitution of the *human* body; *human* material needs; materials of *human* production; and so on. I argued that these particular theories were by that measure straitjacketed into a concern with *human teleologies*.

If instead I proactively question any form of anthropocentrism, then I am able to inquire into how law is shaped by agencies other than the human. Rejecting the idea that the human is ontologically prior licenses investigation into law's materiality *in toto*. In other words, I am able to posit ways in which law is also formed by non-human, non-living, animal, and inorganic agencies (understood as nominal rather than ontological categories).

[247] Bargetz (n 137) 186.

With a view to using an ontology of matter inspired by new materialisms for an inquiry into law, I formulated two aspects under the thematic headings of Conditioning and Flux (**3.4**). Conditioning captures the recognition that things are as they are, no more or less, because those things are fundamentally *conditioned* as such by the infinitely complex entanglement of material agencies (**3.4.1**). Flux captures the notions of the *reconditioning* and *systems* of materiality (**3.4.2**). I will use these aspects sequentially in my investigations into law's materiality (Conditioning in **4**, and Flux in **5**).

After I established my ontological positions, I finished the chapter by considering two significant metaphysical debates that overlap with questions of matter: namely, tensions between 'mind' and 'matter' (**3.5.1**), and scales of matter and human perception (**3.5.2**). I sketched pragmatic and new materialist responses, respectively, as defences against the issues raised by these central philosophical debates.

Inspired by the foregoing discussions of new materialist ontologies, I now turn to answer how law is material using the first of my nominal aspects: Conditioning.

4 Material Conditioning of Law

4.1 Overview

In this chapter, I apply the first aspect of my new materialist ontology of matter, Conditioning, to answer the central research question of how law is material. The aspect of Conditioning was detailed in **3.4.1**. There, I described the ineffably complex, contingent entanglement of material agencies – all materiality is, in some way, *Conditioned*. To demonstrate, I employed the example of the material Conditioning of an artist's painting. A painting is contingent on the material agencies of the brush, the canvas, the paint, fingers, eyes… and so on.

As with the painting, so too is law Conditioned. It is my aim here to describe the principle ways in which law is contingent on material agencies. This treatment of Conditioning should not be read in isolation from the later discussion of Flux (**5**). As I explained in **3.3.3**, the two *nominal* aspects of my ontology of matter fundamentally presuppose one another. This interdependency will become apparent in due course.

There are two lines of inquiry with respect to the material Conditioning of law. In **4.2**, I argue that law is Conditioned in the way that it is *communicated*. Second, in **4.3**, I consider how the *content* of law is Conditioned. As the notion of the content of law anchored the critiques in **2.4**, this investigation seeks to reconfigure what I mean by the content of law in light of my new materialist ontology of matter.

The two sub-aspects of communication and content are not presented as exhaustive. As I said in **3.4.1**, knowledge of the totality of agentic Conditioning is not graspable. Communication and content, however, are at least sufficiently paradigmatic illustrations of the parent aspect of Conditioning. Neither are they independent; indeed, at a certain level of analysis, I shall show that they are one and the same.

I will begin with an investigation of the communication of law.

4.2 Communication

'Communication' has long featured in legal philosophy. It will be necessary to consider the various meanings given to communication in theories of law, before I determine how it relates to my own investigation into material Conditioning.

4.2.1 'Communication' in past legal philosophy

Communication has been variously understood as, *inter alia:* any of the methods whereby principles of natural law come into human understanding;[1] an essential analytical element of law;[2] a moral requirement for law under systems of deontological ethics;[3] central to the rhetorical nature of law and legal argument;[4] and conceptually equivalent to law, in the sense that 'law' *is itself* 'communication'.[5]

The first three of these understandings of communication are related to the concept of *promulgation*. Promulgation, ordinarily understood, means to 'promote or make widely known'.[6] Promulgation is correlative with an ordinary understanding of communication as 'the imparting or exchanging of information by speaking, writing, or using some other medium';[7] *a priori*, promulgation presupposes communication. In legal philosophy, there are at least three (not necessarily exclusive) ways in which communication as promulgation has been given particular nuance.

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[1] Thomas Aquinas, *Selected Writings* (Penguin Books 1998) 617; Claudiu Ramon D Butculescu, 'Considerations Regarding the Influence of Legal Communication from the Perspective of Natural Law' (2016) 6 Challenges of the Knowledge Society 357, 359.
[2] Jeremy Bentham, *The Works of Jeremy Bentham*, vol 1 (William Tait 1843) 157; Claudiu Ramon D Butculescu, 'The Role of Law as an Instrument of Communication within Legal Positivism' (2015) 5 Juridical Tribune 132.
[3] Lon L Fuller, *The Morality of Law* (2nd edn, Yale University Press 1969) 49.
[4] Janice Schuetz, *Communicating the Law: Lessons from Landmark Legal Cases* (Waveland Press 2006).
[5] Jan M Broekman, 'Communicating Law' in David Nelken (ed), *Law as Communication* (Dartmouth 1996) 45.

[7] Angus Stevenson (ed), 'Communication', *Oxford Dictionary of English* (3rd edn, Oxford University Press 2010) 352.

First, in a natural law context, promulgation entails the communication or transmission of higher principles into human understanding. I described in **2.2.1** how such promulgation may occur through divine revelation, reason, and/or intuition.[8] The image of Moses returning from Mount Sinai with the Tablets of the Law, after his direct communication with God, is paradigmatic of this first divine or scriptural meaning of promulgation.[9] Otherwise, natural law principles may be promulgated through the application of human reason. Both Hobbes and Locke, for example, maintained that the natural law is accessible through a reasoned reflection on (differently conceived) states of nature (**2.2.2**).

The appeal to reason in natural law theories entails more than simply the *cognisance* of principles; there is the deeper sense that these principles have been *communicated* to humans *through* the human faculty of reason. Aquinas, for example, maintained that 'promulgation is necessary in order that [human] law have [sic] its power'.[10] It was for this reason, according to Aquinas, that God gifted humans with the capacity for reason in order that the divine promulgations of *natural* law may be grasped, in which human law may participate.[11] In all cases, Butculescu identifies that natural law conceptualisations of promulgation posit rectilinear, rather than circular, communications of principles; ie, communication proceeds from an immutable source to humans, not reciprocally between society and state.[12]

Second, communication is integral to legal theories which take promulgation as an essential conceptual element, or *sine qua non*, for law. Rather than concerning themselves with transcendental principles, these theories take an analytical approach towards a general description of law. This sense of promulgation is therefore closely

[8] JW Harris, *Legal Philosophies* (Butterworths 1980) 7. At **2.2.1** n 20, I also stated that, while 'intuition' is not typically identified as a separate method within natural law, I make particular reference to intuition for its resonance with the 'Flux theories of law' that I shall visit in **5.3.1**.
[9] Exodus 34:29.
[10] Aquinas (n 1) 617.
[11] Aquinas (n 1) 620-622; Gilbert Bailey, 'The Promulgation of Law' (1941) 35 The American Political Science Review 1059, 1062. Aquinas' legal philosophy regards promulgation through both divine revelation *and* human reason (Hilaire McCoubrey and Nigel D White, *Textbook on Jurisprudence* (3rd edn, Blackstone Press 1999) 74).
[12] Butculescu (n 1) 359.

allied with the school of positivism.[13] Bentham, for example, argued that law must necessarily be promulgated through various practical methods: '[t]hat a law may be obeyed, it is necessary that it should be known: that it may be known, it is necessary that it be promulgated.'[14] Austin, who adopted and refined Bentham's command theory of law, similarly included communication as promulgation in his definition of law; for a command is the 'signification of desire', combined with the intimation of 'evil or pain' to the addressee.[15] Outside the realm of legal philosophy, the public promulgation of laws in gazettes or official publications is a formal requirement in many legal systems.[16] But for these practical steps – examples of what Hart would term rules of recognition[17] – a rule has no binding status as 'law' in such jurisdictions.

Identifying promulgation as essential to law in this second sense has raised perennial legal and moral puzzles. Foremost of these is captured in the story of 'Caligula's pillars'. Grant recounts that Caligula

> was an emperor who made a ruse of the laws. He made his laws known, whilst at the same time making it as difficult as possible for the people to know of them. Seeking to replenish the imperial coffers he issued tax laws that specified hefty fines for their violation, and had them inscribed in small characters on a tablet hung high upon a pillar. The emperor thus circumvented the Roman practice of giving notice of the laws, posting them publicly for all to see, whilst obstructing the people's ability actually to learn of them.[18]

This raises the question: if communication (promulgation) is posited as an essential requirement for law, then must one be actually cognisant of this communication in order

[13] Butculescu (n 2) 132.
[14] Bentham, *The Works of Jeremy Bentham* (n 2) 157. Such methods include education, publication, and religious service (Bentham, *The Works of Jeremy Bentham* (n 2) 158-159).
[15] John Austin, *The Province of Jurisprudence Determined* (John Murray 1832) 6.
[16] Examples include Luxembourg (Constitution of Luxembourg, Article 34); and Canada, where 'no person shall be convicted of an offence… that at the time of the alleged contravention was not published in the *Canada Gazette* [with some exceptions]' (Canadian Statutory Instruments Act 1985, s 11(2)).
[17] HLA Hart, *The Concept of Law* (3rd ed, Oxford University Press 2012) 94-95.
[18] Claire Grant, 'Promulgation and the Law' (2006) 2 International Journal of Law in Context 321.

to be bound by it *as* law? Bentham's theoretical formulation of law seems to require an affirmative answer;[19] but in practice, laws can be and are applied regardless of one's prior knowledge of the law. This is captured by the Latin maxim *ignorantia juris non excusat* – ignorance of the law is no excuse[20] – which has been accepted as legal doctrine in many times and places (with theoretical and jurisdictional variations),[21] in many cases expressly.[22] The doctrine of ignorance of the law being no defence is related to questions concerning *mistake* of law, whereby an individual has incorrectly taken the law governing their affairs and actions to be other than it really is.[23] For my purposes, these tensions concern independent analytical and moral questions; I need not commit to any particular view on whether communication needs to be 'consummate' for a rule to be binding *as* 'law'.

Third, communication as promulgation in legal philosophy has a nuanced understanding through the prism of deontological ethics. Whereas Bentham and Austin were concerned with promulgation as the *analytical essence* of law, this third approach indicates a deeper *moral* connection between promulgation and law.[24] These legal

[19] 'To promulgate a law, is to present it to the minds of those who are to be governed by it in such manner as that they may have it habitually in their memories, and may possess every facility for consulting it, if they have any doubts respecting what it prescribes' (Bentham, *The Works of Jeremy Bentham* (n 2) 157). Cf Austin, who maintained that the very passing of legislation by Parliament *was* the promulgation, such that law becomes effective at that point even without being published and communicated to the public (Austin, *The Province of Jurisprudence Determined* (n 15) 301; Fuller (n 3) 49).

[20] Jonathan Law and Elizabeth A Martin (eds), 'Ignorantia Juris Non Excusat', *Oxford Dictionary of Law* (7th edn, Oxford University Press 2013) 271.

[21] Gratian stated that '[i]gnorance of the law may sometimes be condoned, but ignorance of the natural law is always to be condemned in those of mature years' (AJ Carlyle, *A History of Mediæval Political Theory in the West*, vol 2 (RW Carlyle and AJ Carlyle eds, Barnes and Noble 1909) 106).

[22] See, for example, Canada's Criminal Code (Canadian Criminal Code 1985, s 19). The United Kingdom enshrines in law a slight modulation of the orthodox doctrine. If legislation had not been published by the Stationery Office at the time of an alleged offence, ignorance of the law is a valid defence; *unless* it is proved by the prosecution that reasonable steps had already been taken to bring the legislation to the notice of the public (Statutory Instruments Act 1946, s 3(2)).

[23] For example, in England and Wales, one does not have the necessary *mens rea* for theft if they believe that they have the right in law to take the property in question (Theft Act 1968, s 2(1)(a)). In the realm of contract law, mistakes of law can render a contract void (*Brennan v Bolt Burdon* [2004] EWCA Civ 1017).

[24] Siltala describes these differences in approach to promulgation as questions of the analytical '*discourse-theoretical* level of law', and the moral '*ideological* deep-structure level of law' (Raimo Siltala, *A Theory of Precedent* (Bloomsbury Publishing 2000) 166).

theories derive their moral positions from Kantian duty ethics, which considers that the type of action itself, rather than its consequences, is the metric for morality.[25] Ultimately, it is rational reflection alone that determines how one should act in accordance with the universal moral law.[26]

In application to law, some argue that reason requires the aspiration to communicate openly and unambiguously. Fuller, for example, stresses the importance of promulgation as an essential aspect of 'the morality that makes law possible'.[27] Indeed, communication is central to Fuller's thought. In reviewing Hart's minimum content of natural law, Fuller first relates the importance of communication to the end of survival:

> In the first place – staying within the limits of Hart's own argument – man has been able to survive up to now because of his capacity for communication. His victory [over other creatures] has come about because he can acquire and transmit knowledge and because he can consciously and deliberately effect a coordination of effort with other human beings.[28]

Fuller goes beyond a recognition of the evolutionary significance of communication for law and human life by ascribing to it deontological significance:

> Communication is more than just a way of staying alive. It is a way of being alive. It is through communication that we inherit the achievements of past human effort. The possibility of communication can reconcile us to the thought of death by assuring us that what we achieve will enrich the lives of those to come. How

[25] James Garvey and Jeremy Strangroom, *The Story of Philosophy* (Quercus 2012) 277.
[26] Peter K McInerney, *Introduction to Philosophy* (Harper Collins 1992) 147. This ethical framework was given expression by Kant in Immanuel Kant, *Groundwork for the Metaphysics of Morals* (Allen W Wood ed & tran, Yale University Press 2002).

[28] Fuller (n 3) 185-186. Given that humans are not in any sense privileged or divorced from non-human agencies (**3.3.2**), such triumphalist talk of 'victory over other creatures' must be read with unease.

> and when we accomplish communication with one another can expand or contract the boundaries of life itself… If I were asked, then, to discern one central indisputable principle of what may be called substantive natural law… I would find it in the injunction: Open up, maintain, and preserve the integrity of the channels of communication by which men convey to one another what they perceive, feel, and desire. In this matter the morality of aspiration offers more than good counsel and the challenge of excellence. It here speaks with the imperious voice we are accustomed to hear from the morality of duty.[29]

Aside from nuanced understandings under the appellation of promulgation, communication has also been conceptually singled out in legal philosophy for its influence on legal argument and process.[30] In this context, communication is integral to an understanding of how practicing lawyers operate, and also to lay understandings of the law and jury deliberations.[31] A recognition of the importance of communication in these respects can be traced back at least to Aristotle who, in *Rhetoric*, places under scrutiny the art of persuasive communication and its influence on public life. Aristotle writes that

> it is obvious that all those [legislators] who definitely lay down, for instance, what should be the contents of the exordium or the narrative [of the law]… are bringing under the rules of art what is outside the subject.[32]

Other than an analytical or moral conceptual element, or its relation to rhetoric and public life, there are those who posit communication in a strong sense *as* law itself. As Broekman says, '[l]aw is more than a subject to communicate. Law is communication in

[29] Fuller (n 3) 186.
[30] Schuertz gives a definitive account of the import of communication to the process of law, under such headings as argument, narrative, and drama (Schuetz (n 4)).
[31] Ann Burnett and Diane M Badzinski, 'An Exploratory Study of Argument in the Jury Decision-Making Process' (2000) 48 Communication Quarterly 380.
[32] Aristotle, *The 'Art' of Rhetoric* (E Capps, TE Page and WHD Rouse eds, John Henry Freese tr, William Heinemann 1926) 7.

itself, not the communication of something.'[33] This sentiment finds influential expression in Luhmann's application of his general systems theory to law.[34]

Despite the varied meanings given to communication in relation to law, it is implicit overall that these accounts understand communication as involving various materialities – human individuals, statute books, marble pillars, and so forth. For my part, I shall conceptualise communication in new materialist terms of *affect*. In **3.3.2**, I described the Spinozist-Deleuzian concept of affect as that by which any 'power of acting is increased or diminished, aided or restrained';[35] ie, an affect changes states or capacities.[36] I will adopt the concept of affect in my discussion of the communication of law for two reasons.

First, there is significant disagreement in the field of ethology over whether communication is better conceptualised in terms of 'information exchange' or 'influence'.[37] I mention this ethological debate here, because it helps illustrate the benefits of conceptualising communication in alternative terms of *affect*.

The position of communication as information exchange entails the view of discrete 'content' passing between sender and receiver.[38] As I shall argue in **4.3.1**, this is inconsistent with my carefully qualified view on the content of law. Otherwise, while the view of communication as influence has the benefit that it rejects the concept of discrete, informational content,[39] the term influence can imply a linear causality

[33] Broekman (n 5) 45.
[34] Luhmann also applies his 'grand narrative' of systems theory to areas as diverse as ecology, religion, and love (Niklas Luhmann, *Ecological Communication* (University of Chicago Press 1989); Niklas Luhmann, 'Religion as Communication' (2014) 59 Archives de sciences sociales des religions 47; Niklas Luhmann, *Love as Passion: The Codification of Intimacy* (Stanford University Press 1998)). For a brief description of systems theory, see **2.3**, n 158.

[36] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus* (Brian Massumi tr, University of Minnesota Press 1987) xvi.
[37] Michael J Owren, Drew Rendall and Michael J Ryan, 'Redefining Animal Signaling: Influence versus Information in Communication' (2010) 25 Biology & Philosophy 755, 756.
[38] Ulrich E Stegmann, 'A Primer on Information and Influence in Animal Communication' in Ulrich E Stegmann (ed), *Animal Communication Theory* (Cambridge University Press 2013) 4.
[39] Drew Rendall and Michael J Owren, 'Communication without Meaning or Information: Abandoning Language-Based and Informational Constructs in Animal Communication Theory'

between active 'agents' and passive influencees.[40] As I argued in **3.3.2**, new materialisms see the view of discrete agents as problematic – not least that any matter is passive – because agency is posited as distributed, and not something that is possessed in a categorical sense.

Conceptualising communication in terms of affect, with the view towards answering the central research question of how law is material, is therefore theoretically consistent with the new materialist ontology that I adopt.

Second, as I described in **3.3.2**, the new materialist concept of affect is subject-independent and not homocentric.[41] When I speak of communication here, I do not restrict inquiry to human-human communication (although this is, of course, very important to law). As I will show, communication – and its Conditioning – entails much more than just the human: adopting such nominal language, it can and does also involve non-human, non-living, and abiotic agencies. In aspiration of the ontological monism posed by new materialisms (**3.3.3**), conceptualising communication in the subject-independent terms of affect therefore allows me to consider law's materiality beyond the context of human agencies.

With the understanding of communication as *affect* in mind, I shall now turn to consider how communication is Conditioned. This inquiry is necessary to ultimately understand how *law* is material, and I shall relate discussion to law throughout.

4.2.2 Conditioning of communication

In the first instance, communication fundamentally lies in the affectivity of agents. The material basis of communication is well-theorised in evolutionary biology. Otte, for

[40] Scarantino writes that communication as influence posits that 'communication is fundamentally a signaller's attempt to affect the behaviour of a recipient in ways that are advantageous to the signaller' (Andrea Scarantino, 'Animal Communication between Information and Influence' (2010) 79 Animal Behaviour e1, e4).
[41] Deleuze and Guattari (n 36) 240.

example, describes communication as dependent upon 'behavioral, physiological, or morphological characteristics fashioned or maintained by natural selection'.[42] Likewise, Martinelli explains the precondition that human reception of signals must only be able to occur through one of at least eight sensory channels (olfactory, gustatory, thermic, electric, tactile, acoustic, visual, and magnetic).[43] The essence of these observations is that communication is necessarily contingent on – Conditioned – by particular materialities. As Bradbury and Vehrencamp explain,

> the physiological mechanisms with which senders develop signals and receivers process them are those that the animals are already using before signals evolve. These physiological precursors of communication have been shaped over prior evolutionary time by constraining principles of physics and chemistry.[44]

Communication is Conditioned by agentic materialities beyond human physiology. Bradbury and Vehrencamp continue,

> [t]he physical constraints [of communication] differ depending upon the animals' ambient medium (air, water, solid substrates); habitat (e.g., forest versus open plains); circadian rhythm (diurnal versus nocturnal); mobility; position in the food web; and body size. Different physiological preadaptations for [signalling] in these different situations are a major source of diversity in animal communication systems[.][45]

Communication is contingent on such physiological and physical materialities, and by that measure the communication of law is Conditioned.

When considering the communication of law, there is a particular tendency to focus on the medium of *language*. Indeed, some consider language to be the precondition or

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[42] Daniel Otte, 'Effects and Functions in the Evolution of Signaling Systems' (1974) 5 Annual Review of Ecology and Systematics 385.

[44] Jack W Bradbury and Sandra L Vehrencamp, *Principles of Animal Communication* (2nd edn, Sinauer Associates 2011) 7.

[45] Bradbury and Vehrencamp (n 44) 7.

essence of law. For instance, Constable writes that 'language is the medium of law. It is more than a tool or resource; it constitutes the shelter from which we know the world and act in it.'[46] Marmor argues that 'there is only one way in which authorities can convey the legal content they aim to introduce: by communicating in a natural language.'[47] Similarly, Tiersma states '[i]t is possible to have a legal system without writing. To have one without language is inconceivable.'[48]

To be quite sure, communication of law through language, both textual and oral, is undoubtedly extremely significant for law. In terms of texts, in modern civil-law systems, communication takes the form of official statutory codifications – law 'on the books'.[49] Such written-language codifications date to around four thousand years ago, with the Sumerian *Code of Ur-Nammu*.[50] In other places, law might be communicated not only through codes, but also in the written reports of judgments.[51] One additional aspect of the textuality of law is the dictionary.[52] Lawyers' offices were often spatially planned around dictionaries;[53] and where paper dictionaries have been superseded by electronic

[46] Marianne Constable, 'Democratic Citizenship and Civil Political Conversation: What's Law Got to Do with It?' (2011) 63 Mercer Law Review 877.
[47] Andrei Marmor, *The Language of Law* (Oxford University Press 2014) 1.
[48] Peter M Tiersma, *Parchment, Paper, Pixels Law and the Technologies of Communication* (University of Chicago Press 2010) 221.
[49] Civil-law systems are defined by the written codification of law. Due to their 'common legal heritage that began in Rome', they 'all share, to a greater or lesser extent… some core legal concepts [and] the language needed to refer to those concepts' (Peter M Tiersma, 'A History Of The Languages Of Law' in Lawrence M Solan and Peter M Tiersma (eds), *The Oxford Handbook of Language and Law* (Oxford University Press 2012) 15).
[50] The Code of Ur-Nammu regulates such things as divorce, land misuse, and impropriety of witnesses (OR Gurney and Samuel Noah Kramer, 'Two Fragments of Sumerian Laws' (1965) 1965 Assyriological Studies 13, 14-17).
[51] In contrast to civil-law systems, this description of judge-made law describes common law traditions. Tiersma writes about the textualisation of judicial precedent (Peter M Tiersma, 'The Textualization of Precedent' (2006) 82 Notre Dame Law Review 1187). In line with Bentham's views on the promulgation of law (see **4.2.1**), he advocated indefatigably for the complete codification of all case-law and custom: '[i]n every political state the greatest happiness of the greatest number requires, that it be provided with an *all-comprehensive* body of law' (Jeremy Bentham, *Legislator of the World: Writings on Codification, Law, and Education* (Philip Schofield and Jonathan Harris eds, Clarendon Press 1998) 244).
[52] Jose Bellido and Alain Pottage, 'Lexical Properties: Trademarks, Dictionaries, and the Sense of the Generic' (2019) 57 History of Science 119.
[53] Bellido and Pottage (n 52) 121.

materialities, the material affect of dictionary entries on law is still profound. For better or for worse,[54] lexicographical analysis has in fact been decisive in legal disputes.[55]

Alongside texts, orality is also essential to the material communication of law – in the formation of contracts, legal procedure, argumentation, and so on. Compounding this last rhetorical aspect of communication is the fact that law often operates through specialist vocabulary,[56] which may also represent legal concepts that are cross-culturally untranslatable.[57]

Furthermore, the linguistic communication of law is Conditioned by the affects of human materiality. When law is written and read, communication is contingent on many properties of the human body: dextrous fingers to manipulate pens and keyboards; the eye's crystalline lens; the fibrous optic nerve; the recti and oblique muscles that direct eyes as the written language requires; and so on. As well as through texts, humans communicate the language of law through acoustic vibrations Conditioned by the folds of the larynx; the air of the breath; the lungs; the shape of the teeth; the shape of the lips; and so forth. Overall, this complex Conditioning of linguistic communication is just one such way that law is ineluctably material.

As I have said, one tendency – reflected in the above quotes of Constable, Marmor, and Tiersma – is to focus on the communication of law through written or spoken language; even to the extent, in Marmor's case, that language is declared to be the *sine qua non*

[54] 'A long history of law and legal commentary demonstrates why one should not even try to take the dictionary shortcut' (Richard J Leighton, 'Making Puffery Determinations in Lanham Act False Advertising Cases: Surveys, Dictionaries, Judicial Edicts and Materiality Tests Articles and Reports' (2005) 95 The Trademark Reporter 615, 629).

[56] The specialist vocabulary of the initiated, lawyers, is often referred to as 'legalese'. Lengthy and complex legal documents and argumentation can significantly reduce access to justice for the uninitiated (James Hartley, 'Legal Ease and "Legalese"' (2000) 6 Psychology, Crime & Law 1).

[57] Mattila uses the example of the development of the Soviet legal code, which introduced concepts that 'had no counterparts in Western legal languages (such as *prodrazverstka*, 'the obligation to hand over foodstuffs')' (Heikki ES Mattila, 'Legal Vocabulary' in Lawrence M Solan and Peter M Tiersma (eds), *The Oxford Handbook of Language and Law* (Oxford University Press 2012) 30). I shall also describe in **5.3.1** the concept of *mulao* in Lozi jurisprudence, which has no direct English law equivalent.

of law. However, it is critical for a full account of the Conditioning of the communication of law that analysis is not restricted to its linguistic aspects. As Nolan cautions, 'we should not fall into the trap of thinking that language is the end-all and be-all of human communication.'[58] Rather, attention must be given to at least two other ways in which communication is Conditioned.

In the *first* instance, non-verbal 'body language' is a significant form of communication, sometimes crucially so, in social interactions.[59] As Corina and Grosvald put it, '[v]isual signals such as gestures, body postures, and facial expressions profoundly influence communication in ecological contexts.'[60] Others even argue that behaviour renders it axiomatically impossible to ever *not* communicate.[61] Remland documents such non-verbal influence in various spheres of everyday life, from mediated, non-intimate, intimate, and workplace encounters.[62] This is concurrent with the trend of viewing communication as *embodied* action, free from the straitjacket of linguistic examination: 'communicative actions accrue meaning as they emerge in the moment-by-moment interaction of copresent parties.'[63]

[58] Michael J Nolan, 'The Relationship Between Verbal and Nonverbal Communication' in GJ Hanneman and W McEwen (eds), *Communication and Behavior* (Addison-Wesley 1975) 100.
[59] Quantifying non-verbal communication as a 'percentage' of all communication is not the point here. Mehrabian famously calculated that only seven-percent of human communication is verbal, with the remainder comprised of vocal and facial communication (Albert Mehrabian, *Silent Messages* (2nd edn, Wadsworth 1981) 77). However, this meta-analysis of two of Mehrabian's quite specific studies is frequently misapplied to all human communication (Philip Yaffe, 'The 7% Rule: Fact, Fiction, or Misunderstanding' [2011] 9 Ubiquity 1).
[60] David P Corina and Michael Grosvald, 'Exploring Perceptual Processing of ASL and Human Actions: Effects of Inversion and Repetition Priming' (2012) 122 Cognition 330, 341. Perhaps not surprisingly, this study found that the deaf and hard of hearing – especially used to reading bodies, rather than hearing voices – are 'relative to hearing non-signers… more sensitive to the configural properties of signs' (from the article abstract).
[61] The reasoning is that 'there is a property of behavior that could hardly be more basic: … behavior has no opposite… one cannot not behave. Now, if it is accepted that all behavior in an interactional situation… is communication, it follows that no matter how one may try, one cannot not communicate. Activity or inactivity, words or silence all… influence others and these others, in turn, cannot not respond to these communications and are thus themselves communicating' (Paul Watzlawick, Janet Helmick Beavin and Don D Jackson, *Pragmatics of Human Communication* (Faber and Faber 1968) 48-49).
[62] Martin S Remland, *Nonverbal Communication in Everyday Life* (4th edn, SAGE 2017) 251-439.
[63] Jürgen Streeck, 'Embodiment in Human Communication' (2015) 44 Annual Review of Anthropology 419, 420.

Non-verbal communication has particular relevance for law, in the sense that human observations on how others present and use their bodies communicate the content of social rules. This revelatory or communicatory aspect of behaviour is captured within what Hart conceptualised as the 'external point of view' of law.[64] He describes a hypothetical man who, after taking account of the 'observable regularities of behaviour' of a social group, is able to determine the content of particular rules.[65] Examples include the behaviours of removing one's hat before entering a church, or stopping at traffics lights when they are red.[66] In these cases, the very behaviours themselves *are* the non-verbal, material communication of the respective rule (or law). Otherwise, non-verbal behaviour has unique significances in contexts such as law enforcement and courtroom practice.[67]

The point must be stressed here that, in the complex gamut of non-verbal body communication, even the subtlest of materialities can have affectivity. For example, the human eye does not simply participate 'passively' in communication. Rather, in some ways the eye can *be* the communication itself. The 'cooperative eye hypothesis', as espoused by Tomasello and others, maintains that the white sclera of human eyes evolved to 'make it easier… to follow an individual's gaze direction in close-range joint attentional and communicative interactions.'[68] Irrespective of supposed evolutionary origins, the communicative role of eye-contact and eye-direction is otherwise well-documented.[69]

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[64] Hart (n 17) 88-89.
[65] Hart (n 17) 89-90.
[66] These are examples which Hart gives in *Concept*. Hart speaks of the 'external' view of law in contrast with the 'internal' view of law. These describe the difference between the *feeling* of being obliged and *having* an obligation, 'though frequently concomitant things' (Hart (n 17) 88)). His discussions on feeling obliged/having an obligation, couched in a broader critique of Austin's command theory of law, are immaterial for our purposes here.
[67] Noel Otu, 'Decoding Nonverbal Communication in Law Enforcement' (2015) 3 Salus Journal 1; Domitille Baizeau, *Stories from the Hearing Room: Experience from Arbitral Practice* (Kluwer Law International 2015) 49-58.
[68] Michael Tomasello and others, 'Reliance on Head versus Eyes in the Gaze Following of Great Apes and Human Infants: The Cooperative Eye Hypothesis' (2007) 52 Journal of Human Evolution 314.
[69] Atsushi Senju and Mark H Johnson, 'The Eye Contact Effect: Mechanisms and Development' (2009) 13 Trends in Cognitive Sciences 127; David Miller, *The Wisdom of the Eye* (Academic Press 2000) 85-99. The study of the communicative nature of eye movement is known as oculesics (an applied form of kinesics, or the study of body movement communication).

Besides behaviour, Schiffer documents various other properties of the human body that can amount to important modes of communication: from hair, teeth, head shape, skin, stature, and limb size.[70] Chemical signals can also play a role in human communication, particularly between mothers and infants.[71] The wider significance of chemosensory communication in humans is unclear,[72] but my pluralist approach to scales of materiality (**3.5.2**) at least does not shut out the possibility of human chemosensory communication.

Second, moving even further away from traditional analyses, we must understand that the communication of law is Conditioned not only in terms of the human body. This can be demonstrated by introducing further dimensions to my preceding examples. In texts, for example, the *medium* also has affect. In one vivid example, Innis describes how the transition of communication technology from heavy, cumbersome stone to light, transportable papyrus allowed the central monarchical legislator to extend their legal administration, effectively enabling the spread of the Egyptian empire further from the Nile delta.[73] The importance of the medium is of course not confined to ancient times – written legal communication is continuously bound to the contemporary modes and methods of technology. Tiersma argues that there is a lack of attention paid in the literature to the importance of 'the technologies used to store and disseminate' legal texts.[74]

This example of stone and papyrus draws out a wider significance here: in line with a new materialist ontology, it is critical to recognise the complex entanglement of *all* agencies with respect to communication. As I have said, the conceptualisation of

[70] Michael Brian Schiffer, *The Material Life of Human Beings* (Routledge 1999) 34-42.
[71] Johanna Bick and Mary Dozier, 'Mothers' and Children's Concentrations of Oxytocin Following Close, Physical Interactions with Biological and Non-Biological Children' (2010) 52 Developmental Psychobiology 100.

[73] Harold Adams Innis, *Empire and Communications* (Press Porcepic 1986) 14-15 and 21.
[74] Tiersma, *Parchment, Paper, Pixels Law and the Technologies of Communication* (n 48) 2.

communication as affect encourages diverse forms of analysis: alongside linguistic materialities and the human body, communication is Conditioned by the *non*-linguistic and *non*-human. As Finnegan rightly notes, in relation to communication, 'the apparently straightforward distinction between external media and those more directly located in the [human] body turns out to be far from clear-cut: more a matter of degree than an unproblematic opposition.'[75] It is by virtue of this new materialist move towards ontological monism that I reject sole attention on language and the human body, in order to consider other important modes or forms of communication.

The affect of non-human agencies in the context of communication is well-recognised in the vast literature on 'material culture'. Lemonnier describes how non-human agencies may 'render tangible or actualise in a performative way important aspects of social organisation', allowing 'actors to mentally grasp cardinal social relations'.[76] I recall the earlier examples of hats and traffic lights; it is not merely the human behaviour that amounts to communication, but the hats and lights *themselves* have affect, in relation to the communication of law.

There is a further sense in which a particular cultural aesthetic Conditions law's communication. Brigham speaks of the material 'artefacts' of law, referencing as one example the triangular shape of the Greek portico as a sign of judicial power.[77] The interior of courtrooms have affect as well. The spatial aspect of courtrooms is integral to legal proceedings: judges' benches, witness boxes, jury benches, and so forth, inflect discourse in complex ways.[78] For this reason, Corrigan and others metaphorise courtrooms as 'theatres', in which the use of positioning, props, attire, and decoration

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[76] Pierre Lemonnier, *Mundane Objects* (Left Coast Press 2013) 14. The literature on material culture often uses the term 'objects' to describe what I call 'non-human' agencies. Such terms as 'object' can imply a simplistic view of matter as only that which is 'tangible' and sensorially perceptible (as I discussed in **3.5.2**). Notwithstanding this deficit, Lemonnier gives valuable insight into aspects of communication outside the non-human.
[77] John Brigham, *Material Law* (Temple University Press 2009) 146.
[78] Piyel Haldar, 'In and out of Court: On Topographies of Law and the Architecture of Court Buildings' (1994) 7 Revue internationale de semiotique juridique 185, 189-191.

all contribute interdependently to the 'performance' of the law.[79] The affect of such agencies weave into the materiality of law *in toto*. As I have argued, the communication of law is diversely *distributed* across agencies. Thus, while such things as witness boxes and gowns may not amount to the communication of law in themselves, they nonetheless affect the communication of law as part of the complex material-semiotic process (to borrow Haraway's term).[80]

This concludes my investigation of the material communication of law, which is the first part of my wider inquiry into the material Conditioning of law. I will now open a second line of inquiry into the Conditioned *content* of law. As I will show, the conceptualisation of the content of law is complexly interdependent upon the proceeding analyses of the communication of law.

4.3 Content

Before I continue, it is imperative that I clear up precisely what I mean here by the 'content' of law.

4.3.1 Conceptualising 'content'

At the close of **4.2.1**, I alluded to the ethological debate on whether communication can be cogently conceptualised as *information exchange*.[81] When communication is conceptualised as information exchange, the implication is that specific information passes from a sender to a receiver; the emphasis is therefore on detached analyses of information *itself*.[82] In the context of law, the communicated information would be

[79] Lawrence T Corrigan, Heather E Robertson and Bruce Anderson, 'Performative Interior Design in the Criminal Courtroom' (2018) 43 Journal of Interior Design 43.
[80] Donna Haraway, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective' (1988) 14 Feminist Studies 575, 595.
[81] Owren, Rendall and Ryan (n 37) 756.
[82] Stegmann (n 38) 4.

analysed in forms like 'no vehicles in the park', 'pay your taxes by next Monday', and so on. This information amounts to what is ordinarily known as the *content* of law.

As conceptualising communication as information exchange places emphasis on the abstract information itself, Rendall and Owren explain that 'the result is that there is relatively little emphasis on more holistic or integrated patterns' of communication.[83] A non-holistic outlook of communication is inconsistent with the view that agency is distributed across materialities. For this reason, I stressed my conceptualisation of communication in new materialist terms of *affect*. On this view, the emphasis is placed not on what is being communicated – ie, the content of the law – but upon material agencies. Re-rendering the previous examples, I emphasise the affect of the sign on the park gates, or the affect of the letter from the tax-office. I thus argue that there is no information or content to law *per se*; law has 'content' to the extent that such material agencies as tax-letters and judges' larynxes affect communication.

Of course, my own language has not always been consistent with this approach to communication solely in terms of affect. I have often referred to laws *as if* they have certain informational content, divorced from material agencies – for example, I have cited laws relating to theft, workers' rights to redundancy, the licensing of spacecraft, and so on. The reason for this recalls the arguments that I made in **2.4.2**. Methodologically, law is analysed on the understanding that it is 'about' something – and that individual laws are 'about' certain discrete things. In practice it is by virtue of the notion that law contains informational content – 'pay your taxes by next Monday' – that humans are able to say and do anything meaningful about and with law.

With that said, it must be remembered that these representations of content such as 'pay your taxes by next Monday' are ultimately *linguistic*. I have already said in **4.2.2** that the communication of law textually and orally is only partial – non-linguistic and non-human agencies are also crucial for the communication of law. As such, the idea that any 'content' of law can be wholly understood linguistically is a mere deepening of the illusion. The illusion of linguistic content is certainly epistemically expedient for ordering

[83] Rendall and Owren (n 39) 165.

society (and writing theses about law), but it is ontologically inconsistent with my new materialist approach to law.

Therefore, any reference to the 'content' of law must be taken to represent a form of imperfect abstraction of agentic affect. As a concession born from convenience, I shall receive rather than resist the abstraction of law in linguistic forms, such as 'pay your taxes by next Monday', as sufficient to say some useful things concerning the Conditioning of law.[84] I argue that it is through an analysis of linguistic content that the materiality of law is revealed further.

4.3.2 Conditioning of content

I will demonstrate my approach to the Conditioning of content by placing under scrutiny what Hart termed 'necessary preconditions' of law.[85] In the introduction to his discussion of the minimum content of natural law,[86] Hart ponders that

> the still young sciences of psychology and sociology may discover or may even have discovered that, unless certain physical, psychological, or economic conditions are satisfied, e.g. unless young children are fed and nurtured in certain ways within the family, no system of laws or code of morals can be established, or that only those laws can function successfully which conform to a certain type.[87]

Hart stresses that such preconditions are entirely independent of the particularised content of law, because only the latter reflects the *aims* of the social system. On his rendering, the aim of human survival affords a *reason* for certain minimum content. Preconditions, on the other hand, are not teleologically situated. Instead,

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[85] Hart (n 17) 194.
[86] A more in-depth overview is found in **2.2.3.1**.
[87] Hart (n 17) 193-194.

> [c]onnections of this sort between natural conditions and systems of rules are not mediated by *reasons*; for they do not relate the existence of certain rules to the conscious aims or purpose of those whose rules they are. Being fed in infancy in a certain way may well be shown to be a necessary condition or even a *cause* of a population developing or maintaining a moral or legal code, but it is not a *reason* for their doing so.[88]

I reflect on this distinction between necessary preconditions and the content of law in two ways. In the first instance, it is not suitable for me to maintain or commit to such a distinction here, for it rests upon the idea that the content of law relates to certain aims or purposes. For my part, any particular teleological perspective of law was explicitly rejected in **2.4**.

More importantly, in the second instance I argue that there are necessary preconditions *of* the content of law, in the sense that the content of law is always contingent upon agentic materiality – ie, it is fundamentally Conditioned.

I will use examples of law taken from Hart's minimum content of natural law. His first truism is that of *human vulnerability*: 'the fact that men are both occasionally prone to, and normally vulnerable to, bodily attack.'[89] This fact pertains to the Conditioning of human bodies – broadly speaking, humans are materially constituted in such a way that their bodies can be torn, bruised, broken, poisoned, and so on. As such, this Conditioning is not a *reason* for laws prohibiting violence against human bodies, but more fundamentally a *precondition* of that content.

Hart is clearly well aware of this contingent, preconditional aspect of materiality, as he says that 'though [human vulnerability] is a truism it is not a necessary truth; for things might have been, and might one day be, otherwise. There are species of animals whose physical structure (excluding exoskeletons or a carapace) renders them virtually immune from attack by other members of their species and animals who have no organs enabling

[88] Hart (n 17) 194.
[89] Hart (n 17) 194.

them to attack.'[90] However, Hart recognises this preconditional character not through a concern with the underlying material Conditioning of law, but through a concern with relating the law to the *purpose* of survival: '[i]f men were to lose their vulnerability to each other there would vanish one obvious reason for the most characteristic provision of law and morals: *Thou shalt not kill*.'[91] As I have rejected the legal teleology of survival, I argue that, ontologically, the law against violence is fundamentally Conditioned, at minimum, by the materiality of human bodies.

I will also reconfigure a second of Hart's truisms, *limited resources*. Of limited resources, Hart says that '[i]t is a merely contingent fact that human beings need food, clothes, and shelter; that these do not exist at hand in limitless abundance; but are scarce, have to be grown or won from nature, or have to be constructed by human toil.'[92] As with the truism of human vulnerability, this exposes fairly obvious facts of materiality in relation to the human body's need for sustenance and shelter. These facts, however, are not so much teleological *reasons* for laws and concepts relating to property (theft, ownership, trespass, and so on), as they are ontological *preconditions* of those laws and concepts of property. The legal title to a parcel of land, for example, is Conditioned by material agencies like soil, rocks, water, plants, the local and global ecology… and innumerable agencies beyond.

In **4.3.1**, I cautioned that the notion that law possesses 'content' is epistemologically expedient, but ontologically inconsistent with the conceptualisation of communication as agentic affect. The linguistic expression of the 'content' of law is necessarily only ever an imperfect abstraction, or nominalisation, of agentic communication, and as such it produces the illusion of single-pointedness certainty. Linguistic analysis of the 'content' of law is useful up to a point (for example, it has allowed me to determine some fundamental Conditioning agencies of laws against violence and property); but it must be recognised that law is materially Conditioned in ways not apparent from mere analyses of its linguistic abstraction.

[90] Hart (n 17) 194.
[91] Hart (n 17) 194-195.
[92] Hart (n 17) 196.

To demonstrate, I will revisit the example of property law. In general terms, I said that the content of property laws and concepts – such as the legal title to land – are ontologically contingent on agencies like soil, rocks, and so on. What is not apparent from a solely linguistic analysis of content is the way in which localised agencies Condition property law in unique ways. Chomba and Nkhata give the illuminating example of the floodplains of Zambia. They write that

> [t]he physical characteristics of a resource system have a large influence on the type of property regime prevailing over a resource system… [G]iven lagoons and small ponds [in the area] were characterized by discrete and definable boundaries, it is probable that local users found it easier to exclude others and hence enforce restricted access. But in the case of river tributaries and the main channel of the Zambezi River, that are too large such that the costs of exclusion outweigh exclusive or private use of the resource, communal access became the most feasible type of property rights regime.[93]

Like Hart, Chomba and Nkhata also speak in the language of reason here: the *reason* that a communal property regime was formulated is that it was more efficacious for humans in that region to share rather than exclude. This may indeed be so, in a particular teleological mode of analysis. However, this is entirely independent from the more fundamental realisation that this particular communal access regime is necessarily Conditioned by the *unique* material agency of the Zambezi River.

As examples of how the content of law is Conditioned, laws prohibiting violence against the body and laws relating to property are archetypal. As I discussed at length, the natural law theories that I described give them central importance (**2.2**). However, upon a rejection of the anthropocentric survival teleology of law, I signalled that this freed me to consider how law is material using an expansive new materialist ontology of distributed agency.

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[93] Machaya Jeff Chomba and Bimo Abraham Nkhata, 'Property Rights and Benefit Sharing: A Case Study of the Barotse Floodplain of Zambia' (2016) 10 International Journal of the Commons 158, 165-166. In this passage is cited David HL Thomas, 'Fisheries Tenure in an African Floodplain Village and the Implications for Management' (1996) 24 Human Ecology 287.

In **2.4.3**, one specific example of a teleologically ambiguous law was that of a law placing restrictions on crossing borders into a territory (ie, an immigration law). Teleologically, the problems with this example are that the law might possess multiple purposes from different modes of analysis (the ends may be economic, logistical, nationalistic, or any combination of these and any other ends). In addition, it is difficult to determine whether the end of the law, in practice, is concomitant with those ends (that determination being based upon a riot of suppositions, as I argued in **2.4.1**). However, I argue that insisting on law's materiality, as I do in this chapter and **5**, is entirely separate from questions of teleology. In the present example, the content of an immigration law (understood quite broadly as any law restricting crossing the border of a territory) is complexly Conditioned by countless material agencies.

One agency is the Earth itself. In geopolitical thought, natural landscape features are well understood to be factors in the Conditioning of the 'borders' of 'territories'.[94] A cursory glance at a satellite image of the Earth reveals the correlation between demarcated territorial borders and plains, deserts, jungles, mountains, rivers, seas, oceans, and so forth. Marshall argues that such physical realities 'underpin national and international politics', and that every territory is in some way contingent on geographical forces (or agencies, on my understanding).[95] The physical features of the Earth also Condition conflict and war,[96] which has always been intimately bound with territorial determination.[97]

Of course, while important in shaping the historical and political development of territories, natural features alone do not define territories. Walls, fortifications, barriers,

[94] I shall come on to the supposedly 'fictional' character of legal borders in **4.3.2.1**.
[95] Tim Marshall, *Prisoners of Geography* (Elliott & Thompson 2015) x. I am focussing on the features of natural geography in relation to territorial borders, but throughout *Prisoners of Geography* Marshall stresses the equally important agencies of the climate, access to natural materials, and human demographics.
[96] In the case of the Conditioning of combat itself, Freshfield remarked that 'no branch of science enters more closely than Geography into the art of war' (Douglas W Freshfield, 'Address at the Anniversary General Meeting, May 17, 1915' (1915) 46 The Geographical Journal 1). This was well known to the military strategist Sun Tzu, who advised in the fifth-century BCE that '[c]onformation of the ground is of the greatest assistance in battle' (Sun Tzu, *The Art of War* (Samuel B Griffith tr, Oxford University Press 1971) 127-128).
[97] Monica Duffy Toft, 'Territory and War' (2014) 51 Journal of Peace Research 185.

and checkpoints are materially agentic in their own ways. The Berlin Wall, for instance, stood as a symbol of ideological, political, and territorial division.[98]

This is not to suggest that there is any ontological distinction between 'natural' borders and 'constructed' borders. As Nail points out, '[a] river only functions as a border if there is some social impact of it being such (i.e., a tax, a bridge, a socially disputed or accepted division). Additionally, so-called artificial borders always function by cutting or dividing some "natural" flow of the earth or people (who are themselves "natural" beings).'[99] Indeed, constructed barriers and natural geography are very often symbiotic (just as the Great Wall of China is built upon the crests of mountains).

How these material considerations ultimately relate to the law of immigration is clear. Immigration is preconditional on the notion of territory, which itself cannot be understood in isolation from the extremely complex entanglement of material agencies. As Stratford notes, questions of asylum and immigration are co-dependent on the conceptualisation of territories as an aggregate of spaces, volumes, surfaces, and elements.[100] More generally, these materialities are significant for the diversification of law: Pascal remarks that 'three degrees of latitude upset the whole of jurisprudence and one meridian determines what is true… It is a funny sort of justice marked by a river! True on this side of the Pyrenees, false on the other.'[101]

A second material agency Conditioning the content of immigration law is the human body. At the most fundamental level, all immigration laws are necessarily contingent on perceptions of the human body as physically separate objects. As Nail points out, the legal concept of migration is not born of *stasis* but of *motion* of physical bodies across territories (what he calls 'kinopolitics').[102] Beyond these fundaments, particular

[98] Christine Leuenberger, 'From the Berlin Wall to the West Bank Barrier' in Katharina Gerstenberger (ed), *After the Berlin Wall* (Palgrave Macmillan) 59.
[99] Thomas Nail, *Theory of the Border* (Oxford University Press 2016) 7.
[100] Elaine Stratford, 'Edges' in Kimberley A Peters, Philip E Steinberg and Elaine Stratford (eds), *Territory Beyond Terra* (Rowman & Littlefield 2018) 165-166.
[101] Blaise Pascal, *Pensées* (AJ Krailsheimer tr, Penguin 1995) 16; cited in Stuart Elden, *The Birth of Territory* (University of Chicago Press 2013) 3.

characteristics of the human body may Condition the content of immigration laws in unique ways; especially so when bodies are racialised or ethnicised. In the case of racialisation, some ways in which the content of certain immigration laws are materially Conditioned may be readily apparent. Historical examples abound, including the law in 1790 that naturalised citizenship of the United States was only eligible for 'white person[s]',[103] or the Brazilian decree in 1890 that prohibited the entry of 'blacks and yellows'.[104]

Again, law is Conditioned in ways far beyond that which language alone reveals. Expressly racist immigration laws, like prohibitions on entry for 'blacks and yellows', are consigned to history.[105] *However*, the absence of reference to race in the linguistic content of immigration laws of course does not mean that the racialised human body cannot be a partial or even a principal agent of its Conditioning. Rather, Provine describes the 'enduring relationship between race and immigration law':

> Laws that explicitly target particular groups for inclusion or exclusion can no longer be justified on eugenic grounds… Yet immigration laws and policies that leave room for race to play a significant role in enforcement are not only tolerated, but often embraced by immigration restrictionists… They typically feature a large measure of discretion for the front-line officials who determine when surveillance occurs and what cases get priority. Safeguards to prevent abuses are generally lacking.[106]

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host of shifting variables. In this sense, the border should not be analyzed according to motion simply because people and objects move across it, or because it is "permeable." The border is not simply a static membrane or space through which flows of people move. In contrast to the vast literature on the movement of people and things across borders, there is relatively little analysis of the motion of the border itself' (Nail (n 99) 6).

[103] United States Naturalization Act 1790 (1 Stat 103).

[104] David FitzGerald, David Cook-Martín and Angela S García, *Culling the Masses* (Harvard University Press 2014) 261.

[105] At least, such discriminatory laws are prohibited by the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families 2003, Articles 1 and 7.

[106] Doris Marie Provine, 'Institutional Racism in Enforcing Immigration Law' (2013) 8 Norteamérica 31, 32.

While race-based immigration policies are now illegal in the United States,[107] Massey and Pren chart a correlation between its modern immigration policy and the narrative of a 'Latino threat'.[108] Subverting the official narrative of national security and economics, de León and others document 'the important connections among identity, citizenship, and material culture' at the United States-Mexico border.[109] Border crossers defuse the racial stereotyping of law enforcement by adopting phenotypic 'performances', which includes moderating behaviour, speech, clothing, and the use of false passports and identity documents.[110]

The point here is not that the regulation of immigration to the United States is framed to allow for silently racist *purposes*. That may very well be true, but that determination is besides discussion here. In fact, Massey and Pren argue that the United States' immigration policy actually had the effect of drastically *increasing* immigration from Latin America;[111] this again highlights the difficulty with asserting that the end of a law is concomitant to any particularly given end. Rather, the point I stress here is that the law is ultimately Conditioned by factors both intrinsic and extrinsic to its abstracted *linguistic* content.

Through examples, ranging from laws relating to violence, property, and immigration, I have sketched an outline of how the content of law is materially Conditioned. I will now move discussion to a more specific area of relevance to my investigation into the materiality of the content of law: legal fictions. These following analyses of legal fictions have a dual purpose. First, legal fictions represent a recurring theme within legal philosophy, and as such deserve some recognition in themselves. Secondly, these focussed discussions will further demonstrate and nuance my understanding of the Conditioning of the content of law.

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[107] Explicit parity of the eligibility for United States citizenship, irrespective of 'race', was finally recognised in the Immigration and Nationality Act 1952 (66 Stat 163).
[108] Douglas S Massey and Karen A Pren, 'Unintended Consequences of US Immigration Policy: Explaining the Post-1965 Surge from Latin America' (2012) 38 Population and Development Review 1, 4.
[109] Jason de León, Cameron Gokee and Ashley Schubert, '"By the Time I Get to Arizona": Citizenship, Materiality, and Contested Identities Along the US-Mexico Border' (2015) 88 Anthropological Quarterly 445, 448.
[110] de León, Gokee and Schubert (n 109) 448 and 453.
[111] Massey and Pren (n 108) 14.

4.3.2.1 'Legal fictions'

The term 'legal fiction' (hereafter simply 'fiction') is prominent in legal philosophy and law.[112] As I will show, fictions are often spoken of as highly abstract concepts, and are deployed as if they represent a transcendence of materiality. In this section, I instead argue that 'fictions', so-called, are in fact ineluctably material.

To this end, I will first frame what I mean by fictions: essentially, I argue that designations of 'fictions' in law arise from ambiguities with respect to material Conditioning. I will take as an example a law that prohibits driving a vehicle while intoxicated. The Road Traffic Act states that

> [a] person who, when driving or attempting to drive a mechanically propelled vehicle on a road or other public place, is unfit to drive through drink or drugs is guilty of an offence.[113]

The linguistic content of this law betrays its apparent Conditioning by many agencies: a driver, a vehicle, a road, the driver's blood, and alcohol or other drug molecules. However, the linguistic content of law is not always as straightforward with respect to its Conditioning.[114] In contrast to the law prohibiting driving while intoxicated, I will use an example from the Matrimonial Causes Act. One section states that

[112] Louise Harmon, 'Falling off the Vine: Legal Fictions and the Doctrine of Substituted Judgment' (1990) 100 The Yale Law Journal 1.
[113] Road Traffic Act 1988, s 4(1).
[114] I do not mean to suggest that even the given example is straightforward. I have already considered the problem of penumbral meanings (**2.4.1.2** and **4.3.1**). As the classic example goes, such a problem might arise in this case around the *vehicle* that one is driving while intoxicated. In one case in the United States, for example, it had to be decided whether a horse constituted a vehicle for the purposes of driving whilst under the influence (*State of North Carolina v Dellinger* (1985) 327 South Eastern Reporter 2d 609). This point on the penumbra of uncertainty is additional to the way in which, in the very first instance, I treat the linguistic content of law as an imperfect yet expedient abstraction of law's Conditioning (**4.3.1**).

> [a] marriage celebrated after 31st July 1971… shall be void on the [ground]… that at the time of the marriage either party was already lawfully married or a civil partner.[115]

In an everyday sense, the word 'marriage' does not immediately betray Conditioning agencies in the same way that the words 'driver' or 'drink' do. The question might then be posed: what *is* a marriage? Likewise, what *is* a civil partnership; and how may marriages and civil partnerships – whatever they are – be 'void'? These questions suppose an abstraction to law – a sense of ambiguity that cannot be resolved through appeals to materiality – and some therefore answer such questions by designating marriage, as one example, a 'fiction'.[116]

While the working definition of 'fiction' that I am fleshing out appears to have a resemblance to what might be called 'intangible', I have avoided using this latter term for two reasons. First, *intangible* implies the contradistinction of *tangible* – objects, or things, graspable or perceivable. However, as I established throughout **3**, my new materialist ontology goes far beyond this simplistic sense of matter, as I instead proceed from the notion of agency. 'Intangibles' – like asbestos fibres or radio waves – can clearly be agentic,[117] and as such can and do Condition the content of law in demonstrable ways.[118] Second, the more expansive term 'fiction', which has various (and unsettled) established meanings in legal philosophy,[119] covers and incorporates several different aspects of interest to my arguments that 'fictions', as deployed in legal philosophy and law, are ineluctably material.

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[115] Matrimonial Causes Act 1973, s 11.

[116] See eg Norma Basch, 'Invisible Women: The Legal Fiction of Marital Unity in Nineteenth-Century America' (1979) 5 Feminist Studies 346, 347; Peter Larson, 'Married Women and the Law: Legal Fiction and Women's Agency in England, America, and Northwestern Europe' (2015) 50 Canadian Journal of History 86, 87.

[117] See **3.5.2**.

[118] For example, the Control of Asbestos Regulations 2012, s 19(1), states that 'every employer must monitor the exposure to asbestos of any employees employed by that employer by measurement of asbestos fibres present in the air'. Under the Wireless Telegraphy Act 2006, s 8, it is unlawful to broadcast on particular radio frequencies without a licence.

[119] Harmon writes that '[t]he legal fiction used to be a hot topic on the jurisprudential agenda. It was written and talked about passionately by those who wrote and talked about such things in the nineteenth and early twentieth centuries. Then interest in the subject withered and died, and virtually fell off the vine' (Harmon (n 112) 1).

One way that fictions are commonly understood is in an *evidentiary* sense. Judges will often presume something that is 'true for legal purposes, even though it may be untrue or unproven.'[120] One instance is the legal presumption of survivorship. In circumstances like accidents, it may sometimes be unclear which of two (or more) people were deceased first. This fact is sometimes legally critical – for the purposes of executing a will, for example. To overcome this uncertainty, the order of death is 'presumed to have occurred in order of seniority, and accordingly the younger shall be deemed to have survived the elder.'[121]

Another prevalent meaning of fiction coincides with that sketched by my earlier example from the Matrimonial Causes Act. In such cases, fictions are understood in a conceptual or doctrinal sense. Such fictions, on this understanding, have existed since Ancient Rome, where legal personality evolved to cover collections of tradespeople.[122] The similar (but historically different) modern concept of corporate personhood is also spoken of as a highly complex fiction underpinning company law.[123]

In a similar way, many also claim that the law of intellectual property is grounded on fiction.[124] In some jurisdictions, one is seemingly able to own ideas themselves.[125] By this measure, some even claim that intellectual property should not be approached as 'property' at all, but for both theoretical and practical purposes it is best categorised under a separate legal framework entirely.[126]

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[120] Angus Stevenson (ed), 'Legal Fiction', *Oxford Dictionary of English* (3rd edn, Oxford University Press 2010) 1008.
[121] Law of Property Act 1925, s 184. This presumption of survivorship was recently applied in *Scarle v Scarle* [2019] EWHC 2224 (Ch).
[122] Jeffrey L Patterson, 'The Development of the Concept of Corporation from Earliest Roman Times to A.D. 476' (1983) 10 The Accounting Historians Journal 87, 93.
[123] Nicholas Bourne, *Bourne on Company Law* (5th edn, Taylor & Francis) 15-19). In terms of the historical difference between Roman legal personality and , corporate personhood, see Geoffrey Poitras and Frederick Willeboordse, 'The Societas Publicanorum and Corporate Personality in Roman Private Law' [2019] Business History 1, 7-8.
[124] Alexandra George, *Constructing Intellectual Property* (Cambridge University Press 2012) 115-123.
[125] Antoinette Maget Dominicé and Jessica C Lai (eds), *Intellectual Property and Access to Im/Material Goods* (2016) 1.
[126] Lemley points out several differences in the way that 'real' and 'intellectual' property is handled (at least in the United States), and as such charges intellectual 'property' as a theoretically inaccurate and practically harmful misnomer (MA Lemley, 'Property, Intellectual

A third and final way that fictions have been understood is typological: this encompasses notions of 'rights', 'duties', 'liabilities', and so on. Hohfeld famously diagnosed several antagonistic, conceptual pairs important in judicial reasoning,[127] and this analysis 'remains today, despite its faults, the source to which most (and not just jurists) return.'[128] A particular conceptual 'species' of law very often forms the bedrock of legal philosophies. Dworkin, for example, looks primarily to the choices that judges make surrounding *rights* in cases before them.[129] The notion of *duty* is likewise centralised in command and deontological theories of law.[130] The sub-distinctions within Hohfeld's typology, complex as they are, have fostered many such disagreements in legal philosophy.[131]

Overall, the scope of 'fiction' cannot be precisely defined, because it covers a complex web of different meanings in different legal contexts. I have, however, described the use of fictions in evidentiary, doctrinal, and typological senses. These senses cannot be

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Property, and Free Riding' (2005) 83 Texas Law Review 1031; see, *contra* Lemley's position, John F Duffy, 'Intellectual Property Isolationism and the Average Cost Thesis' (2005) 83 Texas Law Review 1077, 1078).

[127] Namely, he correlated right with duty; privilege with no right; power with liability; and immunity with disability (Wesley Newcomb Hohfeld, 'Fundamental Legal Conceptions as Applied in Judicial Reasoning' (1917) 26 The Yale Law Journal 710; Harris (n 8) 77).

[128] Michael DA Freeman, *Lloyd's Introduction To Jurisprudence* (8th edn, Sweet & Maxwell 2008) 396.

[129] Dworkin also develops a view of 'rights as trumps', telling us that '[i]ndividual rights are political trumps held by individuals' (Ronald Dworkin, *Taking Rights Seriously* (Bloomsbury 2013) 7).

[130] Austin defined laws as general commands (Austin, *The Province of Jurisprudence Determined* (n 15) 13). Of commands, he said that '[c]ommand and duty are… correlative terms… wherever a duty lies, a command has been signified; and whenever a command is signified, a duty is imposed' (Austin, *The Province of Jurisprudence Determined* (n 15) 7). I have already discussed deontological theories of law, which operate on Kantian duty-based ethics (see **4.2.1**).

[131] For example, the term 'right' in a legal context has two opposing views as to its 'best (conceptual) understanding': the *claim* theory and the *interest* theory (Brian Bix, *Jurisprudence: Theory and Context* (6th edn, Sweet & Maxwell 2012) 21). Hart champions the former, whilst Bentham, MacCormick, and others champion the latter (HLA Hart, *Essays on Bentham* (Oxford University Press 1982) 162-193; and for a summary of Bentham's position, see 164-170); Neil MacCormick, 'Rights in Legislation' in PMS Hacker and J Raz (eds), *Law, Morality and Society* (Oxford University Press 1977) 189-209; all cited in Bix 21). Otherwise, Whiteley argues that 'duty' should be distinguished as a function of a trust-relationship, and as the correct thing to do (CH Whiteley, 'On Duties' in Joel Feinberg (ed), *Moral Concepts* (Oxford University Press 1969) 54).

neatly separated; indeed, to a large extent these senses presuppose and intersect one another.

At the start of this section, I said that fictions are commonly deployed by lawyers and legal philosophers as if they represent or refer to concepts that transcend materiality. In relation to the so-called 'border fiction', for example, Balibar claims that '[n]othing is less like a material thing than a border, even though it is officially "the same" (identical to itself, and therefore well defined) whichever way you cross it'.[132] Otherwise, Drahos writes of the view that intellectual property rights are immaterial 'mental constructs' that amount to fictions.[133]

In response to such views of so-called legal fictions, I will now demonstrate how fictions are ineluctably material, and conclude that fictions pose no theoretical objection to my material ontology of law. I approach this in two ways. First, I engage in reificatory analyses of fictions in their doctrinal modes. I argue that there is nothing inconsistent with claiming that 'fictions' are agentically Conditioned. To this end, I employ Pottage's notion of *forensic materiality*. Second, I advance a deeper critique of 'fictions' on the basis of language-scepticism.

I will begin with reificatory analysis into the forensic materiality of fictions. In short, forensic materiality is the integrated process of the dematerialisation of 'things in question', and the rematerialisation into discursive forms.[134] Pottage's articulation of forensic materiality was inspired by Thomas' historical analysis of the Roman law concept of *res*:[135] 'a metonym for the trial process and legal issue which the parties were disputing through that procedure.'[136] Pottage explains that, in relation to the *res*, '[t]hings took the form of a *res de qua agitur*, or "thing in question".'[137] This is captured

[132] Etienne Balibar, *Politics and the Other Scene* (Christine Jones, James Swenson and Chris Turner trs, Verso 2002) 81.
[133] Peter Drahos, *A Philosophy of Intellectual Property* (Dartmouth 1996) 111.
[134] Alain Pottage, 'Law Machines: Scale Models, Forensic Materiality and the Making of Modern Patent Law' (2011) 41 Social Studies of Science 621, 635-637.
[135] Yan Thomas, 'Res, Chose et Patrimoine (Note Sur Le Rapport Sujet-Objet En Droit Romain)' (1980) 24 Archives de la philosophie du droit 413; Alain Pottage, 'Law after Anthropology: Object and Technique in Roman Law' (2014) 31 Theory, Culture & Society 147, 150.
[136] Pottage (n 135) 150.
[137] Pottage (n 135) 150.

by Latour's notion of 'matters of concern', which Latour argues have the power to create public discussions by virtue of their power to divide opinion.[138]

The legal process, Pottage argues, dematerialises the 'thing' *res*, and rematerialises it in discursive legal forms. Pottage explains that

> [i]n law, the res was first and foremost a discursive artefact, a 'name' that was shaped by arguments that abstracted the observable, material, qualities of a thing into the legal qualities that determined the questions of priority on which disputes… usually turned.[139]

For example, a bull that disputedly damaged another's land may have been led into the courtroom;[140] the materialities under dispute would be dematerialised, and subsequently rematerialised, in the form of discursive legal argument concerning 'liability' for damage caused by animals.[141] Ultimately, Pottage argues, 'the materiality that is elicited, negotiated and ascribed to (in)tangible things is a kind of *forensic materiality*.'[142]

In the context of Pottage's notion of forensic materiality, I will focus on two fictions here: 'borders' and 'patents'. These are offered as representative examples; there is no reason why the reificatory analysis applied to these fictions cannot be extended to other fictions.

Although I did not use the term, I have already demonstrated an analysis into the forensic materiality of fictions by way of the 'borders' of 'territories'. As I said in **4.3.2**, borders are presupposed by any immigration law that restricts movement. That discussion to a large extent foreshadowed the argument here, in that I sought to

[138] Bruno Latour, 'From Realpolitik to Dingpolitik or How to Make Things Public' in Bruno Latour and Peter Weibel (eds), *Making Things Public* (MIT Press 2005) 13-16; Pottage (n 134) 635.
[139] Pottage (n 134) 635.
[140] Forensic Architecture, Interview with Alain Pottage (30 November 2011).
[141] Ashton-Cross covers Roman law on animal damage in detail (DIC Ashton-Cross, 'Liability in Roman Law for Damage Caused by Animals' (1953) 11 The Cambridge Law Journal 395).

describe the complex agentic Conditioning of that fiction. The forensic materiality of the border fiction is contingent on countless agencies: the physical geographic features of the Earth, walls, checkpoints, documents, complex cultural or racial suppositions, and so on. It is *this* which constitutes the fiction of the border – borders are understood not in spite of or separate from these agencies, but rather *because* of them.

Similar arguments may be made with respect to the notion of patents in the realm of intellectual property law. Generally speaking, a 'patent' is '[t]he grant of an exclusive right to exploit an invention.'[143] On further analysis, the legal concept of the 'patent' is inescapably agentically Conditioned. First of all, the extent of a patent (in the United Kingdom at least) is determined according to 'the description and any drawings contained in [the application or grant] specification'.[144] These specification documents – with their textual descriptions, lines, diagrams, and so forth – are processed and published by the Intellectual Property Office,[145] which reify the 'patent'.

Pottage takes particular interest in the historical role of machinic models, such as that of Morse's telegraph,[146] in the formation of early United States patent law.[147] The patent rights associated with inventions were inextricably Conditioned by the representative models of the inventions, manifest in steel, leather, wheels, pinions, and so forth.[148] Pottage writes that

> [t]he materiality of the model provided the basic medium in which inventions were revealed, scrutinized and compared; not only did the text come after the model, but the meaning of the text was conditioned by what was seen in the demonstration of the model.[149]

[143] Jonathan Law and Elizabeth A Martin (eds), 'Patent', *Oxford Dictionary of Law* (7th edn, Oxford University Press 2013) 398.
[144] Patents Act 1977, s 125(1).
[145] Patents Act 1977 (n 144) s 16(1).
[146] Pottage (n 134) 626; *O'Reilly v Morse* (1853) 56 US 62.
[147] Pottage (n 134) 622.
[148] Pottage (n 134) 624-625.
[149] Pottage (n 134) 624.

While the use of such models in litigation and adjudication fell out of use in the early twentieth century,[150] Pottage argues that 'the *exemplum* of the patent model still speaks to our understanding of modern patent law.'[151] Indeed, there seems to be a recent legal trend in United States law towards being able to physically prove 'the existence of the invention outside of the patent itself'.[152] This is the doctrine of exemplary or preferred embodiment,[153] and patents must also be physically possible to produce by one possessed of the requisite skill.[154]

The complex entanglement of agencies Conditioning patents is also demonstrated in Foster's analysis of the patenting of chemical compounds of *Hoodia* plants.[155] She does so by directing 'inquiry of law toward the technicalities and materialities of legal documents and their governed human and nonhuman agents.'[156] These agencies are countless: the lively matter of the plants themselves, the local ecosystems, indigenous groups, and the scientists and laboratories, to name just a few. Foster ultimately concludes that

> [t]he lively matter of biological things such as molecules and plants finds affiliative kinship in the materialities of legal documents, contracts, and statutes. Studying the life and body of the law requires attention to its technical and material forms.[157]

This first way of demonstrating the materiality of fictions involves reificatory analysis of the fictions themselves – an inquiry into what Pottage would term forensic materiality. Complementary with this line, I secondly advance a deeper scepticism about the notion of fictions *per se*. This means that I not only start with and unravel fictions in reverse; I

[150] Pottage (n 134) 637.
[151] Pottage (n 134) 637.
[152] Christopher A Cotropia, 'Physicalism and Patent Theory' (2016) 69 Vanderbilt Law Review 1543, 1571.
[153] Tom Brody, 'Preferred Embodiments in Patents' (2009) 9 The John Marshall Review of Intellectual Property Law 398.
[154] *Trustees of Boston University v Everlight Electronics* (2018) 896 Federal Reporter 3d 1357.
[155] Laura A Foster, 'The Making and Unmaking of Patent Ownership: Technicalities, Materialities, and Subjectivities' (2016) 39 Political and Legal Anthropology Review 127.
[156] Foster (n 155) 139.
[157] Foster (n 155) 129.

also argue that the notion of fictions in the first instance derives from a particular view of *language*. I arm myself here with both language-scepticism and philosophical pragmatism – an arsenal wielded most effectively by the school of legal realism. I shall treat language-scepticism and pragmatism in their own right, before considering legal realism.

The first thing to inspect, then, is the epistemology of language and words that fictions presume. Wittgenstein criticises the view, which he sees captured in a passage of the *Confessions* of Augustine,[158] that 'the words in language name objects'.[159] This view supposes that 'sentences are combinations of such names… [i]n this picture of language… [e]very word has a meaning. This meaning is correlated with the word. It is the object for which the word stands.'[160] Wittgenstein argues that instead of words representing fixed realities,[161] 'the meaning of a word is its use in the language.'[162] Thus, there is no inherent metaphysical meaning to 'five' 'red' 'apples'.[163] Rather, such terms are engaged with during complex 'language-games': their meanings are imparted by the way that they are named, repeated, and used.[164] Wittgenstein argues that metaphysical puzzles arise when philosophers abduct words from their contexts:

> When philosophers use a word – "knowledge", "being", "object", "I", "proposition/sentence", "name" – and try to grasp the essence of the thing, one must always ask oneself: is the word ever actually used in this way in the language in which it is at home? What *we* do is to bring words back from their metaphysical to their everyday use.[165]

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[158] St Augustine, *The Confessions of St Augustine* (Tobie Matthew tr, Fontana Books 1960) 40-41.
[159] Ludwig Wittgenstein, *Philosophical Investigations* (GEM Anscombe, PMS Hacker and Joachim Schulte trs, 4th edn, Wiley-Blackwell 2009) 5e.
[160] Wittgenstein (n 159) 5e.
[161] It was actually precisely this position that Wittgenstein takes in earlier works, such as *Tractatus Logico-Philosophicus*. The later *Philosophical Investigations*, published posthumously, was a dramatic reversal of thought (Ludwig Wittgenstein, *Tractatus Logico-Philosophicus* (Kegan Paul 1922); James Conant, 'Wittgenstein's Later Criticism of the Tractatus' (2013) 2 Publications of the Austrian Ludwig Wittgenstein Society 172).
[162] Wittgenstein (n 159) 25e.
[163] Wittgenstein (n 159) 5e-6e.

[165] Wittgenstein (n 159) 53e.

Kerruish describes how, on Wittgenstein's view, any puzzles arising about the world 'are not fruitfully considered as puzzles about how the world is, but as products of inadequacies and ambiguities in linguistic expression. Tidy them up and the puzzles disappear.'[166] It is in this spirit that (J L) Austin calls to

> forearm ourselves against the traps that language sets us. [W]ords are not (except in their own little corner) facts or things: we need therefore to prise them off the world, to hold them apart from and against it, so that we can realise their inadequacies and arbitrarinesses, and can re-look at the world without blinkers.[167]

Austin argues that words *in themselves* are not reflections of facts,[168] but that their meaning is given by their *use* in performative ways.[169] While not a legal philosopher, Austin employs legal examples to demonstrate: 'I give and bequeath my watch to my brother'; 'I take this woman to be my lawful wedded wife'.[170] These examples are such that 'they do not 'describe' or 'report' or constate anything at all, are not 'true or false'';[171] '[w]hen I say, before the registrar or altar, [etc], 'I do', I am not reporting on a marriage: I am indulging in it.'[172]

Austin's colleague, Hart, is also such an ordinary language philosopher.[173] Hart's linguistic scepticism runs beyond maintaining that the nature of words can create uncertainty about the content of law;[174] he approaches legal philosophy with a rejection of linguistic essentialism. Hart opens his seminal *Concept* by arguing that the question

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[166] Valerie Kerruish, *Jurisprudence as Ideology* (Routledge 1992) 46. Kerruish is actually making reference to ordinary language philosophy here; but the similarities with Wittgensteinian thought are striking enough to elide the two for my present purposes.
[167] JL Austin, 'A Plea for Excuses' (1956) 57 Proceedings of the Aristotelian Society 1, 7-8.
[168] 'Of all people, jurists should be best aware of the true state of affairs. Perhaps some now are. Yet they will succumb to their own timorous fiction, that a statement of 'the law' is a statement of fact' (JL Austin, *How to Do Things with Words* (Oxford University Press 1962) 4).
[169] Austin, *How to Do Things with Words* (n 168) 6.
[170] Austin, *How to Do Things with Words* (n 168) 5.
[171] Austin, *How to Do Things with Words* (n 168) 5.
[172] Austin, *How to Do Things with Words* (n 168) 6.

[174] Ie, the penumbra of uncertainty, which I have discussed a few times previously (**2.4.2** and **4.3.1**).

'what is law?' masquerades as a single *definitional* puzzle, whereas really it springs from a few quite different perplexities.[175] Hart insists that *Concept* should instead

> be regarded as an essay in descriptive sociology; for the suggestion that inquiries into the meanings of words merely throw light on words is false. Many important distinctions, which are not immediately obvious, between types of social situation or relationships may best be brought to light by an examination of the standard uses of the relevant expressions and of the way in which these depend on a social context, itself often left unstated.[176]

In such a way, Bix argues that Hart 'divert[s] attention away from definitional obsessions' and 'the temptation to ask metaphysical questions ("what is Law?" or "do norms exist")… transforming such questions into (re-)descriptions of the way we actually act.'[177] Hart cites both Austin and Wittgenstein's *Philosophical Investigations* with approval,[178] and his ordinary language approach can be seen throughout *Concept*.[179]

These Wittgenstein approaches have (complex) affinities with the approach taken by philosophical pragmatists.[180] Davies describes how pragmatists 'directed the quest for

[175] Hart (n 17) 6. There are three recurrent perplexities in particular: how law differs from, and how is it related to, orders backed by threats; how legal obligation differs from, and how it is related to, moral obligation; and what rules are and to what extent law is a system of rules (Hart (n 17) 13). For Hart's general scepticism of essentialist definitions, see Hart (n 17) 1-17.
[176] Hart (n 17) vi.
[177] Bix (n 131) 6.
[178] Hart (n 17) 14, 280, and 297.
[179] King argues that Hart debars himself from using the term 'norm' (instead opting for 'rule') because 'analysis of traditional English usage is the chief method of inquiry he pursues' (BE King, 'The Basic Concept of Professor Hart's Jurisprudence: The Norm out of the Bottle' (1963) 21 The Cambridge Law Journal 270, 287). Hart also bases much of his criticism of Austin by teasing out the quite different ways in which people ordinarily use 'obliged' and 'obligated' (Hart (n 17) 82-86).
[180] This is not to claim that Wittgenstein, or the others cited, are philosophical pragmatists. In the case of Wittgenstein, this is contentious, and the most accurate reading of Wittgenstein need not be settled here. For an overview of 'the similarities seen between Wittgenstein and pragmatism as well as the divergences emphasized between the two', see Judy M Hensley, 'Who's Calling Wittgenstein a Pragmatist?' (2012) 4 European Journal of Pragmatism and American Philosophy 1). At the very least, however, Wittgenstein 'was co-opted as a chief ally of pragmatism' by one later leading pragmatist, Rorty (Alan Malachowski, *The Cambridge Companion to Pragmatism* (Alan Malachowski ed, Cambridge University Press 2013) 10), who wrote that 'the closer one brings pragmatism to the writings of the later Wittgenstein and of

understanding away from a metaphysical search for truth to an understanding of truth grounded only in experience and practical relations.'[181] James describes a pragmatist as one who

> turns his back resolutely and once and for all upon a lot of inveterate habits dear to professional philosophers. He turns away from abstraction and insufficiency, from verbal solutions… from fixed principles, closed systems, and pretended absolutes and origins. He turns towards concreteness and adequacy… It means the open air and possibilities of nature, as against dogma, artificiality, and the pretence of finality in truth.[182]

The duality of pragmatism and language-scepticism finds a home in legal realism (hereafter realism).[183] There are two nominal schools – American and Scandinavian. While these schools differ in terms of scope[184] and influence,[185] realism is taken here as one tradition, because both American and Scandinavian adherents share the same form of sceptical outlook. Those who ride under the banner of realism are united by the 'desire to eliminate metaphysics' from legal science,[186] and are spurred by an

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those influenced by him, the more light they shed on each other' (Richard Rorty, 'Pragmatism, Categories, and Language' (1961) 70 The Philosophical Review 197, 198-199; cited in Malachowski 10). Goodman comments that 'such contemporary pragmatic philosophers as Richard Rorty and Hilary Putnam… rely equally on Wittgensteinian pictures of language and on pragmatist epistemology – or anti-epistemology in the case of Rorty' (Russell B Goodman, 'Wittgenstein and Pragmatism' (1998) 4 Parallax 91).

[181] Margaret Davies, *Asking the Law Question* (Sweet & Maxwell 1994) 121.

[182] William James, *Pragmatism* (Harvard University Press 1975) 51; cited in Davies (n 181) 121.

[183] Kerruish historically connects American realism with pragmatists like James (Kerruish (n 166) 10. It is important to note that legal realism here is not linked to philosophical realism, which has a different (actually opposite) meaning (Harris (n 8) 93).

[184] American realism centres around dispelling the myth that judges resolve cases in strictly formal ways (Karl N Llewellyn, 'Some Realism about Realism: Responding to Dean Pound' (1931) 44 Harvard Law Review 1222, 1241-1242; Bix (n 131) 200-202; see **2.4.2**). Scandinavian realism, on the other hand, expanded the scope to consider the metaphysical positioning of legal concepts and doctrines more generally, advancing from a certain philosophy of human psychology (McCoubrey and White (n 11) 178 and 181; Freeman (n 128) 1038-1039).

[185] American realism derives from the work of Holmes (see n 152 in **2.3**). Llewellyn, a leading American realist, wrote of his own theories that 'Holmes' mind had travelled most of the road two generations back' (Karl N Llewellyn, 'A Realistic Jurisprudence - The Next Step' (1930) 30 Columbia Law Review 431, 454). Scandinavian realism was instead inspired by the works of Hägerström, whom we shall consider presently.

[186] 1038.

'iconoclastic spirit sweeping away previously prevailing error.'[187] The notion that legal concepts, doctrines, and terminologies are somehow transcendental is rejected as an illusion. Harris describes how the realist claims

> that lawyers commonly talk of 'rules' as though they were genuine entities, occupying some world other than the world of time and space… and that legal concepts, like 'right', 'duty' or 'possession', are treated as if these words had some metaphysical essence as their counterpart in that same other legal world.[188]

The founder of the Scandinavian chapter, Hägerström, embodies this spirit of realism.[189] He rejected Hohfeldian distinctions like rights and duties, arguing that ascribing metaphysical meanings to such terms is akin to believing in mystical and ritualistic powers.[190] Similarly, Lundstedt remarks that the notion of the violation of rights 'was like a parrot's blather.'[191] Cohen argued that to believe such things as 'corporations' exist beyond the word itself is 'transcendental nonsense', asking pointedly, '[w]hat right have we to believe in corporations if we don't angels?'[192] Such provocative expression, characteristic of realists, is redolent of Bentham's charge that talk of natural rights is 'nonsense on stilts'.[193] Indeed, Bentham is similarly derisive of fictions,[194] and in these ways he pre-empts the realist spirit.[195]

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[187] McCoubrey and White (n 11) 178.
[188] Harris (n 8) 93.
[189] '[W]e must destroy metaphysics, if we ever wish to pierce through the mist of words which has arisen out of feelings and associations and to proceed 'from sounds to things'' (Axel Hägerström, *Philosophy and Religion* (Taylor & Francis 2004) 74).
[190] Axel Hägerström, *Inquiries into the Nature of Law and Morals* (CD Broad tr, Almqvist and Wiksell 1953) 315-324; cited in Freeman (n 128) 1052-1057.
[191] Staffan Källström, *En filosof i politiken: Vilhelm Lundstedt och äganderätten* (Stockholms Universitet 1991) 15; cited in Patricia Mindus, *A Real Mind* (Springer Netherlands 2009) 187.
[192] Felix S Cohen, 'Transcendental Nonsense and the Functional Approach' (1935) 35 Columbia Law Review 809, 811.
[193] Jeremy Bentham, *The Works of Jeremy Bentham*, vol 2 (William Tait 1843) 501.
[194] 'Let us guard against the employment of [fictions] in matter [sic] of jurisprudence…. amidst which all light and common sense will disappear; then mists will rise, amidst the darkness of which [lawyers] will reap a harvest of false and pernicious consequences' (Bentham, *The Works of Jeremy Bentham* (n 193) 539).

At this point, the similarities between realist and Wittgensteinian approaches to language are manifest.[196] The realist Olivecrona believes that the actual *use* of legal words is what counted, and that any inquiry into their intrinsic meaning or correspondent 'realities' is useless.[197] To illustrate, Olivecrona borrows the earlier example of the wedding ceremony from Austin.[198] He argues that wedding vows are 'performative utterances' which have significant consequences in certain social, spatial, and temporal contexts.[199] Legal 'marriage' is given its meaning through complex performances:

It is hopefully clear how these Wittgensteinian, pragmatic, and realist positions can shed insight on my discussion of fictions. How fictions may be explained in terms compatible with a material ontology of law, and the aspect of Conditioning in particular, is reduced to a pseudo-problem. Indeed, the notion of a 'fiction' in the content of law is *itself* a fiction; it is senseless to ask after any essential metaphysical meaning behind words like 'right' or 'marriage'.

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[196] Ahilan T Arulanantham, 'Breaking the Rules?: Wittgenstein and Legal Realism' (1998) 107 The Yale Law Journal 1853.

[197] 'If an astronaut from a distant planet were to descend some day on our earth, he would not be able to perceive any rights or duties, legal powers or properties. All talk of such things is ultimately based on inference' (Karl Olivecrona, 'Legal Language and Reality' in Ralph Newman (ed), *Essays in Jurisprudence in Honor of Roscoe Pound* (Bobbs-Merrill 1962) 152); '[t]he power which is labelled a right is really non-existent. It is an empty word. But the power is thought to be a power to do something' (Karl Olivecrona, *Law as Fact* (Oxford University Press 1939) 96).

[198] Austin, *How to Do Things with Words* (n 168) 5.

[199] Olivecrona, 'Legal Language and Reality' (n 197) 174-175.

[200] Olivecrona, 'Legal Language and Reality' (n 197) 179.

Rather, the words *themselves* affect through their agentic materiality. 'Right' is Conditioned by the agentic entanglement of larynxes-vibrations-ears, paper-ink-eyes, and so on, in a way no different to any other word. This approach closes the argumentative loop between communication as affect (described in **4.2.2** and developed in **4.3.1**) and the fundamental Conditioning of the content of law (**4.3.2**). This leads me to a recapitulation of my entire treatment of the Conditioning of law.

4.4 Conclusion

In **4.1**, I reintroduced Conditioning as an aspect of my ontology of matter. In short, Conditioning encapsulates the sense of material contingency and the complex entanglement of agencies. I explored how this conceptualisation frames an answer to the central research question of how law is material. Here, I focussed upon the *communication* and the *content* of law (**4.2** and **4.3**, respectively). Communication and content were treated as only notionally separate for the purposes of analysis, because I argued that the two are conceptually unified.

First, in **4.2**, I considered the Conditioning of the communication of law. In **4.2.1**, in order to position my own discussion, I reviewed various meanings that have been given to communication in legal philosophy. The first of these related to communication as *promulgation*, which in turn has a two-fold natural law and analytical contextualisation. Second, communication has been posited as a moral requirement for law under systems of deontological ethics. Third, communication has been understood in terms of the rhetorical nature of law and legal argument. Finally, communication has been understood as conceptually equivalent to law, in the sense that law *is* a highly complex system of communication.

I noted that, despite their differences, the meaning given to communication in these past legal theories implies that communication involves various materialities, such as human bodies and statute books. For my part, I understood communication in the new materialist terms of *affect*: I argued that the subject-independent and non-anthropocentric concept of affect allows me to consider law's materiality beyond the

context of human materiality. This expansive approach is consistent with my interdisciplinary approach to law (**1.2.2**).

Upon the understanding of communication as affect, I turned in **4.2.2** to consider some principle ways in which communication, and by that measure the communication of law, is agentically Conditioned. In the first instance, I considered the linguistic communication of law through text and speech. In this respect, I pointed out that humans may only communicate linguistically insofar as bodily materiality allows. Linguistic communication is contingent upon properties of human bodies like the folds of larynxes, the air of the breath, dextrous fingers, retinas, tympanic membranes, and so on.

While clearly integral to law, I then moved to consider ways in which communication is Conditioned beyond the context of language. First, I related the importance of non-verbal 'body language' like gestures, postures, facial expressions, and whole-body movements. These are crucial to a recognition of how law is communicated, because non-verbal behaviour can communicate the content of law. In stopping at a traffic light when it shows red, for example, the behaviour literally *is* the material communication of the content of the law. This is bound with my wider view of law's communication and content (the two being conceptually united) as *affect*.

Second, moving away entirely from an analysis of the 'human', I demonstrated how the communication of law is Conditioned by the 'non-human' (these terms being understood as nominal rather than ontological categories, necessary for the purpose of analysis). On this understanding, such agencies as the lightbulb in the traffic light *is itself* the communication of law. I also cited the affect of architectures like courtrooms,[201] and 'artefacts' like decoration and attire.[202] While such materialities do not amount to communication of the content of law in themselves, as I posit material agency as *distributed*, they nonetheless affect the communication of law as part of the complex material-semiotic process.

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[201] Brigham (n 77).
[202] Corrigan, Robertson and Anderson (n 79).

This discussion of the Conditioning of the communication of law laid the groundwork for my consideration of the Conditioning of the *content* of law in **4.3**. I began in **4.3.1** by explaining my nuanced approach to the notion of the 'content' of law. To this end, I referred back to my understanding of communication as affect. This understanding is consistent with my new materialist ontology of matter, and rejects as ontologically *in*consistent the notion that law possesses 'informational content'. On my view, for example, it is not the *information* contained in tax-letters which amounts to the communication of law, but the affect of tax-letters themselves.

While I maintain that law has no informational content *per se*, in the sense just described, this position is *methodologically* problematic. Recalling the arguments I made in **2.4.2**, law is in fact spoken of *as if* it possesses discrete, informational content; and this is no less demonstrated by the particular examples of law which I myself have and will use. For these reasons, I said that reference to law as if it possesses content is an epistemic concession, in order that I may investigate the agencies that Condition law's materiality.

Upon this foundation, I outlined my general approach to the Conditioning of the content of law in **4.3.2**. I began by examining a distinction that Hart makes between *preconditions* of law and the *content* of law.[203] Hart argues that preconditions are the natural facts, such as being fed in infancy in a certain way, necessary for (or even causing) 'a population developing or maintaining a moral or legal code'.[204] Such preconditions 'are not mediated by *reasons*; for they do not relate the existence of certain rules to the conscious aims or purpose of those whose rules they are.'[205] It is this that distinguishes preconditions of law from the *content* of Hart's natural law concessions, which are necessary to 'forward the minimum purpose of survival'.[206]

In **2.4**, I rejected that the ends of law and survival are concomitant; and on this basis, the distinction that Hart creates between preconditions and content collapses. In **4.3.2**,

[203] Hart (n 17) 193-194.
[204] Hart (n 17) 194.

[206] Hart (n 17) 193.

I thus moved to consider preconditions of law not *separately* from the content of law, but to reconfigure the inquiry into preconditions *of* the content of law.

I argue that these preconditions are agentic materialities. For example, the content of a law prohibiting violence is *at minimum* preconditional upon – Conditioned – by the agency of the human body. Likewise, laws on property are fundamentally Conditioned by agencies like mud, rocks, water, the local ecology, and so on. Again, I argued that an analysis of the *language* of the law is only an imperfect glimpse at its Conditioning. I used Chomba and Nkhata's example of the property regimes on the floodplains of Zambia.[207] In areas where lagoons and ponds divided the land, exclusionary property laws developed. Otherwise, in areas where the land stretched between tributaries, a communal property ownership dominated. This illustrates the way in which unique materialities Condition divergent contents of law.

As I reject any one *purpose* of law, I also moved beyond the archetypal examples of laws relating to violence and property, which are given central importance by natural law theories (**2.2.2**). I gave the example of an immigration law, which had been earlier employed in **2.4.3** to demonstrate the futility of ascribing one essential purpose to law. Understanding 'immigration law' as that which can place restrictions on crossing the borders of territories, then a few principle materialities that Condition such content are readily apparent. First of all, the 'borders' of 'territories' are complexly Conditioned not only by landscape features like rivers and mountains, but by walls, barriers, checkpoints, and so on. It is by virtue of these agencies, minimally, that the 'territorial borders' are Conditioned. Secondly, immigration law is contingent on the perception that human bodies, animals, resources, and so forth, are separable and separate things located in space. As with the example of property, I drew attention to ways in which the Conditioning of an immigration law is not always apparent from its content. The racialised human body formed the target of analysis in this respect.

After these general discussions of the Conditioning of the content of law, I turned in **4.3.2.1** towards a closer look at the notion of 'legal fictions' (or simply fictions).

[207] Chomba and Nkhata (n 93).

Investigating fictions had the purpose of developing and nuancing my understanding of the Conditioning of the content of law.

While a comprehensive meaning of fiction is elusive, I described how fictions have been ascribed with evidentiary, doctrinal/conceptual, and typological senses. In whichever sense, legal fictions are often spoken of as if they are immaterial – in this context, notions such as 'void marriages' and 'rights' are deployed as legal abstractions, implying that they are not Conditioned by material agencies.

In order to dispel this illusion, I first explained how fictions may be reified – pulled down from abstraction and deconstructed. To this end, I considered Pottage's notion of forensic materiality – the dematerialisation of 'things', and the rematerialisation into discursive legal forms.[208] I pointed out that I was inquiring into the forensic materiality of the 'border fiction' in my earlier discussions in **4.3.2**. I used the further example of intellectual property law, pointing to such materialities as prototype embodiment, manufacturing, and environmental and documentary materialities, as instrumental to the Conditioning of the content of patent law.

In the second line of analysis into the notion of fictions, I advanced a deeper linguistic scepticism. First, I took issue with philosophies of language that maintain that words name objects of reality.[209] Drawing on Wittgenstein, I argued that words – ie, the words of legal fictions – are rather given meaning through their *use*.[210] This is consistent with my approach to communication as affect, because it recognises words as agentic *in themselves* (when printed on paper, produced by larynxes, and so forth). This Wittgensteinian approach – which has affinities with philosophical pragmatism – is captured in the works of legal realists. Taking inspiration from realists, I moved to reject the notion that the content of law contains metaphysical 'fictions' in the first instance.

[208] Pottage (n 134) 635-637.

[210] Wittgenstein (n 159) 25e.

This concludes my treatment of the Conditioning of law. As I described in **3.3.3**, Conditioning is one nominal aspect of my wider ontology of matter, inspired by new materialisms. In the second arc of my investigation into how law is material, I will now consider in **5** the other nominal aspect: Flux.

5 Material Flux of Law

5.1 Overview

In **3.4.2**, I introduced Flux as one nominal aspect of my new materialist ontology of matter. I described Flux as capturing the entangled, multi-directional, and contingent processes of agentic matter. As Fowler and Harris write, 'material things [are] an ever-changing bundle of relations… they are constantly fluid and in flux.'[1] I employed the example of rain nurturing a sapling, and its eventual tree dropping a leaf, which is in turn digested by bacteria and turned by worms back into the soil. This image captures the complex reconditioning and systemic nature of materiality.

As will become clear, the aspect of Flux is heavily related to Conditioning. Separating However, I argue that approaching my ontology of matter *through nominal aspects* allows me to construct certain thematic departure points for my central exploration of how law is material. It not only allows the presentation of arguments in a structured way, but also allows for a focussed engagement with the extant literature on particular areas.

As with my treatment of Conditioning, I here look at two themes under the aspect of Flux. The first of these concerns the sense of Flux as material reconditioning (**5.2**). In **5.2.1**, I conceptualise material reconditioning in terms of gradual or punctuated *change*. Crucially, this rejects the notion that anything is materially coherent and stable *in and by itself*. I then apply this conceptualisation of reconditioning to understand the materiality of law. In **5.2.2.1**, I explore law's reconditioning in a conceptual sense; in **5.2.2.2**, I consider a more *substantive* theme of reconditioning in the form of legal resistance to death.

[1] Chris Fowler and Oliver JT Harris, 'Enduring Relations: Exploring a Paradox of New Materialism' (2015) 20 Journal of Material Culture 127, 128.

In **5.3**, I then explore Flux in the sense of material systems. This sense of Flux encompasses the dynamic contingencies and continuous processes of agentic matter. I argue that the adoption of traditional views of the material world, which I have termed Flux theories of law (**5.3.1**), has great value for understanding law's ineluctable materiality (**5.3.2**).

I will now look at the first sense of Flux as material reconditioning.

5.2 Flux as material reconditioning

In **5.2.1**, I conceptualise material reconditioning in line with my aspect of Flux. In **5.2.2**, I then proceed to apply this understanding of Flux as material reconditioning, to deepen my conceptualisation of law's materiality.

5.2.1 Conceptualisation of material reconditioning

As agency is distributed across matter in new materialist ontologies, material agency is cast as contingent, dynamic, and multi-directional. I termed this aspect of my new materialist ontology of matter *Flux* (**3.4.2**). While Flux can be gradual or acute (in the case of potent eruptions of material agency), it is invariably continuous. In an everyday sense, Flux is variously understood as change, mutation, transformation, decay, destruction, birth, and so on. Flux therefore captures the sense in which nothing stays the same – in other words, the way in which everything is constantly *reconditioned*. I choose this term as it implicates my aspect of Conditioning (**3.4.1** and **4**). Flux is, in one sense, the process of *re-Conditioning*.

aspect of the first Noble Truth.[2] As Pauling explains, '[o]ur bodies, the houses we live in, the earth under our feet, and the mountains on the skyline are all in a constant state of flux. Some things change more quickly than others, but in the end everything that arises also eventually declines, dissolves, and becomes part of other phenomena.'[3]

Otherwise, Heraclitus' famous maxim that 'you cannot step twice into the same rivers'[4] has often been interpreted as a statement concerning constant material flux.[5] In a description of reconditioning, Aurelius also used the metaphor of moving water, calling upon us to

> often meditate how swiftly all things that subsist, and all things that are done in the world, are carried away, and as it were conveyed out of sight: for both the substance themselves, we see as a flood, are in a continual flux; and all actions in a perpetual change; and the causes themselves, subject to a thousand alterations… consider both the infiniteness of the time already past, and the immense vastness of that which is to come, wherein all things are to be resolved and annihilated.[6]

New materialisms capture and remould these general understandings of reconditioning in their conceptualisations of material agency. Deleuze, whom many consider a progenitor of new materialisms,[7] incorporates reconditioning in his conceptualisation of 'becoming'. Becoming, for Deleuze, is a process of non-teleological, continuous change:

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[2] Bhikkhu Bodhi (tr), *The Numerical Discourses of the Buddha* (Wisdom Publications 2012) 696-697; Stephen J Laumakis, *An Introduction to Buddhist Philosophy* (Cambridge University Press 2008) 127.

[3] Chris Pauling, *Introducing Buddhism* (Windhorse Publications 2016) 45.

[4] Kahn translates the fragment in question as '[o]ne cannot step twice into the same river, nor can one grasp any mortal substance in a stable condition, but it scatters and again gathers; it forms and dissolves, and approaches and departs' (Heraclitus, *The Art and Thought of Heraclitus* (Charles H Kahn tr, Cambridge University Press 2001) 53).

[5] OR Jones, 'Flux' in Ted Honderich (ed), *The Oxford Companion to Philosophy* (2nd edn, Oxford University Press 2005) 304. There is much hermeneutical disagreement over this fragment of Heraclitus' (James Garvey and Jeremy Strangroom, *The Story of Philosophy* (Quercus 2012) 55 and 57).

[6] Marcus Aurelius, *The Meditations of Marcus Aurelius* (Ernest Rhys ed, J M Dent & Sons 1917) 52.

'[b]ecoming produces nothing other than itself… What is real is the becoming itself'.[8] The non-teleological process of becoming entails that material agency is continuously redistributed in novel, 'creative' ways.[9] Braidotti summarises becoming as 'the affirmation of the positivity of difference, meant as a multiple and constant process of transformation. Both teleological order and fixed identities are relinquished in favour of a flux of multiple becoming.'[10]

Including Braidotti,[11] Deleuze's notion of becoming has been adopted by other new materialist thinkers. Bennett, for example, uses becoming to frame discussions of particular materialities. In the context of humans ingesting food, which I consider myself shortly, Bennett writes that '[i]n the eating encounter, all bodies are shown to be but temporary congealments of a materiality that is a process of becoming, is hustle and flow punctuated by sedimentation and substance.'[12] Otherwise, Kruks thinks with Deleuze's becoming to explore the materialities of 'becoming-aged';[13] I shall also consider reconditioning in terms of human senescence later in this section.

Deleuze's notion of becoming was in turn inspired by the processional ontology of Whitehead.[14] Whitehead posited that nature is in a state of perpetual transition,[15] and that any notion of stasis derives from compounded awareness of events in time.[16] To demonstrate, Whitehead used the example of Cleopatra's Needle, an Ancient Egyptian obelisk which was relocated to central London:

[8] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus* (Brian Massumi tr, University of Minnesota Press 1987) 238.
[9] Sara Ahmed, 'Orientations Matter' in Diana H Coole and Samantha Frost (eds), *New Materialisms* (Duke University Press 2010) 256; Jane Bennett, *Vibrant Matter* (Duke University Press 2010) 60.
[10] Rosi Braidotti, 'Discontinuous Becomings. Deleuze on the Becoming-Woman of Philosophy' (1993) 24 Journal of the British Society for Phenomenology 44.
[11] Rosi Braidotti, *The Posthuman* (Polity Press 2013) 66.
[12] Bennett (n 9) 49.
[13] Sonia Kruks, 'Simone de Beauvoir: Engaging Discrepant Materialisms' in Diana H Coole and Samantha Frost (eds), *New Materialisms* (Duke University Press 2010) 258-276.
[14] Gilles Deleuze, *The Fold* (University of Minnesota Press 1993) 76; Michael Halewood, 'On Whitehead and Deleuze: The Process of Materiality' (2005) 13 Configurations 57.

[16] Whitehead (n 15) 92-93.

> If we define the Needle in a sufficiently abstract manner we can say that it never changes. But a physicist who looks on that part of the life of nature as a dance of electrons, will tell you that daily it has lost some molecules and gained others[.][17]

Such a scientific take on reconditioning is especially apparent in the works of the quantum physicist Barad. Barad applies quantum mechanical understandings of phenomena to explain the ongoing 'material (re)configurings of the world'.[18] Adopting and reworking Deleuze's notion, Barad writes of 'the intra-activity of becoming'.[19] As I explained in **3.3.2**, intra-action is the process of the onto-epistemological entanglement of agencies, in dynamic and ever-shifting ways.[20] As such, reality 'is therefore not a fixed essence. *Reality is an ongoing dynamic of intra-activity*.'[21]

I shall now demonstrate these general reflections on reconditioning, read in the context of new materialist understandings, using the example of the human body. The purpose of this example is to present my own conceptualisation of Flux, in the first sense of *reconditioning*, in greater depth. It should be remembered that I later explore Flux in a second sense of *material system* (**5.3**).

The first crucial thing to note is that the human body is not isolated or isolatable – it is not a coherent, autopoietic whole that changes solely from 'within', or because of itself. As Garland-Thomson points out, 'all [human] bodies are shaped by their environments from the moment of conception', and 'register [the] history' of material affect.[22] Alaimo writes of 'movement across human and more-than-human flesh' (*trans-corporeality*), in recognition that the human body is materially porous and mutable.[23] Many characteristics ordinarily considered being 'of' or belonging to the body (such as weight, height, and skin colour) are not inherent or fixed at all, but derive their Conditioning

[17] Whitehead (n 15) 107.
[18] Karen Barad, *Meeting the Universe Halfway* (Duke University Press 2007) 206.
[19] Barad (n 18) 36.
[20] Barad (n 18) 140-141.
[21] Barad (n 18) 206.

[23] Alaimo (n 22) 12.

from contingent experiences and traumas – ie, Fluxional reconditioning. Indeed, the cells of the human body are continuously 'born',[24] shed,[25] 'eaten',[26] recycled,[27] and regenerated.[28] Integral to all these processes are a staggering number of semi-autonomous mitochondria and autonomous bacteria;[29] this problematises the view that human bodies are distinctly 'human' in a categorical sense (which is an application of the ontological monism that I discussed in **3.3.3**). Ultimately, the new materialist recognition of the complexity of material affect casts the human body as never in statis, but always in Flux.

The nexus of body and *food* is one prime example of the continuous reconditioning of the human body. Physiologically-speaking, the affect of the human body on ingested food is well-documented.[30] However, the new materialist view of distributed agency allows recognition of the conative agency of food itself. Fox and others argue that '[f]rom a materialist perspective, human appetites, desires and consumption territorialise materials into foodstuffs, and in due course into metabolic products. *But*

[24] New cells are produced through cell division (Eleanor Lawrence (ed), 'Cell Division', *Henderson's Dictionary of Biological Terms* (12th edn, Pearson Education 2000) 98).
[25] Human skin cells are continuously shed (desquamated) – the epidermis replaces itself entirely around every fourteen days (SM Jackson and others, 'Pathobiology of the Stratum Corneum' (1993) 158 Western Journal of Medicine 279).
[26] Autophagy, literally 'self-eating', is the eliminative process of dead or dying cells (Danielle Glick, Sandra Barth and Kay F Macleod, 'Autophagy: Cellular and Molecular Mechanisms' (2010) 221 The Journal of Pathology 3). This process is essential to cellular life: some have suggested that cancers are the result of a disruption of autophagy, but this is contested (Sujit K Bhutia and others, 'Autophagy: Cancer's Friend or Foe?' (2013) 118 Advances in Cancer Research 61).
[27] The by-products of autophagy serve as sources of energy and building blocks for new molecules (Yoomi Chun and Joungmok Kim, 'Autophagy: An Essential Degradation Program for Cellular Homeostasis and Life' (2018) 7 Cells 278).
[28] Stem cells are able to differentiate into any specialised cell of the human body, which is essentially a process of self-renewal (Wojciech Zakrzewski and others, 'Stem Cells: Past, Present, and Future' (2019) 10 Stem Cell Research & Therapy 68).
[29] Mitochondria are the semi-autonomous generators of cell energy (Eleanor Lawrence (ed), 'Mitochondrion', *Henderson's Dictionary of Biological Terms* (12th edn, Pearson Education 2000) 384). They have their own genomes, very similar to bacterial genomes; this fact has inspired the theory that mitochondria are ancient organisms that have evolved a symbiotic relationship with eukaryotes (Siv GE Andersson and others, 'On the Origin of Mitochondria: A Genomics Perspective' (2003) 358 Philosophical Transactions of the Royal Society B: Biological Sciences 165).
[30] See for an overview Nicholas F Prayson and Richard A Prayson, *The Big Slide* (Nova Biomedical 2015).

at the same time, bodies become territorialised by these foods.'[31] In describing this conative agency of food, Bennett writes that

> once ingested, once, that is, food coacts with the hand that places it in one's mouth, with the metabolic agencies of intestines, pancreas, kidneys, with cultural practices of physical exercise, and so on, food can generate new human tissue. In the case of some foods, say potato chips, it seems appropriate to regard the hand's actions as only quasi- or semi-intentional, for the chips themselves seem to call forth, or provoke and stoke, the manual labor. To eat chips is to enter into an assemblage in which the I is not necessarily the most decisive operator.[32]

This posits food as colonisers, constantly and actively reconditioning human bodies, and recalls Tsing's view that plants domesticate humans.[33] Entangled with materialities of food and guts is an entire ecosystem of microbiota.[34] The food-gut-microbiota assemblage is immensely complex: microbiota, intimately affected by diet,[35] play a central role as both causers and combatants of disease,[36] and even communicate bidirectionally with the brain.[37] Ultimately, these reflections highlight how the human body is always materially contingent upon (and Conditioned by) a multiplicity of affective agencies. In this sense, the constant changes in affectivity entail *re-Conditioning*, which is captured by what I have termed Flux.

[31] Nick J Fox and others, 'The Micropolitics of Obesity: Materialism, Markets and Food Sovereignty' (2018) 52 Sociology 111, 117. Emphasis added.
[32] Bennett (n 9) 40.

[34] Linda Sherwood, Joanne Willey and Christopher Woolverton, *Prescott's Microbiology* (9th edn, McGraw-Hill 2013) 713-721.
[35] Małgorzata Moszak, Monika Szulińska and Paweł Bogdański, 'You Are What You Eat - The Relationship between Diet, Microbiota, and Metabolic Disorders - A Review' (2020) 12 Nutrients 1096.
[36] Francisco Guarner and Juan-R Malagelada, 'Gut Flora in Health and Disease' (2003) 361 The Lancet 512.
[37] Marilia Carabotti and others, 'The Gut-Brain Axis: Interactions between Enteric Microbiota, Central and Enteric Nervous Systems' (2015) 28 Annals of Gastroenterology 203.

The human body has been my first example of Flux solely because it is often central to the content of law, and as such I consider it specifically in preparation for the discussions in **5.2.2**. In terms of material reconditioning, however, human bodies are of course far from remarkable; all things are constantly reconditioned. To demonstrate, I shall use another example thematically similar to Whitehead's narrative of Cleopatra's Needle.[38]

Around fifty million years ago, near modern-day Cairo, millions of creatures called nummulites lived in warm seas that have long since receded.[39] When they died, their bodies formed a layer of sediment upon the seabed, which slowly underwent geo-chemical lithification into limestone.[40] Around four and a half thousand years ago, this nummulitic limestone was mined in quarries, principally at Tura,[41] and transported west across the River Nile.[42] There, it adorned the pyramids at Giza as spectacularly polished, white veneers.[43] Over the next six thousand years, the limestone cladding was continuously looted.[44] One such building made from the repurposed limestone was Sultan Hassan's mosque,[45] which stands in the heart of Cairo's historic district. Those fifty million year old nummilites were impacted, lithified, mined, transported, chiselled, polished, chiselled again, and transported again.

Flux is, in the context of the passage of time, very often thought of in terms of demise, deterioration, and decay. The story of the pyramids at Giza is one of continuous decay. The looting of the limestone has left the step-like cores that can be seen today, which are a rugged impression of what the pyramids would have looked like in their prime. Indeed, the pyramids were quite literally *built* from nummulitic decay, and limestone,

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[38] Whitehead (n 15) 107.
[39] Esmat A Keheila and Abd Alla M El-Ayyat, 'Lower Eocene Carbonate Facies, Environments and Sedimentary Cycles in Upper Egypt: Evidence for Global Sea-Level Changes' (1990) 81 Palaeogeography, Palaeoclimatology, Palaeoecology 33.
[40] James Mitchell (ed), *The Random House Encyclopedia* (3rd edn, Random House 1990) 248-249.
[41] Nicolas Grimal, *A History of Ancient Egypt* (Ian Shaw tr, Blackwell 2005) 27.
[42] Pierre Tallet and Gregory Marouard, 'The Harbor of Khufu on the Red Sea Coast at Wadi Al-Jarf, Egypt' (2014) 77 Near Eastern Archaeology 4, 10.
[43] Kathryn A Bard, *An Introduction to the Archaeology of Ancient Egypt* (John Wiley & Sons 2015) 149.
[44] Miroslav Verner, *The Pyramids* (Steven Rendall tr, Atlantic Books 2001) 217.
[45] WM Flinders Petrie, 'On the Mechanical Methods of the Ancient Egyptians' (1884) 13 The Journal of the Anthropological Institute of Great Britain and Ireland 88, 92.

being a relatively soft and porous rock, is particularly prone to decay from acidic rain and bacteria.[46] In this sense, the pyramids are not a testament to material stasis, but are rather a testament to material reconditioning.

My presentation of reconditioning should not downplay the quite real sense in which matter is also recalcitrant. In **3.3.2**, I used the Chernobyl nuclear disaster as a case study of the potency of what might be naïvely thought of as 'inert' and 'invisible' matter (ie, lumps of metal and isotopes). The Chernobyl disaster also serves to demonstrate the resistance of matter; however humans might intervene, the area surrounding the reactor will be 'dangerously radioactive for roughly the next three centuries.'[47] Arguably, however, respect and reverence is given to that which is seemingly immutable – old oaks, pernicious radiation, stone cliffs, and pyramids – precisely *because* those things, relative to human lifespans, seem to defy the constancy of Flux. But of course, their apparent material integrity will not last forever – in its grand scale, the universe experiences even the pyramids only transiently.

With this understanding of Flux as material reconditioning in mind, I shall now consider how this relates to the content of law.

5.2.2 Reconditioning and the content of law

[46] Bernard J Smith, Heather A Viles and R Fort, 'Rapid, Catastrophic Decay of Building Limestones: Thoughts on Causes, Effects and Consequences' (2006) 1 Heritage Weathering and Conservation 191, 192. This poses particular challenges for conservation of ancient buildings, such as the previously mentioned mosque of Sultan Hassan (EA Abd-Elkareem and RM Mohamed, 'Microbial Deterioration of Limestone of Sultan Hassan Mosque, Cairo-Egypt and Suggested Treatment' (2017) 10 International Journal of ChemTech Research 535).
[47] Alexey V Nesterenko, Vassily B Nesterenko and Alexey V Yablokov, 'Chapter IV. Radiation Protection after the Chernobyl Catastrophe' (2009) 1181 Annals of the New York Academy of Sciences 287, 300.

a more substantive form. In particular, I consider the theme of law and human death. Ultimately, these conceptual and substantive lines of arguments are undertaken as part of my overall investigation into how law is material.

5.2.2.1 Conceptual bases

As I said in **4.3.1**, I approach the communication of law not as information exchange, but rather as agentic affect. In line with my new materialist ontology of matter, I argued that the words printed in a statute book, on a tax letter, spoken in court, and so on, do not communicate abstract 'data'. Rather, the communication of law lies solely in the affectivity of paper-eyes, larynxes-ears, and so forth. As affect entails the constant reconditioning of agencies, then the communication of law can to a large extent be characterised *as* material Flux.

I also said in **4.3.1** that one concession in relation to this ontology of communication is that law is often spoken of *as if* it possesses abstract, informational content. Law, and individual laws, are ordinarily understood to be '*about*' something, such that one might say 'it is the law in Wales that…'. Thus, while I do maintain that the communication of law should be understood in terms of agentic affect, for further inquiry it is epistemically expedient to regard law as if it possesses discrete, abstract content.

Beyond arguing that the communication of law in inherently Fluxional, therefore, I also understand Flux in terms of the constant reconditioning of the *content* of law. Hart argued that modification of the content of law is empowered by secondary rules of change,[48] and that legal change is necessarily part of 'the heart of a legal system'.[49] General theories of legal change are various, and range from evolutionary, Marxian, and Weberian models (with some conceptual overlap).[50] It is useful to give a brief overview

[48] HLA Hart, *The Concept of Law* (3rd ed, Oxford University Press 2012) 95-96.
[49] Hart (n 48) 98. Hart also wrote that 'rules enabling legislators to change and add to the rules of duty… is a step forward as important to society as the invention of the wheel' (Hart (n 48) 42).
[50] These three theories are covered individually in John Sutton, *Law/Society: Origins, Interactions, and Change* (SAGE 2001) 25-132.

of these theories of legal change, in order to contextualise my reflections on Flux and the content of law.

First, I described in **2.3** the analogisation of legal change with biological evolution. The contention of such analogical theories is that, when the existing law is not suited to a particular purpose, the law will be modified to better 'fit' the social need, in a manner analogous to that of biological natural selection.[51] The evolutionary metaphor has been adopted by many sociological jurists,[52] who argue that '[a]s the language, culture, political system, and economic structure of society evolve, the law changes with them.'[53] Spencer takes the laissez-faire view that the law does and should be allowed to change organically, so as not to interfere with the universal law of the 'survival of the fittest'.[54]

Durkheim argues that the bonds of society evolve from penal (mechanical) to contractual (organic).[55] Otherwise, Marxian theorists take the view that class-conflict drives societal and legal change.[56] Finally, Weber maintains that legal systems progress by replacing irrationality with substantive and formal rationality – the latter of which has culminated in Western capitalist society.[57]

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[51] E Donald Elliott, 'The Evolutionary Tradition in Jurisprudence' (1985) 85 Columbia Law Review 38.

[52] Colin F Wilder, 'Teaching Old Dogs New Tricks: Four Motifs of Legal Change from Early Modern Europe' (2012) 51 History and Theory 18, 20.

[53] Elliott (n 51) 40.

[54] 'Nothing but bringing him face to face with stern necessity, and letting him feel how unbending, how unpitying, are her laws, can improve the man of ill-governed desires… all interposing between humanity and the conditions of its existence – cushioning-off consequences by poor-laws or the like – serves but to neutralize the remedy and prolong the evil' (Herbert Spencer, *Social Statics* (John Chapman 1851) 353-354; Michael DA Freeman, *Lloyd's Introduction To Jurisprudence* (8th edn, Sweet & Maxwell 2008) 838). Spencer coined the termed 'survival of the fittest' (Herbert Spencer, *The Principles of Biology*, vol 1 (Williams and Norgate 1864) 444-445).

[55] Émile Durkheim, *The Division of Labor in Society* (George Simpson tr, The Free Press of Glencoe 1960) 144-146; Lawrence M Friedman, 'Law: Change and Evolution' in James D Wright (ed), *International Encyclopedia of the Social & Behavioral Sciences* (2nd edn, Elsevier 2015) 566.

[56] 'In the social production which men carry on they enter into definite relations that… correspond to a *definite stage of development of their material powers of production*. The sum total of these relations of production constitutes the economic structure of society – the real foundation, *on which rise legal and political superstructures*' (Karl Marx, *A Contribution to the Critique of Political Economy* (NI Stone tr, Charles H Kerr 1904) 11), emphases added; Sutton (n 50) 62).

[57] Max Weber, *Economy and Society*, vol 2 (University of California Press 1978) 656; Freeman (n 54) 839.

Despite their differences, what these legal philosophers recognise is the way in which the content of law is not static, but is rather constantly shifting with the particular materialities pertaining. In my own recognition of the constant reconditioning of the content of law, I will move to demonstrate how my nominal aspects of Conditioning and Flux are inextricably bound.

In **4.3.2**, in order to explain how the content of law is Conditioned, I used the example of the divergent property regimes on the floodplains of Zambia. Chomba and Nkhata described how, in areas with ponds and lakes, exclusionary property regimes developed; in contrast, in areas where the plains were more open, communal access regimes developed.[58] This example illustrated how the content of law is differentially Conditioned by divergent *geographies*. Of course, because materiality is being constantly reconditioned, Flux adds a deeper level to my earlier presentation of Conditioning. Staying with property law, the geographical example of the Zambia floodplains can be fruitfully compared with the historical example of English property law. This ultimately serves to demonstrate how the content of law is Fluxional, as the materialities which Condition that content are continuously *re*conditioned.

In England, while a private land regime now dominates, land law in the fourteenth century was based upon the feudal system, of which the rural manor formed an important section.[59] Jarrett remarks that 'through all Western civilisation, from the seventh century to the fourteenth, the personal equation was largely merged with the territorial. One and all, master and man, lord and tenant, were "tied to the soil".'[60] Then, as now, the content of law was Conditioned by the particular social, agricultural, and ecological materialities of the time. Jones describes the feudal land regime thus:

> During the Middle Ages, the modern idea of private property did not exist… In medieval England, the king claimed sovereignty over all of the land and leased it out to vassals, or lords… The manors of the lords were relatively isolated, since

[58] Machaya Jeff Chomba and Bimo Abraham Nkhata, 'Property Rights and Benefit Sharing: A Case Study of the Barotse Floodplain of Zambia' (2016) 10 International Journal of the Commons 158, 165-166.
[59] HS Bennett, *Life on the English Manor* (Cambridge University Press 1974) 42.
[60] Bede Jarrett, *Mediaeval Socialism* (Burns Oates & Washbourne 1935) 18.

> populations were smaller and movement was difficult before the existence of modern transportation technologies. This meant that each manor was largely self-contained and produced a wide range of goods necessary for subsistence. The area around the manor home was divided into different sections, depending on the productivity of the land. In the English Midlands, the best farmlands were cleared and used for crops in an open-field system. The residents of a village shared the lands by allocating different strips to farmers each year. Farmers had strips in many different parts of the lands, so no one monopolized the most productive areas. The manor also had wastes – uncultivated brush lands – and forests nearby for grazing animals and collecting firewood and other forest products. The peasants did not own these lands but had access to them to farm, hunt, raise animals, and gather fuel. These commons were essential for their survival and provided them with some freedom to roam. The lord made a profit on the arrangement; the peasants had autonomy to use the common lands for their own purposes.[61]

Here, the laws of tenure and land use were contingent upon the material conditions of the land and ecologies then pertaining. A 'prime mover' for the transition from feudalism to capitalism is hotly contested;[62] but a compound of material factors is likely, including population decimation following prolonged famine and disease,[63] and the rise of townships.[64] What the eventual *shift in legal regime* reflects is that content of law is Fluxional due to the constant *reconditioning of materiality*.

[61] Reece Jones, *Violent Borders* (Verso 2016) 90-91.
[62] See Paul Sweezy and others, *The Transition from Feudalism to Capitalism* (NLB 1976) 26-29.
[63] Strife was seemingly endless in fourteenth-century England. Freak weather events led to widespread famines; and after the Black Death subsided in 1350, the population in England had halved in under forty years (Terry Jones and Alan Ereira, *Terry Jones' Medieval Lives* (BBC Books 2005) 32-33). Moore argues that the Black Death 'decisively altered labor-land ratios in favor of western Europe's peasantry. This new balance of class forces eliminated the possibility of feudal restoration' (Jason W Moore, 'The Crisis of Feudalism - An Environmental History' (2002) 15 Organization & Environment 301).
[64] Michael Dunford and Diane Perrons, 'Town and Country in the Transition from Feudalism to Capitalism' in Michael Dunford and Diane Perrons (eds), *The Arena of Capital* (Macmillan Education UK 1983) 124.

While law is Conditioned by materiality, and material Flux is constant, this of course does not mean that the content of law, insofar as its language would suggest, is always congruous of the material agencies pertaining at any one moment in time. Indeed, the content of law has often been ascribed a static character.[65] As one example, the technological transformation in the last thirty years has demonstrated how the content of law may remain static relative to fast-changing materialities. Armijo writes that

> current debates concerning communication law and policy would have been unrecognizable to us twenty years ago. Few predicted in 1993, when the World Wide Web was just five years old, that in two decades, the functions of a word processor, camcorder, telephone, camera and pager could all fit within a single, palm-sized device[.][66]

In practice, the rapidity of this material change has meant that the content of pre-existing laws may have no application to new technological disputes,[67] and this can have quite meaningful consequences where privacy is concerned.[68]

However, there is no paradox in recognising such stases of the content of law, and arguing that the content of law, Conditioned by materiality, is by that measure also constantly in Flux. In order to elucidate the notion of the stasis of the content of law, in line with my conceptualisation of Flux, I will recall my earlier arguments concerning the material communication of law.

In one sense, whenever law is scribed, printed, and digitised in statutes, law reports, documents, and books, it is given a *relative stasis* by virtue of the agentic *recalcitrance* of those materialities. As I argued in **5.2.1**, materiality is in constant Flux; it is constantly being reconditioned. However, I also said in that section that matter is recalcitrant. In

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[65] Hart (n 48) 23.
[66] Enrique Armijo, 'Communication Law, Technological Change, and the New Normal' (2014) 19 Communication Law and Policy 401.
[67] Gregory N Mandel, 'Legal Evolution in Response to Technological Change' in Roger Brownsword, Eloise Scotford and Karen Yeung (eds), *The Oxford Handbook of Law, Regulation, and Technology* (Oxford University Press 2017) 228.
[68] Urs Gasser, 'Recoding Privacy Law: Reflections on the Future Relationship Among Law, Technology, and Privacy' (2016) 130 Harvard Law Review 61.

the new materialisms, affect also implies *resistance* to affect in a multidirectional manner.[69] In practice, this means that materialities like books, documents, and electronic files, may and do have *relative stability* in time.

Coupled with the view that these recalcitrant materialities communicate law in the form of abstract 'informational' content (a view that I argued in **4.3.1** is ontologically misconceived), what can result is the *appearance* that the content of law is static. It is of course no coincidence that the oldest surviving legal codes are inscribed upon relatively materially stable clay or stone. The four thousand year old Code of Ur-Nammu provides a snapshot of Mesopotamian life in its directive that a man who severs a foot shall pay the victim ten shekels of silver.[70] On the view that the communication of law entails the exchange of informational content, there is no reason why this law cannot be said to endure so long as the tablet inscribed with the Code is intelligible. In fact, it is precisely this view that Aquinas holds when he writes that the promulgation of law 'extends into the future through the permanence of writing, which in a way promulgates it always.'[71]

However, while the linguistic communication of law is of course important, I argued in **4.2.2** for a more expansive approach to the communication of the content of law. Non-verbal, non-human agencies are equally important to the communication of law. With this in mind, the position that law persists so long as the language-medium persists is untenable. I argued in **4.2.2** that the language media (clay, paper, pixels) are not the only materialities that communicate law, but rather, law is communicated holistically through *distributions* of material agency. For example, the use of discrete weights of silver for payment, as referred to in the Code of Ur-Nammu above, has long fallen out

[69] Bennett (n 9) 35.

[70] Martha Tobi Roth and Harry A Hoffner, *Law Collections from Mesopotamia and Asia Minor* (Piotr Michalowski ed, Scholars Press 1997) 19; OR Gurney and Samuel Noah Kramer, 'Two Fragments of Sumerian Laws' (1965) 1965 Assyriological Studies 13, 15. I mentioned the Code of Ur-Nammu in **4.2.2**. There, I also used the image of Moses descending from Mount Sinai with the promulgated Commandments of God (Exodus 34:29). Arguably, it is symbolic that the eternal law was not written on papyrus or some other mutable medium (upon which Moses initially transcribed his conversation with God (Exodus 24:4)), but carved on relatively impermanent stone tablets; as 'it is easier for heaven and earth to pass away than for one dot of the Law to become void' (Luke 16:17).

[71] Thomas Aquinas, *Selected Writings* (Penguin Books 1998) 617.

of use in southern Iraq (modern-day Sumer). By that measure – alongside countless other materialities that no longer pertain – the law does not persist indefinitely. Because material agency is in constant Flux, law too necessarily has Flux. It is linguistic analyses of law that create the illusion that law endures in some fixed manner.

Having dealt with general *conceptual* considerations relating to the reconditioning of the content of law, I will now turn to consider the *substantive theme* of human death.

5.2.2.2 A thematic consideration of human death

I have just argued in **5.2.2.1** for some conceptual ways in which law is materially reconditioned – one sense of the aspect of Flux. In order to apply this more substantively, I investigate further here the theme of human death. It is not just that laws relating to death, for all their many variations, are temporally and culturally ubiquitous. Rather, I proffer laws on death as apt, particularised examples of the way in which law is Fluxional. It is a benefit that the ubiquity of laws relating to human death helps to contextualise my application of Flux to law.

At the close of **5.2.1**, I said that material reconditioning is often understood in terms of destruction and decay. Apropos the human body, this is rendered as physical vulnerability, senescence, and death. Through experience and trauma, acute or gradual, the materiality of the human body inevitably unravels. Garland-Thomson writes that '[e]very life evolves into disability, making it perhaps the essential characteristic of being human.'[72] Biologically, senescence of the human body follows some stringent processes. Hayflick first described the limit of human cell divisions, beyond which cell strains die at a faster rate than they are replaced.[73] The shortening of telomeres – chemical structures

[72] Garland-Thomson (n 22) 524-525.
[73] L Hayflick and PS Moorhead, 'The Serial Cultivation of Human Diploid Cell Strains' (1961) 25 Experimental Cell Research 585.

at the end of chromosomes – determines this limit.[74] Countless other factors like lifestyle, exposure to UV radiation, and disease affect senescence.[75]

Before I consider the theme of death and law, it is worth making one point on physical vulnerability to *violence*. Although they do not necessarily suppose one another, violence and death can often be materially and legally concomitant (as in murder, manslaughter, suicide, and so on).

In **4.3.2**, I described laws prohibiting violence as Conditioned by the fact that human bodies, lacking such things as exoskeletons, are in fact vulnerable to acute material disruption.[76] This perishability of the body by virtue of violence is often central to the survival theories of law that I described in **2**. However, their treatments are distinctly anthropocentric, as they focus solely on physical violence *between humans*. Thus, for Hobbes, the social contract is precipitated by humans' violent enmity towards one another.[77] Hart argues that rules prohibiting killing and inflicting bodily harm are necessary in light of human vulnerability 'to each other'.[78] Hart asks rhetorically, '[i]f there were not these rules what point could there be for beings such as ourselves in having rules of *any* other kind?'[79] Otherwise, Bohannan's theory that law is a mediator for aggression focuses solely on the mediation of *human* aggression.[80]

Humans of course do not have a monopoly on the material disruption of human bodies, because the body is contingent on the *greater nexus* of agentic materiality. What the anthropocentric positions on violence and law fail to recognise is that such things as tsunamis, silicates, and salmonellae are equally capable of doing violence to human bodies. After rejecting anthropocentrism in line with my monistic ontology (**3.3.3**), the

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[74] João Pedro de Magalhães and João F Passos, 'Stress, Cell Senescence and Organismal Ageing' (2018) 170 Mechanisms of Ageing and Development 2.
[75] Meryl H Karol, 'How Environmental Agents Influence the Aging Process' (2009) 17 Biomolecules & Therapeutics 113, 114.
[76] The counterfactual example of exoskeletal organisms was given by Hart in his explanation of the truism of human vulnerability (Hart (n 48) 194).
[77] Thomas Hobbes, *Leviathan* (Oxford University Press 2008) 84-87.
[78] Hart (n 48) 195.
[79] Hart (n 48) 194.
[80] Paul Bohannan, 'Some Bases of Aggression and Their Relationship to Law' in Margaret Gruter and Paul Bohannan (eds), *Law, Biology & Culture* (Ross-Erikson 1983) 157.

understanding of the materiality of law, in the context of bodily reconditioning, may then be expanded to cover such diverse materialities as oceans,[81] particulate hazards,[82] and pathogens within food.[83]

I will now consider the substantive theme of death. The content of law in relation to death is often couched in terms of *resistance*. I have just recounted some of the theories that I inspected throughout **2**. These theories centralise human violence as part of their more general position that survival – ie, the *resistance of death* – is the essential end or purpose of law. The way in which death is resisted within the content of law is especially apparent in relation to assisted suicide, which will be one thematic focus here. While other terms like assisted dying and euthanasia are legally and quite often ethically distinguished from assisted suicide,[84] these terms are interchangeable for the purposes of my present discussion.

In the United Kingdom, assisting in the suicide of another person, for whatever motive, is a criminal offence,[85] and there is a similar legal regime in many jurisdictions around the world.[86] In some jurisdictions, suicide itself is criminalised.[87] A notable exception to the general legal position in Europe is Switzerland, where the law 'lets virtually anyone avail themselves of assisted suicide'.[88] Assisted suicide in Switzerland is legal by omission; the law only criminalises assisting or inciting suicide for 'selfish motives'.[89]

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[81] In Japan, obligations to limit the impact of tsunamis are enshrined in law (Law Concerning Promotion of Countermeasures Against Tsunamis 2011; Law on Making Local Areas Resistant to Tsunamis 2011).

[82] Control of Asbestos Regulations 2012. The example of the agency of silicate asbestos was used previously in **4.3.2.1** (see text to n 120).

[83] For example, food hygiene is regulated in the United Kingdom through the Food Safety Act 1990.

[84] Ewan C Goligher and others, 'Physician-Assisted Suicide and Euthanasia in the Intensive Care Unit: A Dialogue on Core Ethical Issues' (2017) 45 Critical Care Medicine 149.

[85] Suicide Act 1961, s 2(1). Following the *Purdy* case, the Crown Prosecution Service signalled that they would not prosecute under s 2 when it is not in the public interest (Crown Prosecution Service, 'Policy for Prosecutors in Respect of Cases of Encouraging or Assisting Suicide' (Crown Prosecution Service 2010); *R (on the application of Purdy) v DPP* [2009] UKHL 45).

[86] Susan Stefan, *Rational Suicide, Irrational Laws* (Oxford University Press 2016) 220.

[87] Bangladesh Penal Code 1860, Article 309; Lebanon Penal Code 1943, Article 553.

[89] Swiss Criminal Code 1937, Article 115.

The law on assisted suicide brings up several points of interest concerning the material reconditioning of law. Montgomery likens laws preventing assisted suicide to 'guarding the gates of St Peter';[90] religious views of death have been historically important in shaping the law.[91] Williams writes that

> [h]istorically, Church and State ideologies have militated against indulgence of certain aspects of autonomous control over our physical selves. Law as the inheritor and instrument of these ideologies has been slow to acquire the language of rights where there is conflict with institutional interests in the preservation of each human unit.[92]

These religious influences cannot be neatly untangled from the policy approaches to assisted suicide, the resistance to which is also complexly determined by views on medical professionalism,[93] safeguarding concerns,[94] and economic arguments.[95] Overall, as Hinton argues, in countries where assisted suicide is illegal, 'political efforts

[90] Jonathan Montgomery, 'Guarding the Gates of St Peter: Life, Death and Law Making' (2011) 31 Legal Studies 644. In the religious allegory *The Divine Comedy*, Dante places suicides on the same level as murderers, as both 'turn to weeping what was meant for joy' (Alighieri Dante, *The Divine Comedy*, vol 1 (Dorothy L Sayers tr, Penguin) 135; see also **2.4.3**, n 224).

[91] Cristina LH Traina, 'Religious Perspectives on Assisted Suicide' (1998) 88 The Journal of Criminal Law and Criminology 1147, 1148-1150.

[92] Melanie Williams, 'The Sanctity of Death: Poetry and the Law and Ethics of Euthanasia' in Desmond Manderson (ed), *Courting Death* (Pluto Press 1999) 78.

[93] Sprung and others argue that physician-assisted suicide 'undermines the patient–physician relationship and erode patients' and society's trust in the medical profession… By allowing doctors to participate in [assisted suicide] patients and families may become suspicious about the doctor's intentions at a time when they have the greatest need for help from a trusted medical professional' (Charles L Sprung and others, 'Physician-Assisted Suicide and Euthanasia: Emerging Issues From a Global Perspective' (2018) 33 Journal of Palliative Care 197, 200).

[94] Pereira 'provides evidence that [assisted suicide] laws and safeguards are regularly ignored and transgressed in all the jurisdictions [where legal,] and that transgressions are not prosecuted' (J Pereira, 'Legalizing Euthanasia or Assisted Suicide: The Illusion of Safeguards and Controls' (2011) 18 Current Oncology e38).

[95] One general economic argument is that legalising assisted suicide will reduce the need for expensive palliative care, thus freeing up resources for public health services. Others counter that the costs saved are minimal. Emanuel and Battin make this latter point in the case of New England (Ezekiel J Emanuel and Margaret P Battin, 'What Are the Potential Cost Savings from Legalizing Physician-Assisted Suicide?' (1998) 339 New England Journal of Medicine 167).

gather around a shared sense of vulnerability – our mortality – that work in the direction of *avoiding* death'.[96]

What new materialisms can bring to the debate here is a critical eye upon the view of death and the body implicit in the laws that resist assisted suicide. Ultimately, my concept of Flux – which encompasses the sense of material reconditioning – problematises paternalistic, legal resistances to suicide. Legal resistance to suicide is based upon the assumptions that, first of all, bodies are coherent wholes, responsible for their own generation and persistence. I criticised this particular notion in **5.2.1**. Secondly, and more significantly, legal resistances to death espouse the view that this material coherency and persistence of life must be controlled and protected *at all costs*.

This second assumption is given force by what Mbembe terms 'necropolitics' – meaning 'the power and capacity to dictate who is able to live and who must die.'[97] Necropolitics views death as something to be domesticated; it is a domination of nature through human force.[98] The concept of necropolitics draws upon the Foucauldian concept of 'biopolitics' (or 'biopower'),[99] which 'exerts a positive influence on life, that endeavors to administer, optimize, and multiply it, subjecting it to precise controls and comprehensive regulations.'[100] Foucault writes that the purpose of biopolitics 'is not to modify any given phenomena as such… but, essentially… to intervene at the level of their generality. The mortality rate has to be modified or lowered; life expectancy has to be increased; the birth rate has to be stimulated'.[101] In the words of Hinton, 'biopower denies death at the behest of its capacity to master life, and, in doing so, it produces a sanitised, technologised and alien relationship with bodies.'[102] Biopolitics is the total system of control over material bodies and life:

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[96] Peta Hinton, 'A Sociality of Death: Towards a New Materialist Politics and Ethics of Life Itself' in Vicki Kirby (ed), *What If Culture Was Nature All Along?* (Edinburgh University Press 2017) 226.
[97] Achille Mbembe, 'Necropolitics' (2003) 15 Public Culture 11.
[98] Achille Mbembe and Steve Corcoran, *Necropolitics* (Duke University Press 2019) 122.
[99] Michel Foucault, *Society Must Be Defended* (Mauro Bertani and Allesandro Fontana eds, David Macey tr, Allen Lane 2003) 243.
[100] Michel Foucault, *The History of Sexuality*, vol 1 (Robert Hurley tr, Vintage 1980) 136-137.

[102] Hinton (n 96) 227.

> To say that power took possession of life in the nineteenth century… is to say that it has, thanks to the play of technologies of discipline on the one hand and technologies of regulation on the other, succeeded in covering the whole surface that lies between the organic and the biological, between body and population. We are, then, in a power that has taken control of both the body and life or that has, if you like, taken control of life in general[.][103]

Ironically, then, the act of suicide can be seen as resistance in itself to this power.[104] Mbembe sees suicidal resistance as epitomised by the suicide-bomber, where 'to a large extent, resistance and self-destruction are synonymous. To deal out death is therefore to reduce the other and oneself to the status of pieces of inert flesh, scattered everywhere, and assembled with difficulty before the burial.'[105]

In the new materialist spirit, I argue that the boundaries between life and death are not as clear cut as the forms of resistance to death, in this case laws prohibiting assisted suicide, would suppose. Rather, as all materiality is in constant Flux, the idea of human life as something fixed and ontologically prior is problematic. Instead, bearing in mind the complex material Conditioning and reconditioning of the human body calls into question the notion of death as the horizon of life. By that measure, it also problematises the notion that life – and the resistance to death – is the end of law. As I have shown in **2**, this latter view is typified in survival theories of law.

Rejecting the life/death binary in such a way, Braidotti develops a 'posthuman theory of death' to place necropolitics and biopolitics under critical analysis.[106] She writes that

> [o]ne's view on death depends on one's assumptions about Life. In my vitalist materialist view, Life is cosmic energy, simultaneously empty chaos and absolute

[103] Foucault, *Society Must Be Defended* (n 99) 253.
[104] Michel Foucault, 'The Ethic of Care for the Self as a Practice of Freedom: An Interview with Michel Foucault on January 20, 1984' in James Bernauer and David Rasmussen (eds), *The Final Foucault* (MIT Press 1987) 12; Chloë Taylor, 'Birth of the Suicidal Subject: Nelly Arcan, Michel Foucault, and Voluntary Death' (2015) 56 Culture, Theory and Critique 187, 204.
[105] Mbembe (n 97) 36-37.
[106] Braidotti (n 11) 130.

> speed or movement. It is impersonal and inhuman in the monstrous, animal sense of radical alterity: *zoe* in all its powers.[107]

This chaos, movement, and vitalism encapsulates what I have argued for in terms of ineffably complex Flux. The fluidity of matter confronts the life/death binary where it stands; how then may this indeterminacy ever be rendered into determinate content of law? For example, medical law has struggled to define when the threshold of life and death is crossed. These questions are pressing when the legality of discontinuing treatment of patients is at issue; more so because all such patients have unique circumstances and prognoses. Coole and Frost write that assisted suicide 'demonstrates how the very definitions of life and death are thrown into the political arena once decisions about survival rely on medical expertise.'[108]

Agamben describes the problem that liminality poses to the law by examining the emergence of the medico-juridical category of so-called 'brain death'.[109] While medically complex, in short brain death 'is defined as the irreversible loss of all functions of the brain, including the brainstem.'[110] In line with my analysis in **4.3.2.1**, the legal determination of death on this basis is an example of a fiction.[111]

Brain death has long been doctrine in the law of the United States;[112] but several emerging challenges – including religious challenges, as discussed above – means that the 'legal status of brain death is unlikely to remain the same.'[113] The *Hailu* case in

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[107] Braidotti (n 11) 131.
[108] Coole and Frost (n 7) 23.
[109] Giorgio Agamben, *Homo Sacer* (Daniel Heller-Roazen tr, Stanford University Press 1998) 93.
[110] Ajay Kumar Goila and Mridula Pawar, 'The Diagnosis of Brain Death' (2009) 13 Indian Journal of Critical Care Medicine 7, 8. The concept of brain death was introduced in 1968 by practioners at the Harvard Medical School (Ad Hoc Committee, 'A Definition of Irreversible Coma' (1968) 205 Journal of the American Medical Association 337).
[111] Shah also argues that 'diagnosing brain death as a hidden legal fiction is a helpful way to understand its historical development and current status' (Seema K Shah, 'Rethinking Brain Death as a Legal Fiction: Is the Terminology the Problem?' (2018) 48 Hastings Center Report S49).
[112] 'The determination of death by neurological criteria—"brain death"—has long been legally established as death in all U.S. jurisdictions' (Thaddeus Pope, 'Brain Death and the Law: Hard Cases and Legal Challenges' (2018) 48 Hastings Center Report S46).
[113] Pope (n 112) S48.

Nevada cast doubt upon the neurological guidelines used to determine legal death;[114] but as the patient 'met the criteria for cardiopulmonary death several weeks prior to the hearing', the legal issues remain unresolved.[115] The problem with seeking certainty in binary terms of life/death are of course universal;[116] and so many other jurisdictions face the same legal uncertainties.[117]

These consternations about the material status of the *end* of life are naturally paralleled in the problems faced when trying to define the *beginning* of life, questions which are particularly pressing when considering the legality of abortion. To this end, the concept of brain death has led to the symmetrical concept of so-called 'brain birth';[118] but whether legal protection at the 'start' of life can be translated from the doctrine of brain death is highly contentious.[119]

These considerations, in the context of Flux, instigate a critical appraisal of the view of life/death implicit in laws which *idolise* the former and *resist* the latter. In terms of assisted suicide, Braidotti argues that

> assisted suicide and euthanasia practices are challenging the Law to rest on the tacit assumption of a self-evident value attributed to 'Life'. As is often the case, advanced capitalism functions by schizoid or internally contradictory moves… The obsession with being 'forever young' works in tandem with and forms the counterpart of social practices of euthanasia and assisted death.[120]

[114] *Re Guardianship of Hailu* (2015) 361 Pacific Reporter 3d 524.
[115] Greg Yanke, Mohamed Y Rady and Joseph L Verheijde, 'In Re Guardianship of Hailu: The Nevada Supreme Court Casts Doubt on the Standard for Brain Death Diagnosis' (2017) 57 Medicine, Science and the Law 100, 101.
[116] M Smith, 'Brain Death: Time for an International Consensus' (2012) 108 British Journal of Anaesthesia i6.
[117] S Monteverde and A Rid, 'Controversies in the Determination of Death: Perspectives from Switzerland' (2012) 142 Swiss Medical Weekly w13667; J Cohen and others, 'Brain Death Determination in Israel: The First Two Years Experience Following Changes to the Brain Death Law—Opportunities and Challenges' (2012) 12 American Journal of Transplantation 2514.
[118] DG Jones, 'Brain Birth and Personal Identity' (1989) 15 Journal of Medical Ethics 173.
[119] DG Jones, 'The Problematic Symmetry between Brain Birth and Brain Death' (1998) 24 Journal of Medical Ethics 237.
[120] Braidotti (n 11) 114.

Utilising Barad's concept of agential realism,[121] Salmela introduces a unique new materialist perspective on suicide as a 'non-deterministic and ever-varying phenomenon'.[122] This flows against the narrative of suicide as a solely human phenomena[123] (which, as argued above, rests upon the narrow view that the human body is unitary and self-determining). Using historical post-mortem reports from female suicides, Salmela describes how the determination and view of suicides 'emerged as doctors, bodies, medical discourse, weather conditions and other material and discursive, human and non-human agencies intra-acted.'[124] In conjunction with reappraising the life/death binary, such work points to a critical reappraisal of the assumption that suicide is uniquely human.

Overall, these reflections on Flux – in the first sense of material impermanence – problematises the resistance to death in the content of law, such as in the prohibition of assisted suicide. Rather, these laws paradoxically resist material agencies that are not neatly determined or fixed. This concludes my treatment of material reconditioning in both conceptual and substantive senses. Moving away from the sense of Flux as reconditioning, I will now turn to a second sense of Flux as *material system*.

5.3 Flux as material system

In **3.4.2**, I introduced Flux as one nominal aspect of my new materialist ontology of matter. I described Flux as encompassing the sense in which material agency is contingent, dynamic, and multi-directional. In **5.2**, I explored this general understanding of Flux in terms of *material reconditioning*. Here, I lean towards a different – but by no means mutually exclusive – understanding of Flux as *material system*. Considering Flux in these two different ways allows me to construct thematic departure points for my investigation into how law is material.

[121] Barad (n 18) 139.
[122] Anu Salmela, 'Fleshy Stories. New Materialism and Female Suicides in Late Nineteenth-Century Finland' (2018) 6 International Journal for History, Culture And Modernity 1, 3.
[123] Salmela (n 122) 3.
[124] Salmela (n 122) 16.

I give the term *material system* a particular meaning here. In the same way that materiality is constantly reconditioned – ordinarily thought of in terms of growth, change, or decay – so too (and indeed, by the measure of material reconditioning) there is a sense in which materiality is *systemic*. Flux as 'material system' captures the continuous *processes* of materiality. I have previously used the example of the growth, fruition, and decay of a leaf. At all times, these processes of reconditioning are contingent upon a complex *system* of materialities. The agencies of rainwater, sunlight, roots, worms, and countless agencies besides, are all entangled in an ineffably complex *system of affect*.

With a view to applying this sense of Flux to understand how law is material, I explore here a rich body of traditional conceptualisations of the systemic nature of the material world. I call these *Flux theories of law*.

5.3.1 Flux theories of law

At the outset, at least three difficulties with cross-cultural theoretical exploration must be recognised. The first difficulty relates to my own history and capacities, as an English man; the second difficulty relates to the available literature; and the third difficulty relates to the reduction of difference to sameness.

First, one must approach any treatment of a culture unfamiliar to their own with an awareness of their own situatedness. So unique, formative, and indelible is each lived experience, that I could not hope to truly understand any other's experience, as no one can understand mine, even with the most disciplined self-reflection. Although this recognition positively fosters humility, the methodological implication for this thesis is that I – who was born and live in England – must be careful when handling concepts cross-culturally.

It is not just that the English language may not possess discrete vocabulary to express a certain concept, which is otherwise readily understood in experience. *Gluckschmerz* is an apt example: literally German for 'luck pain', *Gluckschmerz* is a negative emotion

elicited when hearing news that is positive for another person (such as a business or sporting rival).[127] While there is no singular word in the English language to capture this, of course this emotion is experienced even if one is not a German speaker.

In this section, the problem goes far beyond vocabulary; the concepts I will be handling are *experientially untranslatable*. For example, as I shall attempt to demonstrate, the Lozi concept of *mulao* and the Aboriginal concept of the Dreaming are inseparable with the lived experience of generations of unique geographies and communities, that my handling of them here may only ever be partial. By virtue of being born and raised in an English town, I cannot truly understand the connection to the Australian Bush, and how that articulates the intricacies of the Dreaming for Aboriginal peoples; it does not 'run in my blood'.[128] Thus, I proceed sensitive to my own limits of understanding.

The second problem with exploring theories cross-culturally is that my understanding depends upon the understanding of others. In the case of cross-cultural legal research – legal anthropology – there is a colonial heritage. Early texts in legal anthropology were written not by enquiring academics, but by colonial bureaucrats and religious missionaries for their practical needs.[129] Later influential texts suffer from theoretical moves that are problematic, such as the imposition of Eurocentric views of the passage of time.[130] For this reason, I have endeavoured to describe the theories and concepts here using culturally direct voices whenever possible.

The third problem with cross-cultural theorisation is that there is a danger of reducing the richness and diversity of theories to sameness. My reason for treating many different traditions under one section here is that they share one very general feature of great interest to my thesis, which I shall now explain.

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[127] Richard H Smith and Wilco W van Dijk, 'Schadenfreude and Gluckschmerz' (2018) 10 Emotion Review 293, 294.

[128] Newell's documentary *In My Blood It Runs* follows Dujuan Turner, an Aboriginal schoolboy in Northern Australia. The documentary highlights the flaws in the colonialised school system, as very often Aboriginal children struggle with cultural misunderstanding and repression. In one scene, for example, Turner's teacher is perplexed and dismissive over the existence of a spirit in the land, to which Turner reacts with frustration (Maya Newell, *In My Blood It Runs* (2020), from twenty-three minutes and forty-two seconds, to twenty-four minutes and twenty-eight seconds).

[129] Laura Nader, 'The Anthropological Study of Law' (1965) 67 American Anthropologist 3.

[130] Mark Goodale, *Anthropology and Law* (New York University Press 2017) 53-54.

Harmonious with the ontology of matter that I have established in earlier chapters, 'Flux theories', so-called, recognise the holistic affect of Earth's geographies, ecologies, climates, and so forth. Ultimately, this holism *erodes* dichotomies such as living/non-living, human/non-human, and so on (**3.3.3**). On this view, a deeper sense of law's materiality becomes apparent, which any anthropocentric outlook on law simply cannot capture. Flux theories take the position that *there are universally applicable, transcendental principles that govern and bring balance to the universe*.

Beyond this, on the *basis* of those transcendental principles, Flux theories tend towards practical guidance or instruction on the proper way to live, in accordance with the observed or theoretically derived features and patterns of the universe. This practical guidance might *then* be articulated in legal, religious, or other social codes.

The position that there are universal, transcendental principles that govern and bring order and balance to the universe entails that the essence of all existence and lived experience is inseparable. For these Flux theories, transcendental principles govern interdependencies between (or the entanglement of) *all* things, whether perceptible or not (see **3.5.2**). On this view, any kind of distinction between *physical* laws (like those articulated by Newton or Boyle) and *human* laws is a distortion of the true nature of the universe. Thus, it will be seen that the legal theories that I describe here are located within deeply nuanced ontologies: the distinction between 'natural' and 'legal' has no strict basis in Flux theories. In a similar vein, as a consequence of the purported universality of transcendental principles, Flux theories – at least those that I visit here – are not at their departure point anthropocentric, but recognise alongside the human the affectivity of 'non-human' materialities.

The instances of theories fitting the above description are pervasive. Geographically, many theories of natural order can be found within, or are otherwise conceptually indebted to, philosophical traditions originating in the Indian subcontinent and East Asia. I do not refer to such traditions under the broad, geocultural appellation of Eastern/Oriental philosophy, for there is inherent indeterminacy and reduction in those

terms (as well as in the concomitant terms Western/Occidental).[131] Under this ambit, I will draw upon the philosophical and religious traditions of Indian Hinduism and Chinese Taoism. South-central African and Aboriginal philosophies share many thematic similarities, and are also of great interest.

The theories selected here have been chosen because they all conceptualise law as, in some sense, a material system. Therefore, they are treated together here under the heading of 'Flux theories' of law; this is not intended to detract from their diversity and nuance beyond this general feature.

For Aboriginal peoples, a concept of natural order is embodied in the philosophy of the 'Dreaming'. The Dreaming encompasses a variety of concepts, at various levels of abstraction, and so the term itself is essentially experientially untranslatable.[132] However, in one primary sense, the Dreaming is 'the ultimate ground for the existence of everything that is'.[133] Stanner describes it as 'a kind of *logos* or principle of order transcending everything significant for Aboriginal man'.[134] The essence of this *logos* is imbued in '[a]ll things, from hills, trees and watercourses to heavenly bodies and all living creatures'; and it is the Dreaming that is responsible for the material propagation of life-sustaining 'foods, materials or species of fauna and flora'.[135]

Stanner reports that the Dreaming is held to be causally responsible for the 'existence of a custom, or law of life'.[136] But talk of causation is problematic here; strictly speaking, the Dreaming is atemporal, as it 'encompasses the past, the present and the future' all at once.[137] Moreover, Kwaymullina and Kwaymullina clarify that, in Aboriginal society, the Dreaming does not encompass merely 'customary' behaviour. They charge that the language of custom used by non-Indigenous commentators implies 'blindly copying the behaviour of previous generations', and that reducing Aboriginal legal

[131] Hajime Nakamura, *The Ways of Thinking of Eastern Peoples* (Greenwood 1988) 3-4.
[132] WEH Stanner, *White Man Got No Dreaming* (Australian National University Press 1979) 23.
[133] AP Elkin, 'Elements of Australian Aboriginal Philosophy' (1969) 40 Oceania 85, 89.
[134] Stanner (n 132) 24.
[135] Lynne Hume, 'On the Unsafe Side of the White Divide: New Perspectives on the Dreaming of Australian Aborigines' (1999) 10 Anthropology of Consciousness 1, 2.
[136] Stanner (n 132) 23.
[137] Hume (n 135) 2.

systems to mere custom 'echoes colonial prejudice and contradicts Aboriginal views of legal origins.'[138] Watson, a lawyer of and for the Tanganekald peoples,[139] describes their legal system as 'raw' in the sense that it has always existed, and was created alongside the peoples and the land in accordance with the Dreaming:

> Law came to us in a song, it was sung with the rising of the sun, law was sung in the walking of the mother earth, law inhered in all things, law is alive, it lives in all things.[140]

In substance, the operation of Aboriginal legal systems are based upon the level of connectedness that an individual has to 'country' and other life, of which an important factor is kinship and totemic relations. [141] The import and complexities of kinship in Aboriginal society should not be underestimated.[142] Indeed, so intricate are the particulars of kinship, that it led Freud to comment naïvely that they 'look more like the result of deliberate legislation'.[143] Thus, hunting, fishing, and gathering rights,[144] and the equivalences of criminal, tort, and inheritance law,[145] are all operationalised by material relationships in accordance with kinship and the Dreaming.

Again, while there are significant differences, an appeal to absolute, transcendental principles beyond human law is also typified by the concept of *mulao* in Lozi jurisprudence. The Lozi peoples, also called the Barotse, are a large ethnic group in

[138] Ambelin Kwaymullina and Blaze Kwaymullina, 'Learning to Read the Signs: Law in an Indigenous Reality' (2010) 34 Journal of Australian Studies 195, 198.
[139] Irene Watson, 'Indigenous Peoples' Law-Ways: Survival against the Colonial State' (1997) 8 Australian Feminist Law Journal 39.
[140] Irene Watson, 'Kaldowinyeri - Munaintya in the Beginning' (2000) 4 Flinders Journal of Law Reform 3, 4; quoted in Kwaymullina and Kwaymullina (n 138) 197.
[141] Kwaymullina and Kwaymullina (n 138) 198.
[142] Elkin was one of the first to document kinship and totemic relationships in Aboriginal peoples: AP Elkin, 'Kinship in South Australia' (1937) 8 Oceania 419.
[143] Sigmund Freud, *Totem and Taboo: Resemblances between the Psychic Lives of Savages and Neurotics* (Routledge 1919) 9.
[144] Law Reform Commission of Western Australia, 'Aboriginal Customary Laws: The Interaction of Western Australian Law with Aboriginal Law and Culture' (2006) 301.
[145] Law Reform Commission of Western Australia (n 144) 79, 228, and 233.

Western Zambia.[146] Their legal system conceives of mulao as the natural order and balance of *all* things, regarded as 'having always existed'.[147] The legal anthropologist Gluckman described mulao as 'the general idea of regularity and order and of rightness – what ought to be – either existing or to be striven for.'[148] All regularities are amenable to description with reference to mulao:

> For the Lozi mulao is law and order wherever it occurs. It includes regularities in rainfall and seasons, movements of the sun and moon, night and day, growth of crops, human physiology; and it also covers all regularities in human conduct, personal, tribal, and general.[149]

Disputes in Lozi jurisprudence are settled on the basis of whether behavioural conduct is *reasonable* – in turn, the standard of reasonable is determined with reference to what is customary.[150] However, Gluckman explains that an observation of patterns *beyond* what is considered regular human conduct also influences the process of Lozi adjudication:

> For [the Lozi] too, as for the ancient world, there is a close similarity between what we think of as the physical laws of nature and the fundamental rules of social morality. It is worth emphasizing that the physical laws of nature, insofar as their knowledge goes, provide a framework within which their judges make decisions on evidence[.][151]

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[146] Gary Thoulouis, 'Lozi' in John Middleton (ed), *Encyclopedia of Africa South of the Sahara* (Charles Scribner's Sons 1997) 58. There has been an organised Lozi secessionist movement for many decades: Jack Hogan, '"What Then Happened To Our Eden?": The Long History of Lozi Secessionism, 1890–2013' (2014) 40 Journal of Southern African Studies 907.
[147] I Schapera, *The Bantu-Speaking Tribes of South Africa* (Routledge and Kegan Paul 1937) 197.
[148] Max Gluckman, *The Ideas in Barotse Jurisprudence* (Yale University Press 1965) 20.
[149] Max Gluckman, *The Judicial Process Among the Barotse of Northern Rhodesia* (Manchester University Press 1955) 230.
[150] SF Nadel, 'Reason and Unreason in African Law' (1956) 26 Africa: Journal of the International African Institute 160.
[151] Max Gluckman, 'Natural Justice in Africa' (1964) 9 The American Journal of Jurisprudence 25, 39-40.

Elsewhere, Gluckman describes the various phenomena of the material world that influence adjudication:

> [J]udges [take] note of what we would call other "natural laws"; physiological laws, controlling the gestation and rate of reproduction of women and cows; or botanical laws, controlling the growth-rate of crops; or pedological laws, controlling the manner of use and enrichment of soil. Hence the more or less regular operation of nature – its order – also influenced decisions on fact and hence final adjudication.[152]

Similar to the concepts of the Dreaming and mulao in Aboriginal and Lozi jurisprudence, the concept of law in ancient Chinese philosophy derives from a metaphysics of material balance. This metaphysics posits *tao* (alternatively dao) as the 'source and principle of the cosmic order';[153] it is 'the totality of existence conceived of as a whole.'[154] Tao encompasses *yin* and *yang* – two opposing forces or energies – the interplay of which synthesise *chi*, or the 'material principle' governing the universe and the Five Elements.[155] The Five Elements (the *wu xing*) comprise water, fire, earth, wood, and metal. This elementary view of the composition of substance is ubiquitous in the ancient world.[156] Leaman describes how the distinct qualities of the Five Elements interact to 'make up the structure of the world and direct the pattern of all life.'[157]

The significance of the Five Elements pervades ancient Chinese philosophy; and these Elements are no less significant in theories of law. In light of the dynamic interaction (*chi*) between yin and yang – which is ultimately a struggle for harmony and balance within the universe – traditional Chinese philosophy maintains that the proper end of

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[152] Gluckman, *The Ideas in Barotse Jurisprudence* (n 148) 18.
[153] Simon Blackburn, 'Tao', *The Oxford Dictionary of Philosophy* (2nd edn, Oxford University Press 2008) 358.
[154] David Leeming, 'Daoism', *A Dictionary of Asian Mythology* (Oxford University Press 2001) 45.
[155] Simon Blackburn, 'Yin/Yang', *The Oxford Dictionary of Philosophy* (Oxford University Press 2016) 392.
[156] See **3.2**, n 15.
[157] Oliver Leaman, *Key Concepts in Eastern Philosophy* (Routledge 1999) 45-46.

human law, and social life in general, is to emulate balance with respect to the natures of the Five Elements. As Cheng explains,

> [t]he Chinese concept of law… is associated with the Five Elements. Son should obey father, subjects the ruler, wife the husband, because Earth must follow Heaven. Boys cannot depart from their parents, as Fire cannot depart from Wood. Girls, however, can depart from their parents when they get married, as gold, sand or metal flows away with the stream.[158]

Based upon the principles of chi and the essences of the Five Elements, it is also a matter for human law to emulate the cyclical patterns of nature, which are also seen as a manifestation of the overarching universal principle, tao. Thus, in the *I Ching* (*Book of Changes*), it is noted that 'the breath of spring, calling forth all vegetable life, gives the law for sowing and planting; the breath of autumn, completing and solidifying all things, gives the law for ingathering and storing'.[159] The natures of the seasons were said to have import for criminal law, too:

> Punishment tends toward killing the people [yin], whereas virtue tends toward their survival [yang]. Thus Yang, like the warm sun in Spring and Summer, makes trees and grass grow, and Yin, like the cold wind in Autumn and Winter, withers them… When the ruler sentences his people to death, the date of sentence is always in the Autumn, and the date of execution is always in the Winter, because the Autumn and Winter belong to Yin which denotes the time of killing when the weather is so cruel as to wither trees and grass.[160]

Contemporaneous with these themes of materiality in ancient Chinese legal philosophy, ancient Indian texts also conceive of man-made law as a reflection of transcendental principles governing the natural world. The conceptual keystone of early Hindu law is

[158] Chi-Yu Cheng, 'The Chinese Theory of Criminal Law' (1948) 39 Journal of Criminal Law and Criminology 461, 462.

[160] Cheng (n 158) 463.

dharma, and its negation *adharma*. The semantic history of dharma is complex,[161] and is conceptually different in several philosophical and religious traditions (it has a particular meaning in Buddhism, for example).[162] I will refer here to dharma only in the context of Hinduism, because the legislative texts that are derived from the Hindu tradition's conceptualisation of dharma are of particular interest.

While dharma has many subtle meanings, even when restricted to the context of Hinduism, it generally connotes the 'notion of order',[163] or 'the principle or law governing the universe'.[164] In religious mythology, Hindu gods became flesh-bound and mortal to embody dharma on Earth.[165] Dharma is comparable to the concepts of mulao and tao, in that it signifies the natural order and propensities of things of the material world. Van Buitenen explains that

> [i]t is the dharma of the sun to shine, of the pole to be fixed, of the rivers to Flux, of the cow to yield milk, of the brahmin [priests] to officiate, of the ksatriya [warriors] to rule, of the vailya [traders and farmers] to farm.[166]

This material, cosmological sense of dharma eventually 'came to include areas of individual and social behaviours and norms, as well as personal, civil, and criminal law'.[167] Horsch describes the historical process by which the concept of dharma came to include social order:

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[161] Paul Horsch, 'From Creation Myth to World Law: The Early History of Dharma' in Patrick Olivelle (ed), *Dharma* (Motilal Banarsidass 2009) 19-20. In Sanskrit, dharma literally means 'carrying' or 'holding': Simon Blackburn, 'Dharma', *The Oxford Dictionary of Philosophy* (2nd edn, Oxford University Press 2008) 98.

[162] Damien Keown, 'Dharma', *A Dictionary of Buddhism* (Oxford University Press 2003) 74).

[163] Leaman (n 157) 94.

[164] Blackburn, 'Dharma' (n 161) 98.

[165] G Scott Littleton (ed), *Mythology* (Duncan Baird Publishers 2002) 344-345.

[166] JAB Van Buitenen, 'Dharma and Moksa' (1957) 7 Philosophy East and West 33, 36. Priests, warriors, and traders are three of the four castes (*varna*) in traditional Hinduism. The fourth caste represents the 'untouchable' labourers, or Sudras, who live in deference to the three other castes.

[167] Wendy Doniger (tr), *The Laws of Manu: With an Introduction and Notes* (Penguin 1991) xvii.

> The final step consisted in the transfer of *dhárman* to the human, ethical sphere. Now the concept indicates not only what grants to the cosmos… stability, permanence, and regularity, but rather at the same time the commandments, duties, and customs of people, that is to say the maintenance… of the social order as such. The world law now comprises all realms: the cosmic, ritual and ethical-juridical.[168]

Codifications of dharma can be found in several 'Vedic' texts, which, apropos Hinduism, can be considered the equivalent of canon law in Catholicism.[169] In line with eternal dharma, these texts stipulate 'the guidelines for proper and productive living and for social organization and interaction.'[170] There are two major Vedic texts: the Dharmaśāstras; and the Manusmriti, or Laws of Manu. The Dharmaśāstras are a body of primarily Hindu theological texts, which contain detailed rules on, inter alia, property (eg inheritance and theft); sexual intercourse (including incest); due process (rules on witnesses to crimes, and punishment); and trade restrictions.[171] Similarly, the Laws of Manu are a treasure-trove of highly specific rules on material offences and associated punishments.[172] They also stipulate that social life should emulate material balance, in ways similar to the Chinese *I Ching*. For example, the Laws of Manu command that

> [t]he king should behave with the brilliant energy of… the Sun, the Wind… Fire, and the Earth… Just as the Sun takes up water with his rays for eight months, even so he should constantly take up taxes from his kingdom... He should pervade (his subjects) with his spies just as the Wind moves about, pervading all creatures, for in this he behaves like the Wind… He should constantly turn the heat of his brilliant energy and majesty against evil-doers and use it to injure corrupt vassals; this is traditionally known as behaving like Fire. He behaves like

[168] Horsch (n 161) 12.
[169] Brian K Smith, 'Canonical Authority and Social Classification: Veda and "Varṇa" in Ancient Indian Texts' (1992) 32 History of Religions 103, 104.
[170] Patrick Olivelle, *The Dharmasūtras: The Law Codes of Āpastamba, Gautama, Baudhāyana, and Vasiṣṭha* (Oxford University Press 1999) xxxviii-xxxix.
[171] Olivelle (n 170) 74-77.
[172] 'If a priest kills a snake, he should give a black iron spade to a priest; for (killing) an impotent man, a load of straw and a 'small bean' of lead; for a boar, a pot of clarified butter; for a partridge, a bucket of sesame seeds;' and so forth (Doniger (n 167) 264).

> the Earth when he supports all living beings just as the Earth bears all living beings equally.[173]

In all these preceding theories of law, it is apparent that some form of relationship is posited between human law and a certain universal, governing principle (whether that is described as the Dreaming, mulao, tao, or dharma). It may be that law should conform to the universal principle as a matter of practical ambition – as in the *I Ching* and the Vedic texts. Or, it may be that law is metaphysically contingent on the universal principles, irrespective of human endeavour – as in Aboriginal rules of kinship and totems, which are understood to transcend mere customary behaviour. In either case, I argue that these Flux theories of law provide important insights into the complexity of law's materiality.

5.3.2 Implications of Flux theories of law

As is clear from their content, the legal theories that I have described posit notions similar to my concept of Flux. Because of this similarity, 'Flux theories' are not anthropocentric, and nor do they suppose distinct ontological categories or binaries. As I explained in **3.3.3**, adopting a monistic ontology of matter enables the investigation into how law is material without any conceptual limitation. In other words, Flux theories usefully recognise ways that law is Conditioned by the material agencies of the non-human, non-living, animal, and/or inorganic (understood as nominal rather than ontological categories).

To reiterate the point made earlier, the treatment of different theories under one heading here is not intended to suggest that all these theories are essentially homogenous, or that there are not many significant and subtle differences that cannot be explored here. Rather, these diverse theories and concepts of law are being considered at just one point of intersection; namely, the appreciation of agencies

beyond the human. It is this approach can be seen readily in the Flux theories detailed in **5.3.1**.

For example, Watson describes how Aboriginal metaphysics, for example, conceives of nature as 'encompassed within a circle'; the geometrical metaphor is apt because it reflects that there is

> no hierarchy that forms from the circle, and is unlike the Christian reference to god giving man dominion over the natural world… within the circle are all other life forms; there is no hierarchy between humanity and the natural world.[174]

Thus, Kwaymullina and Kwaymullina explain that, '[i]n a holistic Indigenous worldview, law cannot exist in isolation from the connections between all life. Law both sustains and reflects the nexus of relationships, the pattern of creation that is the world.'[175] In practice, this 'understanding of how the earth's energies are interconnected' has meant that the 'law of sharing and the concept of watching the land are both principles found in Indigenous jurisprudence',[176] insofar as that is possible in a way compatible with Australian state law.

Similarly, traditional Chinese legal philosophy emphasises the systemic materiality of law. The literature on this point is extremely complex in its richness but, in brief, the concept of tao – proposed as the universal principle governing *all* things – necessarily presents a monistic ontology of the universe: '[d]ao, things and humans are closely connected with each other. Indeed, they are not at all separated in early Taoist texts.'[177] The universal tao is made manifest through the process of *ziran*. Ziran

> is all-inclusive and this means that it posits a non-discriminatory and non-judgemental position, to allow all modalities of being to display themselves as

[174] Watson (n 140) 10.
[175] Kwaymullina and Kwaymullina (n 138) 198.
[176] Christine Black, 'Maturing Australia through Australian Aboriginal Narrative Law' (2011) 110 South Atlantic Quarterly 347, 359.
[177] Jing Liu, 'What Is Nature? - Ziran in Early Daoist Thinking' (2016) 26 Asian Philosophy 265.

> they are... Here, mountains, rivers, rocks, trees, animals and humans are the modalities of being of energy-matter[.][178]

The material monism posited in ancient Chinese metaphysics – which is at the same time a position of systemic materiality – leads to the natural law view that law and governance should emulate natural harmony and balance.[179] In fact, on this basis, Ancient Chinese philosophers like Mencius even advocated *minimal* legal order, warning that 'any intervention in the natural order was potentially harmful'.[180] Rather, law must aim above all to preserve the balance within material systems. Mencius advised one of his kings thus:

> If you do not interfere with the busy seasons in the fields, then there will be more grain than the people can eat; if you do not allow nets with too fine a mesh to be used in large ponds, then there will be more fish and turtles than they can eat; if hatchets and axes are permitted in the forests on the hills only in the proper seasons, then there will be more timber than they can use.[181]

This attitude of passivity towards nature on the basis of non-interference with material systems is a central theme in Taoism;[182] it is also present within Hinduism and Jainism, rationalised as an aspiration towards maintaining *dharma*, as previously discussed.[183]

What these Flux theories of law bring to light is *that humans inhabit a world that is a complex material system*. It is not just that these theories support (vibrantly) my ontology of matter. Rather, because their underpinning principles are not anthropocentric, then they naturally theorise law as Conditioned by the systemic

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[178] Deborah Cao, 'Visibility and Invisibility of Animals in Traditional Chinese Philosophy and Law' (2011) 24 International Journal for the Semiotics of Law 351.
[179] John CH Wu, 'Chinese Legal and Political Philosophy' (1959) 9 Philosophy East and West 77, 78.
[180] Karen Turner, 'War, Punishment, and The Law of Nature in Early Chinese Concepts of The State' (1993) 53 Harvard Journal of Asiatic Studies 285, 291.
[181] Mencius, *Mencius* (DC Lau tr, Penguin 1970) 51.
[182] James Miller, 'Ecology and Religion: Ecology and Daoism' in Lindsay Jones (ed), *Encyclopedia of Religion*, vol 4 (2nd edn, Macmillan 2005) 2636.
[183] Pankaj Jain, 'Jainism, Dharma, and Environmental Ethics' (2010) 63 Union Seminary Quarterly Review 121.

materiality of the world. They may have ancient roots, but their messages are no less pressing today. The European Union's Common Fisheries Policy, for example, regulates the minimum hole size that can be used in fishing nets.[184] These laws are of course Conditioned by the materiality of fish: their size, lifespan, breeding patterns, habitats, and so on. Here, the content is dictated by material agencies that are no less potent today as when Mencius advised precisely the same policy as that adopted by the EU. This approach presents law in deference and subjugation to systemic material agencies, and I will signal towards the implications of this view in **6.6.3**.

I will now recapitulate on all that I have visited in this chapter.

5.4 Conclusion

In **3.4**, I identified two aspects for the purpose of inquiring into the central research question of how law is material. Both of these aspects are to be taken as nominal, because they capture certain inflections of my wider, new materialist ontology of matter. This chapter considered the second of the nominal aspects, Flux. As with Conditioning in **4**, I embarked upon the discussion of Flux from two thematic departure points. This does not suggest that these themes are mutually exclusive – indeed, they fundamentally presuppose one another – but this bifurcation has been useful for the purposes of argumentative focus.

I first conceptualised a sense of Flux as *material reconditioning*. This captures the way in which materiality is constantly (re-)Conditioned, gradually or abruptly. Materiality is therefore never fixed – it is contingent upon an ever-changing entanglement of agencies. As such, notions like permanence and endurance are only relative. I demonstrated the illusion of fixity or coherence using the vignette of the human body. The body is contingent upon materiality from even before birth. The potent agency of food on the body was a particular example of the way in which human bodies are

[184] Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures [2019] OJ L198/105.

reconditioned by material agencies.[185] In keeping with a rejection of anthropocentric analyses, I then pointed out that human bodies are far from privileged in this sense; *all* things are constantly reconditioned. Here, I employed the narrative of nummulitic sea-creatures being impacted, lithified, mined, transported, chiselled, and polished; eventually coming to adorn pyramids and build mosques, which remain in constant material Flux.

This recognition of material reconditioning has profound implications for conceptualising law's materiality. In **5.2.1**, I recalled my argument from **4.3.1** that the communication of law should be understood in new materialist terms of affect. In this fundamental respect, law *is* ever-changing Flux. However, while I reject that law has abstract informational content *per se*, I concede that law is often treated *as if* it has discrete contents. Accepting this notion for methodological purposes allows for further investigation into law's materiality, and in particular the reconditioning of law.

First of all, it is clear that the content of law changes throughout time and place. Past theories of legal change broadly fall under evolutionary, Marxian, and Weberian models.[186] Although internally they may disagree quite significantly, generally speaking these legal philosophers recognise the important way in which the content of law is in a constant state of flux, as the content of law is contingent upon the particular conditions pertaining. This reveals the ontological unity of my nominal aspects of Conditioning and Flux. The example of the floodplains of Zambia in **4.3.2** was compared with the example of the land regime in feudal England.[187] I described how the system of tenure was contingent upon the particular social, agricultural, and ecological materialities of the time. Ultimately, this demonstrated how *the inevitable Flux of materiality corresponds with a Flux in the content of law*.

To this foundational statement, I made one further point. Although the content of law is bound to change by virtue of inevitable material change, there is also a sense in which

[185] Fox and others (n 31) 117.
[186] Durkheim (n 55) 144-146; Elliott (n 51); Marx (n 56) 11; Weber (n 57) 656.
[187] Chomba and Nkhata argued for the divergence of land regimes around the Zambezi floodplains on the basis of localised materialities (Chomba and Nkhata (n 58)).

the content of law has a persistent character. Here, I used the case of law's stasis relative to fast-emerging technological materialities within the past few decades. However, I argue that the view that law contains discrete informational content creates the *illusion* that its content is fixed. For example, the ancient laws inscribed on the Code of Ur-Nammu tablets are still legible.[188] But because the content of law is Conditioned by the *totality* of agentic influence, and not just by inscribed words alone, law does not endure in any fixed manner; law is necessarily in constant Flux.

In **5.2.2**, I turned away from *conceptual* considerations relating to material reconditioning and law, to consider one particular *substantive* theme. When conceptualising reconditioning in **5.2.1**, I said that is often thought of in terms of destruction and decay; in the context of human bodies, destruction and decay is then quite often rendered in terms of physical vulnerability and death. I here looked at the paradox between the inevitability of material human death, and laws that somehow *resist death* in their contents.

Laws that prohibit violence against bodies (which can often be materially and legally concomitant with death) were central to the survival theories of law that I visited in **2**.[189] These theorisations of survival prioritise the *human* above all else, in line with their more general anthropocentric outlook. This is problematic, because it fails to recognise that human bodies are reconditioned by virtue of the greater nexus of material agencies. I thus moved to extend the conceptualisation of law and physical vulnerability to give account of disruptive agencies as a whole ('tsunamis, silicates, and salmonellae').

I then turned to consider the resistance of death in the context of laws on assisted suicide, which is prohibited in many jurisdictions.[190] The factors owing to the regulation of assisted suicide are multifarious;[191] but I concentrated on the underlying assumptions relating to the material body. The resistance to death such as those prohibiting assisted

[188] Gurney and Kramer (n 70).
[189] Hobbes (n 77) 84-87; Hart (n 48) 194-195; Bohannan (n 80) 157.
[190] Stefan (n 86) 220.
[191] These include religious reasons, views on medical professionalism, safeguarding concerns, and economic arguments (Williams (n 92) 78; Sprung and others (n 93) 200; Pereira (n 94); Emanuel and Battin (n 95), respectively).

suicide reveal a view that bodies and life are something to be managed, protected, and controlled. The necropolitical analysis of Mbembe and biopolitical analysis of Foucault inspired discussion in this respect.[192] New materialisms lead me to recognise that binaries such as life/death are, in the face of *un*controllable materialities, extremely problematic. I drew out this tension by considering challenges to the legal fiction of 'brain death'.[193] This concluded my consideration of Flux in the sense of material reconditioning.

5.3 then considered Flux in the sense of material *system*. I have often returned to the vignette of a leaf nurtured by rainwater and sunlight, and its eventual decomposition by worms, which integrates the leaf into the soil. This image captures the entangled and relational *system* of materiality. I argued that a certain type of traditional natural law theory resonates with my presentation of Flux here, and provides much of interest into my investigation into how law is material. These 'Flux theories of law' were investigated in **5.3.1**, and were drawn from a range of philosophical traditions including Aboriginal, Lozi, and ancient Chinese.[194]

While these philosophies are extraordinarily culturally complex and diverse, they all in some way posit law as contingent upon the order and balance within the material world-system as a whole. In **5.3.2**, I therefore signalled towards the implications of adopting these Flux theories of law in line with new materialist investigations. This will be explored more fully in **6.6.3**.

This concludes my exploration of the second of the nominal aspects of my ontology of matter, with the view to answering the question of how law is material. I now arrive at a recapitulation of the thesis, the identification of potential gaps, and suggestions for new directions.

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[192] Mbembe (n 97); Foucault, *Society Must Be Defended* (n 99) 243.
[193] *Re Guardianship of Hailu* (n 114); Yanke, Rady and Verheijde (n 115); Monteverde and Rid (n 117); Cohen and others (n 117).
[194] Watson (n 140); Gluckman, 'Natural Justice in Africa' (n 151); Legge (n 159).

6 Reflections on the Material Ontology of Law

6.1 Overview

A summary of the argumentative narrative of this thesis was given in **1.3**, with recapitulations at the end of each chapter. In brief, my thesis aimed to determine *how law is material*. Throughout the thesis, I have argued that law is ineluctably material in both concept and content. In an important sense, law *is* matter in the way that it may be explained in accordance with my new materialist aspects of Conditioning and Flux. Overall, I call this the *material ontology of law*.

In this reflective chapter, I will outline two further avenues of research that my material ontology of law may implicate. In **6.2**, I consider how my material ontology of law may relate to the concept of emergence, drawing in particular on new materialist thought. In **6.3**, I then turn towards the prospect of an ethics informed by my material ontology of law.

6.2 Material emergence

My meaning of material emergence here should not be confused with emergentism, a term that has a specific meaning in the philosophy of mind.[1] The concept of emergence that I point towards is, generally speaking, the idea of complex wholes or systems generated from component phenomena.[2]

[2] Peter A Corning, 'The Re-emergence of "Emergence": A Venerable Concept in Search of a Theory' (2002) 7 Complexity 18, 22.

Emergence in this sense has had explicit applications in legal philosophy. Luhmann applied his general systems theory,[3] which is in many ways a theory of emergence,[4] to explain the generative nature of law.[5] In a material sense, Gommer has proposed a novel theory of *fractal* emergence.[6] Geometric fractals are complex emergent wholes, generated from repetitions of simpler components.[7] Gommer proposes that law emerges on the basis of *genes* as fractal generators, and that, because the macrostructure (law) is approximate to the microstructure (genes), law has inherent stability, reciprocity, and replication.[8] Other than Gommer's supposition that characteristics of component parts must be preserved in the whole,[9] I would question his equivocation of characteristics of DNA with those of law. To say that a gene is 'stable', for example, is quite different in meaning to saying that law is 'stable'.[10]

In accordance with the approach taken throughout the thesis, I argue that the best prospect for further inquiry comes from an exploration of *new materialist* approaches to emergence.

[3] See **2.3**, n 141.
[4] Vladislav Valentinov, Stefan Hielscher and Ingo Pies, 'Emergence: A Systems Theory's Challenge to Ethics' (2016) 29 Systemic Practice and Action Research 597.
[5] Niklas Luhmann, Klaus A Ziegert and Fatima Kastner, *Law as a Social System* (Oxford University Press 2004) 88.
[6] Hendrik Gommer, 'The Molecular Concept Of Law' (2011) 7 Utrecht Law Review 141; Hendrik Gommer, 'The Biological Essence of Law' (2012) 25 Ratio Juris 59.
[7] Kenneth Falconer, *Fractal Geometry: Mathematical Foundations and Applications* (John Wiley & Sons 1997) xx-xxi. The word 'fractal' is a neologism coined by Mandelbrot in the late twentieth-century (Benoit B Mandelbrot, *The Fractal Geometry of Nature* (W H Freeman 1982)).
[8] Gommer, 'The Molecular Concept Of Law' (n 6) 146.
[9] Gommer, 'The Molecular Concept Of Law' (n 6) 143.

6.2.1 New materialist approaches

Hird describes how '[n]ew materialism has for some time moved towards an understanding of matter as a complex open system subject to emergent properties.'[11] In **3.3.2**, I described the inspiration that some new materialists have drawn from the works of Deleuze and Guattari. DeLanda has taken great inspiration in his deployment of assemblage theory,[12] and he conceptualises matter as the *generative* basis of complex emergent systems.[13] This conceptualisation ascribes great agency to matter; in interview with Dolphijn and van der Tuin, DeLanda said that 'matter has morphogenetic capacities of its own and does not need to be commanded into generating form'.[14] Likewise, Barad conceives of matter as possessing agency capable of dynamically and iteratively producing and reconfiguring the world in complex 'intra-actions';[15] she writes that '[t]he reconfiguring of the world continues without end. Matter's dynamism is inexhaustible, exuberant, and prolific.'[16]

My portrayal of systemic Flux – which can encapsulate the sense of matter as affective and generative of materiality – is on these terms potentially amenable to an analysis in line with the notion of material emergence. Here, there is the possibility of melding the 'vital impetus' of material agencies[17] with non-linear ideas of emergent causation.[18] Coole and Frost comment that

> new materialists are rediscovering a materiality that materializes, evincing immanent modes of self-transformation that compel us to think of causation in far more complex terms; to recognize that phenomena are caught in a

[11] Myra J Hird, 'Feminist Matters: New Materialist Considerations of Sexual Difference' (2004) 5 Feminist Theory 223, 226.
[12] Manuel DeLanda, *A New Philosophy of Society* (Continuum 2006) 10-11.
[13] Manuel DeLanda, 'The Geology of Morals: A Neomaterialist Interpretation' (Virtual Futures 95 Conference, Warwick University, 26 May 1995); Iris Van Der Tuin and Rick Dolphijn, 'The Transversality of New Materialism' (2010) 21 Women: A Cultural Review 153, 155.
[14] Manuel DeLanda, 'Interview with Manuel DeLanda' in Rick Dolphijn and Iris van der Tuin (eds), *New Materialism* (Open Humanities Press 2012) 43.
[15] Karen Barad, *Meeting the Universe Halfway* (Duke University Press 2007) 392-393.

[17] Jane Bennett, *Vibrant Matter* (Duke University Press 2010) 21.
[18] DeLanda, 'Interview with Manuel DeLanda' (n 14) 42; Barad (n 15) 180.

> multitude of interlocking systems and forces and to consider anew the location and nature of capacities for agency.[19]

These new materialist considerations on material emergence may provide tools for inquiry into the *generative* nature of matter in relation to a material ontology of law, whether in concept or in content. This goes hand in hand with the view of matter as agentic, and is also, at least in prospect, consonant with my nominal aspects of Conditioning and Flux.

I will now consider the possibility of an ethical reading of my material ontology of law.

6.3 Pointing towards an ethics

It is important to bear in mind at the outset of this discussion that, throughout the thesis, I have been primarily engaged in questions of ontology. As such, any pointers towards the ethical implications of my material ontology of law have been purposefully reserved for this forward-facing conclusion. Opening up a different route of inquiry in this way, I only intend here to sketch an outline of my reflections on ethics.

I will first look at the relationship between ethics and ontology in general (**6.3.1**). This provides due diligence on one knotty philosophical problem in this area – namely, the view that values cannot be derived from facts. Bracketing this question, I will then turn to consider some ways in which the material ontology of law could inform an ethical approach to law (**6.3.2**).

[19] Diana H Coole and Samantha Frost (eds), *New Materialisms* (Duke University Press 2010) 9.

6.3.1 Ethics from ontology

Broadly speaking, one maintains a position of ethical naturalism when asserting that 'ethical conclusions are derivable from non-ethical premises'.[20] At least after Hume, however, the majority of moral philosophers have denied that any prescriptive statement can be derived from a descriptive statement.[21] Hume elucidates what has subsequently become known as 'Hume's guillotine' – the severance of *what is* from what *ought to be*.[22] Hume writes that

> [i]n every system of morality, which I have hitherto met with, I have always remark'd, that the author proceeds for some time in the ordinary way of reasoning, and establishes the being of a God, or makes observations concerning human affairs; when of a sudden I am surpris'd to find, that instead of the usual copulations of propositions, *is*, and *is not*, I meet with no proposition that is not connected with an *ought*, or an *ought not*. This change is imperceptible; but is, however, of the last consequence.[23]

Applying his views on causation and inference,[24] Hume therefore argues that nothing about an action – such as 'wilful murder' – *a priori* determines its moral quality.[25] Another critic of ethical naturalism is Moore.[26] While Moore instead concerns himself with the language of morals,[27] like Hume he argues that moral principles cannot be derived from statements of fact.[28] Hume's system has been notoriously hard to refute;

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[20] This is the second of three views that Crisp associates with ethical naturalism: Roger Crisp, 'Naturalism, Ethical' in Ted Honderich (ed), *The Oxford Companion to Philosophy* (2nd edn, Oxford University Press 2005) 642.
[21] John Hospers, *An Introduction to Philosophical Analysis* (3rd edn, Routledge 1990) 347.
[22] This term was coined by Black (Max Black, 'The Gap Between "Is" and "Should"' (1964) 73 The Philosophical Review 165, 166).
[23] David Hume, *A Treatise of Human Nature* (LA Selby-Bigge and PH Nidditch eds, Oxford University Press 1987) 469.
[24] Hume argues that '[w]e have no other notion of cause and effect, but that of certain objects, which have been *always conjoin'd* together, and which in all past instances have been found inseparable. We cannot penetrate into the reason of the conjunction' (Hume (n 23) 93).
[25] Hume (n 23) 468-469; Barry Stroud, *Hume* (Routledge and Kegan Paul 1981) 176-177.
[26] GE Moore, *Principia Ethica* (Cambridge University Press 1971).

[28] Moore (n 26) 126.

his scepticism is, as Russell says, 'a dead end: in his direction, it is impossible to go further.'[29] In the present instance, then, it would seem initially that there is no justification for a material ontology of law to inform an ethics.

Of course, Hume's philosophical severance of is from ought is independent of the fact that how people understand the world quite often *does* inform how they think they should act. This is no mystery outside of the terms of the argument set by philosophers like Hume. It is enough to recognise that people do ordinarily act as they think they should; and that how they think they should act ordinarily accords with their view of the world. For example, a hypothetical person understands murder in a certain physical, social, and emotional context. Likewise, they understand pollution in relation to how they view the ecology, aesthetics, and materiality of the world, amongst many other considerations. Their belief that they should not murder or pollute, as those acts stand in relation to their understanding of the world, is not undercut simply because they cannot justify the move between facts and values.

Even philosophers maintaining that this move can never be justified often move from facts to values. Indeed, in a reversal of his scepticism, Hume himself takes a practical approach to the development of an ethical system.[30] Kant also ostensibly maintains a separation between ontology and ethics;[31] in practice, however, Kant's perception of racial hierarchies informs his ethical judgements.[32] As Eze points out, 'skin color for

[29] Bertrand Russell, *History of Western Philosophy* (Routledge 2004) 600.

[30] 'In order to attain [the true origin of morals]… we shall analyse… what, in common life, we call Personal Merit… The quick sensibility, which, on this head, is so universal among mankind, gives a philosopher sufficient assurance' (David Hume, *Enquiries Concerning Human Understanding and Concerning the Principles of Morals* (3rd edn, Oxford University Press 1990) 174). This is not entirely inconsistent with Hume's argument in the *Treatise*: he saw philosophy as often distracting us from more practical questions or understandings of the world (Hume (n 23) 187; Russell (n 29) 610).

[31] In particular, Kant argues for ethics as first philosophy when he posits that a pure will can be determined through reason alone (Immanuel Kant, *Groundwork for the Metaphysics of Morals* (Allen W Wood ed & tran, Yale University Press 2002) 6); Simon Truwant, 'The Turn from Ontology to Ethics: Three Kantian Responses to Three Levinasian Critiques' (2014) 22 International Journal of Philosophical Studies 696, 698).

[32] Amongst other pseudo-scientific conjectures, Kant writes that 'humid warmth is beneficial to the robust growth of animals in general and, in short, this results in the Negro, who is well suited to his climate, namely strong, fleshy, supple, but who, given the abundant provision of his mother land, is lazy, soft and trifling' (Immanuel Kant, *Anthropology, History, and Education*

Kant was [not] merely a physical characteristic. It is, rather, evidence of an unchanging and unchangeable moral quality.'[33]

It is of course possible that there is merit in Hume's guillotine; however, this is not a question which needs to be answered for my prospective purposes here. Remaining alive to the general philosophical context, I will now turn to sketch some ways in which my material ontology of law might inform an ethical approach to law.

6.3.2 Informing approaches to law

Throughout the thesis, I have drawn upon new materialisms to inspire a response to ontological questions. It must be recognised, however, that new materialisms often have a predilection towards suggesting *ethical* responses to questions. For example, Coole and Frost write that an 'urgent reason for turning to materialism is the emergence of pressing ethical and political concerns that accompany the scientific and technological advances predicated on new scientific models of matter and, in particular, of living matter.'[34] Bennett is similarly motivated to explore the ethics entailed by a view of all matter as vibrant.[35] My thesis has the potential to tap into this ethical vein. There are at least two ways that my material ontology of law could inform a legal ethics.

First of all, ascribing agency to all matter (**3.3.2**) goes hand in hand with an erosion of the human/non-human binary. This points towards a reconfiguration of legal relationships with non-human agencies, or at least an awareness of current doctrine and practices. In terms of animals and plants, Anderson writes that 'living things in

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(Günter Zöller and Robert B Louden eds, Mary Gregor tr, Cambridge University Press 2007) 93). Elsewhere, Kant remarks that 'the Negroes of Africa have by nature no feeling that rises above the trifling' (Immanuel Kant, *Race and the Englightenment* (Emmanuel Chukwudi Eze ed, Wiley-Blackwell 1997) 55). Such comments testify to the ignorance that may be bred if one never leaves eighteenth century Königsberg.

[33] Emmanuel Chukwudi Eze (ed), *Postcolonial African Philosophy* (Blackwell 1997) 119.

[34] Coole and Frost (n 19) 5.

general have intrinsic values, as individual organisms and as systematically related in ecosystems and the biosphere as a whole.'[36] Roncancio, for example, takes such monistic views on the agency of matter, and argues for granting rights to certain plants in constitutional law.[37] In such a way, it is possible that thinking with a material ontology of law could bolster the case for extending legalities beyond the human.[38]

Second, the view of Flux as material system brings in to view the contingent entanglement of things – including the unbalancing affects of human activity. I reject use of the word 'environment' here, because it does not have obviously betray the systemic nature of the material world. 'Environment', as Williams points out, also has a certain clinical feel to it:

> And the word environment. Such a bloodless word. A flat-footed word with a shrunken heart. A word increasingly disengaged from its association with the natural world. Urban planners, industrialists, economists, developers use it. It's a lost word, really. A cold word, mechanistic, suited strangely to the coldness generally felt toward nature.[39]

Human activity has directly unbalanced the materialities of ecological and climate systems.[40] The current epoch, marked by this unprecedented human activity,[41] is often

[36] Elizabeth Anderson, 'Animal Rights and the Values of Nonhuman Life' in Cass R Sunstein and Martha Craven Nussbaum (eds), *Animal Rights* (Oxford University Press 2004) 277.
[37] Iván Dario Vargas Roncancio, 'Plants and the Law: Vegetal Ontologies and the Rights of Nature. a Perspective from Latin America' (2017) 43 Australian Feminist Law Journal 67, 70-71.
[38] For examples of the debates in these areas, see Cass R Sunstein and Martha Craven Nussbaum (eds), *Animal Rights* (Oxford University Press 2004); Anna Grear, *Should Trees Have Standing?: 40 Years On* (Edward Elgar 2012); Sean Coyle, *The Philosophical Foundations of Environmental Law: Property, Rights and Nature* (Hart 2004).
[39] Joy Williams, *Ill Nature* (The Lyons Press 2001) 2; cited in Stacy Alaimo, *Bodily Natures* (Indiana University Press 2010) 1.
[40] World Wildlife Fund, *Living Planet Report 2018* (M Grooten and REA Almond eds, 2018) 7; Intergovernmental Panel on Climate Change, *Climate Change 2014: Synthesis Report* (RK Pachauri and LA Meyer eds, 2014) v.
[41] Colin N Waters and others, 'The Anthropocene Is Functionally and Stratigraphically Distinct from the Holocene' (2016) 351 Science aad2622.

referred to as the Anthropocene.[42] Others like Moore and Haraway suggest that the term Capitolocene is more apt;[43] Grear argues that any engagement with 'Anthropocene' should address the 'predatory capitalist neocolonialism' inherent in the *anthropos* itself, which has reached 'its apotheosis in the transnational corporate form.'[44] New materialisms raise the prospect of addressing pressing issues by thinking with fresh, ethically-attuned ontologies of matter. With respect to the technologies and practices that have destabilised ecological and climate systems, Philippopoulos-Mihalopoulos writes that

> [r]ather than considering these emergent agencies as merely exacerbating the current and ongoing global political, financial, religious, social and environmental instability (an instability that has become too stable to talk about crisis anymore), legal theory is now called to think imaginatively on how to include them as tools against the instability. In other words, how to use strategically such abstractions (or at least things that were so far considered abstractions for law, such as objects, animals, insects, senses, atmospheres, quanta and so on) in order to resist the ongoing instability and its potential lethal planetary result.[45]

I am merely pointing towards this prospect here; some, like Rekret, have explicitly doubted the ethical implications of new materialisms.[46] Rekret argues that new materialisms gloss over the historicity and entrenchment of binaries like human/non-human.[47] Notwithstanding the Humean philosophical objections in **6.3.1**, it is also

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[42] This terms was popularised by Crutzen (Paul J Crutzen, 'Geology of Mankind' (2002) 415 Nature 23; Noel Castree, 'The Anthropocene: A Primer for Geographers' (2015) 100 Geography 66).

[43] Jason W Moore, 'The Capitalocene, Part I: On the Nature and Origins of Our Ecological Crisis' (2017) 44 The Journal of Peasant Studies 594; Donna Haraway, 'Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin' (2015) 6 Environmental Humanities 159.

[44] Anna Grear, 'Deconstructing Anthropos: A Critical Legal Reflection on "Anthropocentric" Law and Anthropocene "Humanity"' (2015) 26 Law and Critique 225, 245.

[45] Andreas Philippopoulos-Mihalopoulos (ed), *Routledge Handbook of Law and Theory* (Routledge 2019) 4.

[46] Paul Rekret, 'A Critique of New Materialism: Ethics and Ontology' (2016) 9 Subjectivity 225.

possible that a closer examination of the social context of such binaries is needed to secure the basis for an ethical reading of my material ontology of law.

6.4 Conclusion

In this concluding chapter, I have reflected on two further avenues of inquiry that my material ontology of law implicates. First, in **6.2**, I considered the notion of emergence – the generation of complex wholes or systems from component phenomena.[48] I first gave a brief overview and potential critique of Gommer's theory of law based on fractal emergence.[49] In **6.2.1**, I turned my attention to new materialist emergence; here, the works of DeLanda and Barad were identified.[50] I concluded that my nominal aspects of Conditioning and Flux were potentially amenable to further investigation in terms of the generative emergence of the materiality of law.

In **6.3**, I then pointed towards an ethical reading of my material ontology of law. I first considered the philosophical context of moves from ontological to ethical statements (**6.3.1**), which has, post-Hume, often been doubted.[51] This problem was bracketed; I ultimately argued that it is sufficient for my prospective purposes here to be alive to such philosophical questions. Therefore, in **6.3.2**, I proceeded to explore how my material ontology may inform an ethical approach to law. First, I suggested that the new materialist erosion of binaries such as human/non-human has the potential to reconfigure legal relationships with, and the rights of, non-human agencies. Second, my portrayal of Flux as material system may also place under scrutiny the practices, bolstered by law, which have destabilised – and continue to destabilise – ecological and climate systems.

In this thesis, I have argued for the materiality of law in both concept and content. I have termed this the *material ontology of law*.

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[48] Corning (n 2) 22.

[50] DeLanda, *A New Philosophy of Society* (n 12); Barad (n 15).

[51] Hume (n 23) 469; Hospers (n 21) 347.

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